



Appendices for COVID-19 Living Evidence Profile #1

(Version 7: 28 May 2021)

Appendix 1: Methodological details

We use a standard protocol for preparing living evidence profiles (LEP) to ensure that our approach to identifying research evidence as well as experiences from other countries and from Canadian provinces and territories are as systematic and transparent as possible in the time we were given to prepare the profile.

Identifying research evidence

For each LEP, we search our continually updated <u>inventory of best evidence syntheses</u> and <u>guide to key</u> <u>COVID-19 evidence sources</u> for:

- 1) Guidelines (defined as providing recommendations or other normative statements derived from an explicit process for evidence synthesis);
- 2) full systematic reviews;
- 3) rapid reviews;
- 4) protocols for reviews or rapid reviews that are underway;
- 5) titles/questions for reviews that are being planned; and
- 6) single studies (when no guidelines, systematic reviews or rapid reviews are identified).

For the first version of this LEP, we also searched Health Systems Evidence (<u>www.healthsystemsevidence.org</u>) and HealthEvidence (<u>www.healthevidence.org</u>), to identify any relevant evidence documents that might have relevance to the COVID-19 vaccine roll-out, but were produced before the pandemic, given that the other sources searched were specific to COVID-19. In Health Systems Evidence, we searched for overviews of systematic reviews, systematic reviews of effects, systematic reviews addressing other questions, and protocols for systematic reviews, that may provide insights about vaccine-delivery systems by searching for 'vaccine' using the filters for 'public health' (under health-system sectors). In HealthEvidence, we searched using the categories for 'Immunization' and 'Policy and Legislation' under the intervention strategy filter combined with 'Communicable Disease/Infection' category under the topic filter.

Each source for these documents is assigned to one team member who conducts hand searches (when a source contains a smaller number of documents) or keyword searches to identify potentially relevant documents. A final inclusion assessment is performed both by the person who did the initial screening and the lead author of the rapid evidence profile, with disagreements resolved by consensus or with the input of a third reviewer on the team. The team uses a dedicated virtual channel to discuss and iteratively refine inclusion/exclusion criteria throughout the process, which provides a running list of considerations that all members can consult during the first stages of assessment.

During this process we include published, pre-print and grey literature. We do not exclude documents based on the language of a document. However, we are not able to extract key findings from documents that are written in languages other than Chinese, English, French or Spanish. We provide any documents that do not have content available in these languages in an appendix containing documents excluded at the final stages of reviewing.

Identifying experiences from other countries and from Canadian provinces and territories

For each LEP, we collectively decide on what countries to examine based on the question posed. For other countries we search relevant sources included in our continually updated guide to key COVID-19 evidence sources. These sources include government-response trackers that document national responses to the

pandemic. In addition, we conduct searches of relevant government and ministry websites. In Canada, we search websites from relevant federal and provincial governments, ministries and agencies (e.g., Public Health Agency of Canada).

While we do not exclude countries based on language, where information is not available through the government-response trackers, we are unable to extract information about countries that do not use English, Chinese, French or Spanish as an official language.

Assessing relevance and quality of evidence

We assess the relevance of each included evidence document as being of high, moderate or low relevance to the question. We then use a colour gradient to reflect high (darkest blue) to low (lightest blue) relevance.

Two reviewers (Qi Wang and Micayla Matthews) independently appraised the quality of the guidelines we identified as being highly relevant using AGREE II. We used three domains in the tool (stakeholder involvement, rigour of development and editorial independence) and classified guidelines as high quality if they were scored as 60% or higher across each of these domains.

Two reviewers (Malvika Agarwal and Hannah Whitelaw) independently appraise the methodological quality of systematic reviews and rapid reviews that are deemed to be highly relevant. Disagreements are resolved by consensus with a third reviewer if needed. AMSTAR rates overall methodological quality on a scale of 0 to 11, where 11/11 represents a review of the highest quality. High-quality reviews are those with scores of eight or higher out of a possible 11, medium-quality reviews are those with scores between four and seven, and lowquality reviews are those with scores less than four. It is important to note that the AMSTAR tool was developed to assess reviews focused on clinical interventions, so not all criteria apply to systematic reviews pertaining to health-system arrangements or to economic and social responses to COVID-19. Where the denominator is not 11, an aspect of the tool was considered not relevant by the raters. In comparing ratings, it is therefore important to keep both parts of the score (i.e., the numerator and denominator) in mind. For example, a review that scores 8/8 is generally of comparable quality to a review scoring 11/11; both ratings are considered 'high scores.' A high score signals that readers of the review can have a high level of confidence in its findings. A low score, on the other hand, does not mean that the review should be discarded, merely that less confidence can be placed in its findings and that the review needs to be examined closely to identify its limitations. (Lewin S, Oxman AD, Lavis JN, Fretheim A. SUPPORT Tools for evidence-informed health Policymaking (STP): 8. Deciding how much confidence to place in a systematic review. Health Research Policy and Systems 2009; 7 (Suppl1):S8.

Preparing the profile

Each included document is hyperlinked to its original source to facilitate easy retrieval. For all included guidelines, systematic reviews, rapid reviews and single studies (when included), we prepare a small number of bullet points that provide a brief summary of the key findings, which are used to summarize key messages in the text. Protocols and titles/questions have their titles hyperlinked given that findings are not yet available. We then draft a brief summary that highlights the total number of different types of highly relevant documents identified (organized by document), as well as their key findings, date of last search (or date last updated or published), and methodological quality.

Appendix 2a: Key findings from <u>new</u> highly relevant evidence documents that address the question, organized by document type and sorted by relevance to the question and COVID-19

Type of document	Relevance to question	Key findings	Recency or status
Guidelines	 Allocating vaccines and ancillary supplies equitably Allocation rules People for whom vaccine safety and effectiveness has not yet been established 	 The Canadian Rheumatology Association (CRA) guideline panel suggests using COVID-19 vaccination in persons with autoimmune rheumatic diseases (ARDs) The panel unanimously agreed that for most patients, the potential benefits outweigh the potential harms in people with ARDs The recommendation was conditional due to low certainty of evidence about the effects of the Pfizer-BioNTech, Moderna and Johnson and Johnson vaccines, and very low certainty for AstraZeneca in people with ARDs Source (high-quality AGREE II rating; Canadian Rheumatology Association) 	Published 15 May 2021
	 Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Target of intervention Delivery of intervention Content of messaging Surveillance, monitoring and evaluation, and reporting Documenting adverse events and follow-up 	 This document provides interim recommendations for the use of the COVID-19 BIBP vaccine, including information on the vaccine itself and its use, as well as a summary of the current available evidence of its the safety in specific populations This guidance highlights the importance of effective communication regarding the mechanism of action, efficacy, and safety of the vaccine, as well as any adverse side-effects of its use in specific populations. The authors highlight that this information should be shared in a culturally and linguistically acceptable manner through community engagement and communication strategies involving trusted community leaders The document also stresses that during times where the supply of vaccines is limited, jurisdictions may choose to follow the WHO Prioritization Roadmap and WHO Values Framework to assist them in determining their prioritization of target groups 	Published 7 May 2021

Type of document	Relevance to question	Key findings	Recency or status
		 Finally, recommendations are made as to the safety surveillance and monitoring of the vaccine among populations <u>Source</u> (high-quality AGREE II rating; World Health Organization) 	
	 Surveillance, monitoring and evaluation, and reporting Documenting adverse events and follow-up 	 As of 21 April 2021, around 7.98 million doses of the Janssen COVID-19 vaccine had been administered in the United States, and between the period of 2 March and 21 April 2021, the national vaccine monitoring system known as the Vaccine Adverse Event Reporting System (VAERS) had received 15 reports of thrombosis with thrombocytopenia syndrome (TTS) after Janssen COVID-19 vaccination In conducting an evaluation of the evidence to support updated interim recommendations for the use of the Janssen COVID-19 vaccine in the United States, the Advisory Committee on Immunization Practices (ACIP) reviewed a risk-benefit assessment for both population- and individual-level risks of TTS events after vaccination The summary of evidence showed that the single-dose Janssen COVID-19 vaccine is a highly effective and flexible prevention tool that can be useful in communities with increasing COVID-19 incidence and emerging variants, and limiting its usage to specific populations could reduce TTS cases Based on the risk-benefit assessment that if the Janssen COVID-19 vaccine were no longer available then excess COVID-19 cases and deaths could occur, the ACIP reaffirmed its interim recommendation for the use of the Janssen COVID-19 vaccine in all persons aged 18 years and over The ACIP emphasized the importance of providing education for vaccination providers and the public about the risk for TTS and availability of other 	Published 30 April 2021

Type of document	Relevance to question	Key findings	Recency or
			status
		COVID-19 vaccine options, particularly for women	
		aged 18-49 years	
		• The Food and Drug Administration (FDA) has	
		added a warning to the Janssen COVID-19 vaccine	
		and fact sheets regarding rare clotting events that	
		have been reported among vaccine recipients, and	
		patient education and communication materials have	
		been updated to ensure that patients are aware of the	
		The Control of the Co	
		• The Centers for Disease Control and Prevention	
		(CDC) and FDA will continue to closely monitor	
		COVID 10 yearing and additional data will be	
		brought to the ACID for regularly updated	
		recommendations	
		• The FDA continues its requirement for vaccine	
		providers to report vaccination administration errors,	
		inflammatory syndrome, and cases of COVID-19	
		that result in hospitalization or death after	
		administration of a COVID-19 vaccine to VAERS	
		Source (low-quality AGREE II rating: Advisory	
		Committee on Immunization Practices, United States)	
	• Allocating vaccines and ancillary supplies	• This guideline was updated from when it was first	Last updated 28
	equitably	published in December 2020	April 2021
	o Allocation rules	• Women under age 50, including pregnant individuals,	_
	 People for whom vaccine safety and 	can receive any available FDA-authorized COVID-19	
	effectiveness has not yet been established	vaccine, and should be aware of the rare risk of TTS	
		(thrombosis with thrombocytopenia syndrome) after	
		receipt of the Janssen COVID-19 vaccine	
		Source (low-quality AGREE II rating; American College	
		of Obstetricians and Gynecologists)	
	• Administering vaccines in ways that optimize	• This WHO and UNICEF guideline outlines the	Published 26
	timely uptake	potential roles and opportunities for community	April 2021
	• With what partnerships to reach early	health workers in national deployment and	
	populations of focus	vaccination plans for COVID-19	

 Community health workers are often involved in routine vaccination programs, have knowledge of "last mile" health-service delivery, and hold positions of trust within communities which enables them to play key roles in COVID-19 vaccine roll-out Community health workers are well-placed and have knowledge to aid in national and subnational planning committees that plan and coordinate COVID-19 vaccine distribution They can identify and connect with target populations for vaccination 	Type of document	ument Relevance to question	Key findings	Recency or status
 Community health workers can understand beliefs and barriers to vaccination in individuals and communities and address these barriers with evidence-based strategies to promote uptake They can mobilize community members (for example by arranging transportation) and guiding them to sites of vaccine administration Community health workers can aid in tracking vaccine roll-out and following up with patients Involving community health workers in COVID-19 vaccination efforts requires appropriate supports from health systems Policies regaring scopes of practices and remuneration mechanisms may need to be altered, and community health workers may need to be integrated in new systems The costs of engaging community health workers need to be calculated and budgeted for without sacrificing other essential health services Workers need to be supported with competency- based education and learning programs that are tailored to the local context Community health workers need to be accurately accounted for in health information systems and provided with priority access for vaccination as agreentic health worker ender 			 Community health workers are often involved in routine vaccination programs, have knowledge of "last mile" health-service delivery, and hold positions of trust within communities which enables them to play key roles in COVID-19 vaccine roll-out Community health workers are well-placed and have knowledge to aid in national and subnational planning committees that plan and coordinate COVID-19 vaccine distribution They can identify and connect with target populations for vaccination Community health workers can understand beliefs and barriers to vaccination in individuals and communities and address these barriers with evidence-based strategies to promote uptake They can mobilize community members (for example by arranging transportation) and guiding them to sites of vaccine administration Community health workers can aid in tracking vaccine roll-out and following up with patients Involving community health workers may need to be altered, and community health workers may need to be integrated in new systems The costs of engaging community health workers may need to be integrated in new systems Workers need to be supported with competency-based education and learning programs that are tailored to the local context Community health workers need to be accurately accounted for in health information systems and provided with priority access for vaccination as assential health workers 	

Type of document	Relevance to question	Key findings	Recency or
		 Workers will need to be provided with materials and training for infection prevention and control Appropriate health-system supports can also enable the COVID-19 vaccination campaign to strengthen health systems broadly – and in particular the role of community health workers in health systems Source (low-quality AGREE II rating; World Health Organization and UNICEF) 	Status
	 Securing and distributing a reliable supply of vaccines and ancillary supplies Storage and handling within country Allocating vaccines and ancillary supplies equitably Allocation rules Dosing rules Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Target of intervention Delivery of intervention Content of messaging Administering vaccines in ways that optimize timely uptake With what post-vaccination observation period and what physical distancing, personal protective equipment, sanitation and other public-health measures With what safety-monitoring requirements 	 The World Health Organization published interim recommendations for use of the ChAdOx1-S [recombinant] vaccine against COVID-19 (AstraZeneca COVID-19 vaccine AZD1222, SII Covishield, SK Bioscience) The recommendations cover considerations related to: Intended use (adults 18 years of age and older) Administration Booster doses Interchangeability with other COVID-19 vaccines Contraindications Precautions Special settings Other considerations such as SARS-CoV 2 variants, community engagement, effective communication, and legitimacy and vaccination logistics 	Last updated 21 April 2021
	 Administering vaccines in ways that optimize timely uptake With what broader, complementary health interventions 	 This document provides interim guidance on the risks for fully vaccinated individuals to develop or transmit infection that will give rise to severe COVID-19 disease in the context of the current epidemiological and vaccine coverage situation in the EU/EEA 	Last updated 21 April 2021

Type of document	Relevance to question	Key findings	Recency or status
		 Based on the current assessed risks, the non-pharmaceutical interventions (NPIs) could be lifted in the following specific situations: When fully vaccinated individuals meet other fully vaccinated individuals (very low/low risk), physical distancing and the wearing of face masks can be relaxed When unvaccinated individuals meet fully vaccinated individuals, physical distancing and the wearing of face masks can be relaxed When unvaccinated individuals meet fully vaccinated individuals, physical distancing and the wearing of face masks can be relaxed if there are no risk factors for severe disease or lower vaccine effectiveness in anyone present (e.g., older age, immunosuppression, other underlying conditions) Health authorities may consider classifying fully vaccinated contacts who have been exposed to a confirmed case as low-risk contacts based on a case-by-case risk assessment Requirements for testing and quarantine of travellers and regular testing at workplaces can be waived or modified for fully vaccinated individuals as long as there is no or very low-level circulation of immune escape variants (in the community in the country of origin) In the current epidemiological context in the EU/EEA, in public spaces and in large gatherings, including during travel, NPIs should be maintained irrespective of the vaccination status of the individuals 	
	 Allocating vaccines and ancillary supplies equitably Allocation rules People for whom vaccine safety and effectiveness has not yet been established Administering vaccines in ways that optimize timely uptake 	 These guidelines provide recommendations for intramuscular COVID-19 vaccination in patients with hemophilia that were developed using the Delphi method with a committee of 16 hemophilia experts Hemophilia is not a contraindication for a SARS- COV-2 vaccination (100% agreement) 	Published 15 April 2021

Type of document	Relevance to question	Key findings	Recency or
	 With what post-vaccination observation period and what physical distancing, personal protective equipment, sanitation and other public-health measures 	 The smallest needle size available should be used for injection following manufacturer instructions (97.2%) Patients with severe or moderate hemophilia and patients with inhibitors should receive prophylactic replacement therapy prior to intramuscular vaccination In the event of clinically relevant injection-site hematoma, patients should receive replacement therapy until symptoms disappear (97.1%) Patients should receive both injections of the vaccine as approved, unless serious side-effects prohibit further application after the first injection. A hematoma after the first injection is not a contraindication for the second injection (97.1%) The document contains other recommendations related to administration of the vaccine, prophylaxis prior to vaccination, treatment of bleeding complications, and additional considerations in minimally pretreated patients Source (low-quality AGREE II rating; Hemophilia Board of the German, Austrian, Swiss Society on Thrombosis Hemostasis Research) 	status
	 Allocating vaccines and ancillary supplies equitably Allocation rules People for whom vaccine safety and effectiveness has not yet been established 	 This document provides recommendations on the appropriateness for SARS-CoV-2 vaccination for otolaryngologist and head and neck surgeons in case of pregnancy, breastfeeding, or childbearing potential Seven statements reached consensus using a modified Delphi protocol: Otolaryngology and head and neck surgery represent specialties at high risk of SARS-CoV2 infection Although preventive measures and use of full personal protective equipment has been demonstrated to prevent SARS-CoV2 infection, due to environmental, behavioural, and practical 	Published 15 April 2021

Type of document	Relevance to question	Key findings	Recency or
			status
		contingencies, the specialty-related risk of	
		infection can be minimized but not completely	
		removed	
		• Though the recently developed SARS-CoV2	
		mRNA vaccines do not seem to show a risk	
		profile for complication for the mother-baby	
		dyad during pregnancy and breastfeeding, we have	
		no experimental data in this population on which	
		no trial has been conducted and no long-term	
		evaluation is available	
		• All pregnant, breastfeeding, or fertile female	
		otolaryngologists and head and neck surgeons	
		considering a COVID-19 vaccine should have	
		access to up-to-date information about the safety	
		and efficacy of the vaccine for the mother-baby	
		dvad, including clear information about data and	
		evidence that are not available vet for this specific	
		population	
		• All pregnant otolaryngologists and head and neck	
		surgeons who are active in clinical practice should	
		be given the opportunity to receive the SARS-	
		CoV2 vaccine rapidly, provided the choice is free.	
		individual, and informed and assisted by a health	
		professional to individually assess the benefits and	
		risks according to each case	
		• All pregnant and breastfeeding otolaryngologists	
		and head and neck surgeons who decline	
		vaccination should be strongly stimulated to keep	
		in mind prevention measures such as hand	
		washing, physical distancing, wearing a mask, and	
		using proper personal protection devices	
		• The use of adequate personal protective	
		equipment against SARS-CoV2 remains strongly	
		recommended for otolaryngologist and head and	
		neck surgeons who received the SARSCoV2	
		vaccine	

Type of document	Relevance to question	Key findings	Recency or status
		Source (low-quality AGREE II rating; International Federation of Otorhinolaryngological Societies research group and Confederation of European Otorhinolaryngology – Head and Neck Surgery board)	
	 Allocating vaccines and ancillary supplies equitably Allocation rules People at increased risk of severe COVID-19 	 People with cryoglobulinaemic vasculitis (CV) have an increased risk of severe cases of COVID-19 including hospitalization and death The Italian Group for the Study of Cryoglobulaemias developed clinical recommendations for COVID-19 vaccination in patients with CV Guidelines included: 1) treatment with rituximab should be deferred by 2-4 weeks after vaccination; 2) in patients treated with colchicine or hydroxychloroquine, no modification to either immunomodulatory therapy or vaccination timing is required, and methotrexate or intravenous cyclophosphamide should be administered at least one week after each vaccine dose; and 3) there are no safety concerns for COVID-19 vaccination during anti-viral therapy with direct acting anti-virals for eradicating HCV The authors concluded that patients with CV should be included under vaccination priority groups Source (low-quality AGREE II rating; Italian Group for the Study of Cryoglobulaemias) 	Published 12 April 2021
Full systematic reviews	 Allocating vaccines and ancillary supplies equitably Allocation rules Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Target of intervention General public Administering vaccines in ways that optimize timely uptake Where Community-based health settings 	 The review identified 56 documents about the roll- out of mass-vaccination programs and reported more than 50% reduction in SARS-CoV-2 cases, hospitalization and deaths in addition to low rates of vaccine-related serious adverse events in jurisdictions with good vaccination coverage Most of the documents described vaccine roll-outs to include the following elements: Prioritization of vulnerable groups Converting large public spaces into large vaccination hubs 	Literature last searched 1 March 2021

Relevance to question	Key findings	Recency or
		status
 Surveillance, monitoring and evaluation, and reporting 	 Limited reporting and evaluation of vaccination programs 	
• Infrastructure to enable surveillance,	o Use of Pfizer-BioNTech, Moderna, and Oxford-	
monitoring and evaluation	AstraZeneca	
	• Guidelines for staffing, training, and recruitment requirements	
	 Most vaccination outcomes were reported from Israel and United States 	
	• The review described potential challenges to the	
	vaccine roll-out such as addressing shortages,	
	increasing accessibility to vulnerable populations (e.g.,	
	in conflict areas) cost of procurement and delivery	
	and addressing vaccine hesitancy (e.g., among	
	younger adults, who identify as female, and black	
	populations)	
	Source (AMSTAR rating 5/9)	
• Surveillance, monitoring and evaluation, and	• This rapid review presents a table of	Last updated 13 Max 2021
reporting	recommendations from different professional	May 2021
O Documenting adverse events and tonow-up	pathway and aspects of treatment for patients with	
	possible thrombotic adverse events following SARS-	
	CoV-2 coronavirus vaccination	
	• The guidance provides the following	
	recommendations:	
	immediately for patients with suspected	
	thrombosis with thrombocytopenia syndrome,	
	and treatment should not be delayed while waiting	
	for platelet factor results if imaging findings are	
	positive for thrombosis or the patient's symptoms	
	are troublesome	
	thrombosis with thrombocytopenia syndrome is	
	suspected or confirmed	
	Surveillance, monitoring and evaluation, and reporting O Infrastructure to enable surveillance, monitoring and evaluation Surveillance, monitoring and evaluation, and reporting O Documenting adverse events and follow-up	 Keivance to question Surveillance, monitoring and evaluation, and reporting Infrastructure to enable surveillance, monitoring and evaluation Use of Pfizer-BioNTech, Moderna, and Oxford-AstraZeneca Guidelines for staffing, training, and recruitment requirements Most vaccination outcomes were reported from Israel and United States The review described potential challenges to the vaccine roll-out such as addressing shortages, increasing accessibility to vulnerable populations (e.g., refugees, migrants, minority groups, individuals living in conflict areas), cost of procurement and delivery, and addressing vaccine hesitancy (e.g., among younger adults, who identify as female, and black populations) Surveillance, monitoring and evaluation, and reporting Documenting adverse events and follow-up This rapid review presents a table of recommendations from different professional societies on the components of the diagnostic pathway and aspects of treatment for patients with possible thrombotic adverse events following SARS-CoV-2 coronavirus vaccination The guidance provides the following recommendations: Complete blood count should be obtained immediately for patients with possible thrombosis with thrombocytopenia syndrome, and treatment should no the dalayed while waiting for platelet factor results if maging findings are positive for thrombosis or the patient's symptoms are troublesome A hematology specialist should be consulted if thrombosis with thrombocytopenia syndrome is suspected or confirmed

Type of document	Relevance to question	Key findings	Recency or status
		 Direct thrombin inhibitors or direct oral anticoagulants should be used for treatment of suspected thrombosis patients Intravenous immune globulin should be given, especially if the patient's condition is severe Anticoagulant treatment is recommended to continue for at least three months Source (AMSTAR rating 0/9) 	
	 Allocating vaccines and ancillary supplies equitably Approaches to developing and adjusting allocation rules 	 The National Advisory Committee on Immunization (NACI) in Canada utilized an evidence-informed Equity Matrix which considers biological and social risk factors known as the PROGRESS model to develop vaccine prioritization guidance This rapid review conducted by the research group that reviewed the risk factors that helped populate the Equity Matrix are providing an updated review of the evidence to determine the magnitude of association between the PROGRESS risk factors and severe outcomes of COVID-19 The research group found that there is now strong evidence with moderate certainty of a large increase in COVID-19 mortality among people aged 60 to 69 years versus those under 60 years, people having two or more comorbidities versus those with no comorbidities, and for people affected by Down syndrome, Type 1 and 2 diabetes, kidney disease, epilepsy, neutron diseases, multiple sclerosis, or Huntington's disease Additionally, the rapid review finds that there is probably little-to-no increase in severe outcomes with several cardiovascular and respiratory conditions, and for adult males versus adult females It is suggested by the research group that future research should focus on risk factors where there is low quality or non-existent evidence such as the rare 	Published 26 April 2021

Type of document	Relevance to question	Key findings	Recency or status
		conditions, on the pediatric population, and long- term outcomes <u>Source</u> (AMSTAR rating 7/10)	
	 Surveillance, monitoring and evaluation, and reporting Documenting vaccine-related opinions Identifying sources of vaccine hesitancy 	 This rapid review provides an update on identified and summarized literature on COVID-19 vaccination uptake and attitudes to understand factors associated with vaccine uptake in Canada and globally, with an additional focus on vaccine uptake and evidence on specific populations, such as healthcare workers, LGBTQ+, faith groups, newcomers, parents, women who are pregnant or breastfeeding, people living in rural communities, older adults, people with comorbidities, and people experiencing multiple barriers to health such as homelessness Currently there are 109 studies identified that focus on COVID-19 vaccine uptake and attitudes conducted in Canada on the general public, and in Canada, Australia, New Zealand, the United States and the United Kingdom on healthcare workers, high-risk populations, and other priority populations The findings of vaccine uptake and factors associated with uptake in healthcare workers across studies showed that: The proportion of healthcare workers who accepted and received one-dose of the vaccine ranged from 52% to 92% Vaccine uptake was positively associated with increasing age and male gender Doctors were more likely to get vaccinated compared to nurses and non-clinical healthcare workers Black, Asian, and minority ethnic groups had the lowest uptake rates Vaccine intention studies in Canada showed that: Intention to vaccinate is increasing and currently varies from 66% to 80% in the general public, and 57-80% in healthcare workers 	Published 23 April 2021

Type of document	Relevance to question	Key findings	Recency or
Type of document	 Allocating vaccines and ancillary supplies equitably Approaches to developing and adjusting allocation rules Allocation rules People at increased risk of severe COVID-19 People in social environments that put them at elevated risk for COVID-19 Ensuring equity 	 British Columbia, Quebec and the Atlantic provinces have the highest intentions to vaccinate Most common factors positively associated with intention to vaccinate in the general public in Canada and globally include male gender, older age, higher education, adequate knowledge or health literacy, trust in experts and government, history of a prior influenza vaccine, higher socio-economic status, and heightened worry or concern about COVID-19 Intention to vaccinate in Canada and globally varied widely by race, ethnicity, religious beliefs, high-risk populations (e.g., pregnant women, people experiencing homelessness) and concerns about vaccine safety and effectiveness Source (AMSTAR rating 4/9) This WHO and UNICEF rapid review addresses disability-related considerations various stakeholders should make to ensure equitable vaccine access The following actions are recommended for persons with disabilities and their support networks: Seek reputable information on vaccination and connect with healthcare providers, and connect with support networks and local organizations to seek support in overcoming these barriers Report instances of discrimination when accessing vaccination The following actions are recommended for governments: Consult with and consider persons with disabilities when determining prioritization for 	Published 26 April 2021
		initial phases of vaccination	

Type of document	Relevance to question	Key findings	Recency or
			status
		• Ensure proper disaggregated data are captured to	
		measure equitable vaccination coverage and	
		uptake	
		 Provide vaccination-related materials and 	
		resources in accessible formats	
		 Work with partners to address stigmas and 	
		misconceptions that may prevent persons with	
		disabilities from accessing vaccination	
		• Provide clear guidance and rationale for the	
		vaccination prioritization sequence	
		• Ensure there are adequate feedback mechanisms	
		for community members to report concerns	
		regarding discrimination, misinformation or	
		access issues	
		• The following actions are recommended for heath-	
		service providers delivering vaccinations:	
		• Partner with local organizations to share	
		vaccination-related information with persons with	
		disabilities and address barriers	
		• Provide targeted information about vaccines and	
		the vaccination process to persons with disabilities	
		and their support networks	
		 Educate health workers regarding disability 	
		inclusion and accessibility, and address potential	
		biases	
		• Recruit persons with disabilities as staff members	
		• Ensure registration processes, patient resources,	
		and vaccination sites are accessible and free of	
		barriers	
		• The following actions are recommended for	
		organizations of persons with disabilities:	
		• Seek to provide input on vaccination roll-out	
		strategies and ensure persons with disabilities are	
		represented in any vaccination-related advocacy	
		• Share vaccination-related information and address	
		people's questions	

Type of document	Relevance to question	Key findings	Recency or
			status
		• Compile a list of resources people with disabilities	
		may access to aid in registering for vaccination	
		and accessing vaccination sites	
		• Raise awareness regarding patients' rights,	
		principles of equal access, and informed-consent	
		processes	
		• The following actions are recommended for disability	
		service providers:	
		• Seek to provide input on vaccination roll-out	
		strategies	
		• Share vaccination-related information and address	
		people's questions	
		 Support clients in registering for vaccination and 	
		accessing vaccination sites	
		• The following actions are recommended for	
		residential institutions and long-term care facilities:	
		• Ensure residents and staff are well-informed	
		about vaccines and vaccination programs	
		• Ensure accessible telehealth services are made	
		available	
		 Support residents in registering for vaccination, 	
		accessing vaccination sites, and, if possible, make	
		vaccination available locally	
		• Ensure there are strong measures in place to	
		prevent and monitor instances of abuse, violence,	
		neglect or coercion	
		• The following actions are recommended for the	
		community:	
		• Be informed about vaccination and refrain from	
		spreading potential misinformation	
		 Support persons with disabilities within your 	
		social networks	
		• Address accessibility issues and negative attitudes	
		that persons with disabilities may experience when	
		accessing vaccination	
		Source (AMSTAR rating 0/9)	

Type of document	Relevance to question	Key findings	Recency or
			status
	 Surveillance, monitoring and evaluation, and reporting Documenting vaccine-related opinions Identifying sources of vaccine hesitancy 	 The living evidence review identified 40 studies that assessed factors related to vaccination acceptance and/or uptake in the general public since COVID-19 vaccines have been approved Lower vaccination acceptance and/or uptake were associated with Concerns and misinformed beliefs about vaccine safety, efficacy and necessity Mistrust of governments and public-health agencies Racialized groups (e.g., Black, Latinx, Asian) Based on the Capability, Opportunity, and Motivation-Behaviour (COM-B) model, vaccine acceptance was associated with "knowledge", "environmental context and resources", "social influences", "beliefs about consequences", "social/professional role and identity", "reinforcement", and "emotion" Among racialized groups, vaccine acceptance was associated with "knowledge", associated with "knowledge", "environmental context and resources", and "beliefs about consequences" 	Literature last searched 20 April 2021
	 Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Target of intervention High-risk groups 	 Source (AMSTAR rating 5/9) Only two policy documents from the U.K. were identified relating to healthcare personnel who have not received a COVID-19 vaccination (due to contraindication or refusal) and they recommended that: COVID-19 vaccination should be strongly encouraged among healthcare personnel A supportive environment to engage healthcare personnel is recommended, where information, encouragement and clear explanation of the 	Date of literature search not reported (published 20 April 2021)

Type of document	Relevance to question	Key findings	Recency or
			status
		benefit and value of the vaccine could be	
		• Clear guidance should be provided to employers on	
		how to undertake one-to-one conversations with	
		Source (AMSTAR rating $2/0$)	
	• Sumallance monitoring and ambustion and	This repid review identified (4 studies that assessed	Literature last
	• Surveinance, monitoring and evaluation, and	• This rapid review identified 04 studies that assessed	searched 20
	• Documenting vaccine_related opinions	uptake among healthcare workers (HCWs) and only	April 2021
	o Identifying sources of vaccine hesitancy	six studies were conducted in Canada	L
		 Almost two-thirds (64%) of HCW respondents were 	
		willing to accept a COVID-19 vaccine	
		• Among 37 studies conducted in the period since	
		the COVID-19 vaccine approval (spanning	
		November 2020 - April 2021), 58% of HCW	
		respondents were willing to accept a COVID-19	
		vaccine	
		• Based on the Capability, Opportunity, and	
		Motivation-Behaviour (COM-B) model, several	
		important factors were identified that focused	
		primarily on Opportunity and Motivation	
		• Capability factors focused on "Knowledge"	
		• Opportunity factors included "Environmental	
		context and resources" and "Social influences"	
		• Motivation factors included "Beliefs about	
		"Social / professional role and identity"	
		"Reinforcement" and "Emotion"	
		• Concerns and arrangous baliefs about COVID 10	
		vaccine safety efficacy and necessity were common	
		and associated with lower vaccination accentance and	
		uptake among HCWs	
		 Mistrust of governments and public-health agencies 	
		was associated with lower vaccination acceptance.	
		and routine seasonal vaccination was consistently	

Type of document	Relevance to question	Key findings	Recency or
Type of document	Relevance to question	 Key findings associated with higher likelihood of vaccine acceptance and uptake Lower vaccination acceptance rates were found among non-physician HCWs (e.g., nurses) Overall, 11/64 studies assessed whether vaccine acceptance was associated with race and ethnicity Ten studies found some evidence that racialized (e.g., Black, Latinx, Asian) respondents were less likely to express vaccine acceptance versus. White respondents 	Recency or status
	 Surveillance, monitoring and evaluation, and reporting Documenting vaccine-related opinions Identifying sources of vaccine hesitancy 	 The rapid review summarizes the evidence on what is known about reasons for vaccine confidence and uptake in populations experiencing inequities Indigenous populations in Canada and globally were primarily concerned about safety and preferred to receive information on risks and benefits and access to vaccination from trusted sources (e.g., trusted leaders and community groups at trusted locations), due to experiences of historical stigmatization, racism and discrimination Black, African and Caribbean communities in North America and Europe were primarily concerned about the trade-off between the risk of contracting the disease and the adverse effects of vaccine, in addition to mistrust due to historical injustices Risk-benefit communication from trusted sources that helped to address misinformation and fear was found to be important Providing vaccines in trusted and accessible locations and paper-based appointment booking were important strategies to increase access to vaccines Individuals experiencing homelessness or are precariously housed were primarily concerned about 	Literature last searched 14 April 2021

Type of document	Relevance to question	Key findings	Recency or status
		 access to vaccination programs (e.g., cost, location, awareness of times, and ability to drop-in) Most studies reported that this population group were willing to follow healthcare provider recommendations Barriers to vaccine uptake included unknown status of previous vaccinations Source (AMSTAR rating 7/10) 	
	 Administering vaccines in ways that optimize timely uptake Where Community-based health settings 	 The review identified three models of mass-vaccination clinics such as drive-through clinics (e.g., at stadiums, large open car parks, enclosed school bus garage), walk-through clinics (e.g., at university campus sports arenas, polling stations, outdoor tents at medical facilities, schools), and mobile clinics (e.g., food banks and homeless shelters, assisted-living facilities) Effective practices of mass vaccination clinics included ensuring physical distancing, reducing participant length of time, and providing multiple options or locations across a region Some limitations to mass-vaccination clinics included the large number of people in the same location, harder to control physical distancing, logistics and loss of efficiency, and documentation challenges 	Literature last searched 20 June 2020
	 Surveillance, monitoring and evaluation, and reporting Documenting vaccine-related opinions Identifying sources of vaccine hesitancy 	 This review aimed to determine behavioural responses and attitudes towards receiving a COVID- 19 vaccine if it resulted in health certification for participation in extended activities such as international travel 	Preprint (Literature last searched 28 December 2020)
		• Few studies identified in the review discussed the possible effects of certification on uptake of vaccinations, with some studies reporting that intention to get vaccinated varied based on the activity it enabled the individual to participate in, and	

Type of document	Relevance to question	Key findings	Recency or
		 the source who recommended the vaccine to the individual Gaining health certification to visit hospitals or nursing homes, travel to another state, air travel, work, attending non-religious gatherings, attending large non-religious gatherings, and attending school were associated with increased acceptance and likelihood of vaccination Conversely, one study indicated that 51% of individuals who did not plan to get vaccinated would not be swayed by any opportunity to participate in activities Studies that examined the effects of mandatory vaccinations found that these policies were associated with anger and had negative effects on willingness to accept a vaccine, while one study found that 47.7% of people surveyed found employer-mandated and enforced vaccinations acceptable Source (AMSTAR rating: 7/9) 	status
Protocols for reviews that are underway	 Surveillance, monitoring and evaluation, and reporting Documenting adverse events and follow-up 	 Neurological manifestations related to COVID-19 vaccination Source 	Anticipated completion date 31 October 2021
	 Allocating vaccines and ancillary supplies equitably Allocation rules People for whom vaccine safety and effectiveness has not yet been established Surveillance, monitoring and evaluation, and reporting Documenting vaccine-related opinions Identifying sources of vaccine hesitancy 	 Safety and efficacy of COVID-19 vaccines in pregnant and breastfeeding women, and the factors associated with vaccine uptake, attitudes, and intentions in pregnant, postnatal and breastfeeding women Source 	Anticipated completion date 30 September 2021
	 Surveillance, monitoring and evaluation, and reporting Documenting vaccine-related opinions (e.g., vaccine acceptance and hesitancy) 	• The proportion of people globally who refuse to take the COVID-19 vaccine and the socio-demographic factors that influence vaccine refusal <u>Source</u>	Anticipated completion date 31 August 2021

Type of document	Relevance to question	Key findings	Recency or
			status
	• Surveillance, monitoring and evaluation, and	• Meta-analysis of adverse reactions of COVID-19	Anticipated
	reporting Desumenting adverse events and fellow up	vaccines in adults	31 August 2021
	 Documenting adverse events and follow-up Allocating vaccines and ancillary supplies equitably Allocation rules People in social environments that put them at elevated risk for COVID-19 Ensuring equity 	 Access to vaccination among disadvantaged, isolated and difficult-to-reach communities in the WHO- European Region: A mixed-method systematic review Source 	Anticipated completion date 30 June 2021
	 Surveillance, monitoring and evaluation, and reporting Documenting adverse events and follow-up 	 Systematic review of the prevalence and characteristics of cerebral venous sinus thrombosis (CVST) as well as other thrombotic events after vaccination for COVID-19 Source 	Anticipated completion date 30 June 2021
	 Surveillance, monitoring and evaluation, and reporting Documenting adverse events and follow-up 	 Systematic review of thrombosis with thrombocytopenia syndrome (TTS) after administration of AZD1222 or Ad26.COV2.S vaccine for COVID-19 Source 	Anticipated completion date 30 June 2021
	 Surveillance, monitoring and evaluation, and reporting Documenting adverse events and follow-up 	 Systematic review and meta-analysis of thrombotic bleeding and complications after COVID-19 vaccination Source 	Anticipated completion date 3 June 2021
Titles/questions for reviews that are being planned	No highly relevant titles/questions found		
Single studies in areas where no reviews were identified	 Surveillance, monitoring and evaluation and reporting Documenting vaccine-related opinions 	 The purpose of this study was to identify the attributes of a successful vaccination campaign Results demonstrated that individuals preferred single over multiple vaccine doses, reduced wait times, and in-home vaccination or vaccination at a pharmacy/health facility, as opposed to mass-vaccination sites 	Pre-print (last edited 19 May 2021)

Type of document	Relevance to question	Key findings	Recency or
			status
		 Additionally, individuals favoured having only one 	
		vaccine dose for long-term immunity as compared to	
		annual vaccination	
		• All vaccine enforcement strategies appeared to have a	
		negative impact on willingness to vaccinate	
		• Overall, the authors stressed the importance of	
		simplifying and streamlining vaccination campaigns to	
		promote ease of vaccination. Additionally, successful	
		through offering choice with regard to vaccine brand	
		and the location of vaccination	
		Source	
	• Allocating vaccines and ancillary supplies equitably	• The purpose of this study was to determine the	Published 18
	• Allocation rules	extent to which U.S. jurisdictions have incorporated	May 2021
		disadvantage indices and related measures in their	
		vaccine-allocation guidelines	
		• The authors analyzed any changes in vaccine-	
		allocation plans (particularly with respect to	
		disadvantage indices and related measures) across all	
		U.S. jurisdictions from 8 November 2020 to 30	
		March 2021	
		• Findings indicated that six months after the required	
		deadline to publish their allocation frameworks, the	
		indices or zip code-based measures to reduce	
		inquities"	
		 Five different purposes for implementing these 	
		measures were determined, and are expanded upon in	
		the study's results section	
		• Overall, the authors concluded that the majority of	
		U.S. states have recognized the need to ensure the	
		equitable distribution of vaccines across the country	
		Source	~
	Communicating vaccine-allocation plans and the	• This study utilized a single-blinded parallel-group	Published 12
	safety and effectiveness of vaccines	randomized controlled trial with planned mediation	May 2021
	o Target of intervention	and moderation tests to determine the effects of	

Type of document	Relevance to question	Key findings	Recency or status
	 General public Individuals who are hesitant about or opposed to vaccination Content of messaging Data and evidence about safety and about effectiveness in terms of both protection against COVID-19 and protection against transmission 	 different types of written vaccination information on COVID-19 vaccine hesitancy on 15,014 adults in the United Kingdom Measured using the Oxford COVID-19 Vaccine Hesitancy Scale and the Oxford Vaccine Confidence and Complacency Scale, this study gave participants various forms of vaccine information regarding: 1) the collective benefit of vaccination from not getting ill; 2) the collective benefit of vaccination from not spreading the virus; 3) the personal benefit of getting vaccinated; 4) the seriousness of COVID-19; or 5) why the speed of development is not a problem For those who were strongly hesitant to vaccines, highlighting the personal benefits was more effective than emphasizing collective benefit, and it was ineffective to combine personal and collective benefits rather than providing information on personal benefits of vaccination is the most effective form of messaging 	
	 Surveillance, monitoring and evaluation, and reporting Documenting vaccine-related opinions Identifying sources of vaccine hesitancy 	 Due to a spread of misinformation resulting in vaccine hesitancy within the general population, this study aimed to assess knowledge, attitudes, practices and concerns about the COVID-19 vaccine to support increased uptake The survey was administered to 201 participants 18 years of age or older recruited through convenience sampling 59.21% of participants were willing to get vaccinated and 65.67% would recommend it to their friends and family, 64.68% were concerned about the rapid development of the vaccine, and 45.77% were concerned about the unforeseen future effects of the vaccine 	Published 20 April 2021

Type of document	Relevance to question	Key findings	Recency or
		 In terms of the influence of various sources of information, 82.59% were influenced by healthcare workers, 82.09% by friends and family, 81.6% by government agencies, 71.11% by news from television and radio, and 69.35% were influenced by social media platforms This questionnaire was found to be a quick and straightforward assessment of vaccine acceptance and/or hesitancy and was easy to use for participants This tool can be used by government authorities and healthcare providers to understand factors influencing vaccine hesitancy and other barriers in receiving a vaccination 	Status
	 Allocating vaccines and ancillary supplies equitably Dosing rules 	 This study uses modelling to examine the impact of extending intervals between mRNA vaccine doses under a scenario of limited vaccine supply and a third wave in Canada in April Extending the dose interval in the model resulted in accelerated vaccine coverage, particularly in younger individuals The model showed that extended dose intervals (12 weeks or 24 weeks) lead to fewer cases of symptomatic disease, fewer hospitalizations, and fewer deaths at the population level, when compared to a six-week interval Even when a lower than observed vaccine effectiveness against disease was modelled, the extended dose intervals performed better The model projected the largest decrease in hospitalizations and deaths when adopting a 24-week interval for individuals aged 75 and older Two conditions led to more deaths with extended dose intervals: 	Published 10 April 2021

Type of document	Relevance to question	Key findings	Recency or
			status
		 If the first dose duration of protection is only three months If the first dose is 65% or less effective against death The model showed that under a more severe third wave scenario, extended intervals become effective even at lower effectiveness values 	

Appendix 2b: Key findings from highly relevant evidence documents identified in previous LEP versions that address the question, organized by document type and sorted by relevance to the question and COVID-19

Type of document	Relevance to question	Key findings	Recency or
			status
Guidelines developed using a robust process (e.g., GRADE)	 Allocating vaccines and ancillary supplies equitably Allocation rules People for whom vaccine safety and effectiveness has not yet been established 	 This guidance formulated by a task force of the Korean College of Rheumatology looks at recommendations regarding the efficacy and safety of COVID-19 vaccination in patients with autoimmune inflammatory rheumatic disease The recommendations state the following: Current available COVID-19 vaccines are considered safe and effective The risk of autoimmune inflammatory rheumatic flare after vaccination is low Every patient should receive one of the available COVID-19 vaccines, with the exception being those that cannot for medical reasons (e.g., prior allergy to COVID-19 vaccine components) Patients should be monitored at least 15 minutes after vaccination for potential anaphylaxis Patients should continue their immunosuppressive treatments after vaccination, including biological and targeted synthetic anti-rheumatic drugs Public-health measures (e.g., hand hygiene, mask wearing, physical distancing) should be continued after vaccination 	Published 29 March 2021
	 Allocating vaccines and ancillary supplies equitably Allocation rules People for whom vaccine safety and effectiveness has not yet been established 	 The following guidelines were updated from when they were first published in December 2020 The American College of Obstetricians and Gynecologists recommend that people considering future pregnancy, and currently pregnant or lactating should be offered a COVID-19 vaccine given the current data that symptomatic pregnant people with 	Published 24 March 2021

Type of document	Relevance to question	Key findings	Recency or
			status
		COVID-19 are at increased risk of more severe	
		illness compared with non-pregnant people	
		• People should have access to safety and efficacy	
		information during the consultation of receiving a	
		vaccine	
		Source (low-quality AGREE II rating; American College	
		of Obstetricians and Gynecologists)	
	• Allocating vaccines and ancillary supplies	This guidance produced by the Japan Society of	Published 23
	equitably	Obstetrics and Gynecology and the Japanese Society	March 2021
	o Allocation rules	of Infectious Diseases in Obstetrics and Gynecology	
	• People for whom vaccine safety and	looks at a set of recommendations for COVID-19	
	effectiveness has not yet been established	vaccination among pregnant women or those who	
		wish to become pregnant	
		• The following recommendations have been made:	
		o Safety of the COVID-19 vaccine in pregnant	
		women is currently unknown, however pregnant	
		women should not be excluded from vaccination	
		programs	
		• Before vaccination, women should be fully	
		informed of the unknown safety of the vaccine	
		• Healthcare workers and pregnant women with	
		complications such as diabetes, hypertension and	
		obesity should be vaccinated preferentially	
		 Vaccination should be avoided during 	
		organogenesis (up to 12 weeks of pregnancy)	
		• Vaccination should be administered at an	
		obstetrics and gynecology facility to check fetal	
		health before and after vaccination	
		• Vaccination should be considered for partners of	
		pregnant women to prevent infection in the home	
		• Those who are planning to get pregnant should be	
		vaccinated before pregnancy	
		Source (low-quality AGREE II rating; Japan Society of	
		Obstetrics and Gynecology and the Japanese Society of	
		Infectious Diseases in Obstetrics and Gynecology)	

Type of document	Relevance to question	Key findings	Recency or
			status
	 Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Target of intervention General public Content of messaging Information (for health workers) about vaccine-administration protocols Allocating vaccines and ancillary supplies equitably People for whom vaccine safety and effectiveness has not yet been established 	 The Strategic Advisory Group of Experts (SAGE) developed guidance for the use of Janssen Ad26.COV2.S (COVID-19) vaccine, which is a recombinant, replication-incompetent adenovirus serotype 26 (Ad26) vector encoding a full-length and stabilized SARS-CoV-2 spike protein, with 66.9% efficacy against severe COVID-19 disease after 14 days and 85.4% after day 28 It is a one-dose vaccine targeted for adults aged 18 years and above, with no additional need for further doses at this time (including older persons, and people with comorbidities) The vaccine is recommended after consultation with a physician on the benefits versus risks for the following groups: pregnant people, lactating people, persons with HIV, people who previously had SARS-CoV-2 infection, and immunocompromised people People with current COVID-19 or being treated for passive antibody therapy should not be vaccinated until recovered Source (high-quality AGREE II rating; World Health Organization) 	Published 17 March 2021
	 Allocating vaccines and ancillary supplies equitably People for whom vaccine safety and effectiveness has not yet been established 	 The American College of Rheumatology recommends the COVID-19 vaccine to patients with rheumatic and musculoskeletal diseases (RMD) There is currently no direct evidence for the benefit of patients receiving a COVID-19 vaccine due to paucity of information, however the recommendations are based on the limited evidence and balancing the information on efficacy, effectiveness, safety, feasibility, availability, and tradeoffs Source (high-quality AGREE II rating; American College of Rheumatology) 	Published 17 March 2021
	• Surveillance, monitoring and evaluation, and reporting	 The Canadian Society of Allergy and Clinical Immunology (CSACI) released vaccine testing and 	Published 15 March 2021

Type of document	Relevance to question	Key findings	Recency or
	• Documenting adverse events and follow-up	 administration guidance for allergists and immunologists As of 10 January 2021, the society recommends that an assessment from an allergist is needed among any individuals who have a suspected allergy to the components of a COVID-19 vaccine (including anyone who received the first dose), but is not required for people with history of unrelated allergies (e.g., food, drugs, insects, environmental allergens) The society recommends that immunocompromised people should be offered the COVID-19 vaccine and be a priority group following careful assessment of the benefits and risks Vaccine should be administered and followed by a minimum 15- to 30-minute observation Overall, there is low risk for allergic reactions associated with vaccines, and the cause of reactions to the Pfizer-BioNTech and Moderna COVID-19 vaccines are unknown at this time Source (low-quality AGREE II rating; Canadian Society of Allergy and Clinical Immunology (CSACI)) 	status
	 Administering vaccines in ways that optimize timely uptake With what explicit effort to leverage existing health-system arrangements 	 This document on monitoring COVID-19 vaccination provides guidance about: Minimum and optional data to collect as vaccines are being rolled out and delivered 	Published 3 March 2021
	 Surveillance, monitoring and evaluation, and reporting Documenting vaccine status Documenting adverse events and follow-up Monitoring supply safety Identifying and measuring performance indicators (particularly those adjusted from standard vaccine programs) Infrastructure to enable surveillance, monitoring and evaluation 	 Key performance indicators and the anticipated use of these to measure the performance of key components of the immunization system and to take corrective action when needed The use of information systems to collect, store, analyze and disseminate any relevant information This interim guidance is primarily directed at national authorities who are responsible for the management, implementation and monitoring of COVID-19 vaccine introduction and delivery in their countries, and may also be useful for any partners who provide 	

Type of document	Relevance to question	Key findings	Recency or
	 Allocating vaccines and ancillary supplies equitably People for whom vaccine safety and effectiveness has not yet been established 	 the required support in countries or organizations that develop and deploy information systems to support vaccination programs This interim guidance presents different tools for recording and reporting COVID-19 vaccination data, including home-based records (vaccination cards), facility-based records (immunization registers), tally sheets, periodic reports, and dashboards This interim guidance presents different types of digital systems to collect, report and analyze COVID-19 vaccination data, including health-management information systems (HMIS), electronic immunization registries (EIR), digital vaccination cards and certificates, logistics-management information systems (LMIS), and geographical information systems (GIS) Source (World Health Organization) The Singapore Chapter of Rheumatologists recommends that vaccination decisions should be made at the individual level, and to vaccinate people with rheumatic disease and their household contacts The chapter conditionally recommends that COVID-19 vaccines be administered during dormancy of the disease, prior to rituximab (and if on rituximab, to administer the vaccine a minimum of six months after the last dose and/or four weeks before the next dose of rituximab) Source (high-quality AGREE II rating; The Singapore Chapter of Rheumatologists) 	Pre-print (Last edited 12 March 2021)
	 Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Content of messaging Information (for health workers) about vaccine-administration protocols Administering vaccines in ways that optimize timely uptake 	 The checklist can help frontline health workers prepare and complete a COVID-19 vaccination session at a fixed post or outreach session Before a COVID-19 vaccination session, front-line health workers should conduct related calculations and the following tasks: 	Published 1 March 2021

Type of document	Relevance to question	Key findings	Recency or status
	 Where Community-based health settings With what reporting requirements and supporting immunization information systems and broader healthcare information systems With what safety monitoring requirements 	 Prepare tally sheets (or other reporting forms, depending on recommendation, including tracking for two doses) Develop a list with contact phone numbers (e.g., supervisor, focal person for adverse events following immunization (AEFI), ambulance driver) Prepare an AEFI kit and COVID-19 vaccine-specific AEFI reporting forms Prepare an infection prevention and control kit Provide a waste bin (or bag) and a properly labelled bag for infectious waste Source (World Health Organization) 	
	 Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Delivery of the intervention By whom Modality of delivery Content of messaging Data and evidence about safety and about effectiveness in terms of both protection against COVID-19 (including duration of protection) and protection against transmission (and other factors that may contribute to vaccine acceptance and hesitancy) Information (for health workers) about vaccine-administration protocols Myths and misinformation about vaccines Risk-mitigation efforts (including complementary public-health measures used at time of vaccination) 	 The health worker communication for COVID-19 vaccination flow diagram supports health workers by outlining key steps and messages to communicate during a COVID-19 vaccination session Step 1: determine eligibility for vaccine Step 2: presume acceptance of a vaccine Step 3: share key messages about COVID-19 vaccines, including benefits of vaccination, common potential side-effects and how to handle them Step 4: respond to questions and concerns with empathy, including using facts, stories, and visual aids to provide information to debunk misinformation, rumours, and myths, or pointing to trusted resources or people in the community who support COVID-19 vaccinate Step 5: request consent to vaccinate Step 6: vaccinate and provide information to take home, including reminding the vaccine recipient to continue to follow public-health and social measures (i.e., wear a mask, maintain physical distance, and practise hand hygiene and respiratory etiquette) 	Published 1 March 2021

Type of document	Relevance to question	Key findings	Recency or
		 These steps can be carried out prior to the vaccination event, in-person or via virtual platform, at a group educational session, community meeting, or one-on-one interaction Source (World Health Organization) 	status
	 Securing and distributing a reliable supply of vaccines and ancillary supplies National purchasing Delivery to country Distribution within country and to administration sites Storage and handling within country 	 The COVID-19 vaccine introduction and deployment costing tool (CVIC tool) is intended to help governments, partners, and other stakeholders estimate the introductory and deployment cost of COVID-19 vaccine procurement and service delivery, before detailed planning can take place These costs include central activities, international and domestic logistics, service delivery, and demand generation and communications The tool focuses on operational costs and selected capital expenditures Countries can also use the tool to prepare budgets for vaccination beyond 2021 as COVID-19 vaccine is deployed Source (World Health Organization) 	Published 20 February 2021
	 Surveillance, monitoring and evaluation, and reporting Documenting vaccine-related opinions Identifying sources of vaccine hesitancy 	 This guidebook provides four tools to understand intentions for receiving the COVID-19 vaccine for prioritized groups in the population, based on WHO Strategic Advisory Group of Experts on Immunization (SAGE) Roadmap for prioritizing uses of COVID-19 vaccines in the context of limited supply that includes surveys and qualitative interviews of adults and health workers Intended users of this guidebook are immunization programme managers, researchers, and others involved in collecting, analyzing and using data for COVID-19 vaccine programme planning and evaluation There are three processes outlined in the guidebook that look at planning, investigating and acting of methods and best practices to support 	Published 3 February 2021

Type of document	Relevance to question	Key findings	Recency or
		 implementation of the surveys, interview guides, and the data collection and analysis Regional and national vaccine roll-out plans should use this guidebook to routinely gather and use data that will offer insights into how to continually improve implementation strategies and tailor communication approaches Source (World Health Organization) 	status
	 Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Delivery of the intervention By whom Modality of delivery Content of messaging Data and evidence about safety and about effectiveness in terms of both protection against COVID-19 (including duration of protection) and protection against transmission (and other factors that may contribute to vaccine acceptance and hesitancy) Myths and misinformation about vaccines 	 This interim guidance provides an overview of key activities and considerations to achieve high acceptance and uptake of COVID-19 vaccines and it includes the following aspects: coordination and planning implementation of mass media plan social media monitoring and misinformation management crisis communications advocacy and stakeholder engagement capacity building monitoring, learning and evaluation 	Published 31 January 2021
	 Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Target of intervention General public 	 The document provides tips and discussion points for service providers, health and community workers, volunteers and community networks to discuss vaccine delivery with the general public living within communities Specific details on communicating with older adults aged 65 years and older and people with comorbidities are provided Source (World Health Organization) 	Published 31 January 2021
	 Communicating vaccine-allocation plans and the safety and effectiveness of vaccines o Target of intervention General public 	 The communication planning template provides countries with an outline of communication activities that should be considered when introducing COVID- 19 vaccines, with relevant categories such as target 	Published 31 January 2021

Type of document	Relevance to question	Key findings	Recency or
			status
		audience, budget breakdown, timelines, and	
		responsibilities	
		Source (World Health Organization)	
	• Securing and distributing a reliable supply of	• This guideline outlines the step-by-step process for	Published 29
	vaccines and ancillary supplies	National Deployment and Vaccination Plan for	January 2021
	• Delivery to country	COVID-19 vaccines (NDVP) development,	
	o Inventory management within country	submission and review, which is a helpful resource	
	• Distribution within country and to	for countries as they prepare and submit their	
	administration sites	NDVPs to the Partners Platform	
	o Storage and handling within country	• This guideline should be used in conjunction with:	
	• Surveillance, monitoring and evaluation, and	• the <u>Standard Review Form for NDVP</u> , which	
	reporting	enables countries to prepare their NDVPs for the	
	o Documenting vaccine status	review process and supports regions in	
	 Documenting adverse events and follow-up 	conducting a consistent and uniform assessment	
		of the submitted NDVPs	
		o the <u>Considerations for forming a regional</u>	
		<u>COVID-19 review committee (RRC)</u> , which	
		provides insight on now these committees can be	
		NDVD _c	
		NDVFS Source (World Health Organization)	
			Published 8
	• Securing and distributing a reliable supply of	• This interim guidance is to provide guidance on	I ublished 8 Japuary 2021
	o Distribution within country and to	core facilities (LTCEs) in the context of COVID 10	January 2021
	administration sites	WILD recommends that LTCEs should be a high	
	Allocating vaccines and ancillary supplies	• WHO recommends that LTCFs should be a high	
	equitably	clear plans should be made in advance	
	\circ Allocation rules	• The initial high-priority targets for immunization	
	 Residents in long-term care homes and 	should be health workers (including those	
	other congregate-care settings	working in LTCFs and the private sector) older	
	 Essential workers (beyond front-line bealthcare) 	people and those with underlying health	
	workers) and/or those in work environments that	conditions	
	put them at elevated risk	 Timely communications and plans between LTCEs 	
		and the local health authorities to determine the	
		logistics of how the COVID-19 vaccines will be	
		deployed in their jurisdictions are important	
Type of document	Relevance to question	Key findings	Recency or
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		 Considerations should include communications with residents and next of kin, consent needs, storage, administration, disposable supplies, waste management, management of side-effects, maintaining data and ensuring timely provision of second doses Source (World Health Organization) 	status
	 Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Delivery of the intervention By whom Content of messaging Data and evidence about safety and about effectiveness in terms of both protection against COVID-19 (including duration of protection) and protection against transmission (and other factors that may contribute to vaccine acceptance and hesitancy) Surveillance, monitoring and evaluation and reporting Documenting adverse events and follow-up Infrastructure to enable surveillance, monitoring and evaluation 	 The manual provides an overview of safety implications and immunization strategies, how to identify all relevant stakeholders, provide guidance on safety data collection, data elements of pharmacovigilance preparedness, developing surveillance systems, evidence-based programmatic decisions, and provide support for vaccine safety communication <u>Source</u> (World Health Organization) 	Published 22 December 2020
	 Securing and distributing a reliable supply of vaccines and ancillary supplies Inventory management within country Distribution within country and to administration sites Storage and handling within country Allocating vaccines and ancillary supplies equitably Allocating rules Ensuring equity Communicating vaccine-allocation plans and the safety and effectiveness of vaccines 	 This document provides guidance for administration of COVID-19 vaccines including: Vaccine distribution, storage and handling Recommendations for early immunization and targeting key populations Advice about vaccine administration related to planning, ancillary supplies and about reaching remote, isolated, vulnerable, and hard-to-reach populations Monitoring vaccine uptake, safety and effectiveness, and the networks and mechanisms used to facilitate surveillance 	Published 21 December 2020

Type of document	Relevance to question	Key findings	Recency or status
	 Target of intervention General public High-risk groups Delivery of the intervention By whom Modality of delivery Surveillance, monitoring and evaluation and reporting Documenting vaccine status Documenting adverse events and follow-up Infrastructure to enable surveillance, monitoring and evaluation 	 Leveraging communication and engagement with the public, professionals and the healthcare sector <u>Source</u> (Government of Canada) 	
	 Allocating vaccines and ancillary supplies equitably Allocation rules People who have already had confirmed COVID-19 People for whom vaccine safety and effectiveness has not yet been established People at significant risk for severe allergic reaction Administering vaccines in ways that optimize timely uptake With what post-vaccination observation period and what physical distancing, personal protective equipment, sanitation and other public-health measures With what second-dose provisions 	 The Strategic Advisory Group of Experts (SAGE) provided recommendations on the use of Moderna mRNA-1273 vaccine against COVID-19 Detailed information is provided on administration, considerations for modifications, co-administration with other vaccines, contraindications, vaccinations for specific populations, prioritizations, and other recommendations related to surveillance There is no evidence for the need of a booster dose after the two-dose vaccine and interchangeability of this vaccine with other mRNA vaccines Individuals with a history of anaphylaxis to any component of the vaccine should not be administered the initial dose, and if anaphylaxis happens after the first dose, they should not receive the second dose WHO recommends against the use of mRNA-1273 in pregnancy (unless the benefit outweighs the risk), children and adolescents below the age of 18 years WHO recommends risk-benefit assessments for: extremely frail older adults, those over the age of 95, individuals who are immunocompromised or have autoimmune conditions 	Last update 25 January 2021

Type of document	Relevance to question	Key findings	Recency or status
		 WHO recommends vaccinations groups to include for lactating women, persons living with HIV, and persons with history of Bell's palsy (unless there is a contraindication to vaccination) WHO recommends delayed vaccination for individuals who currently or previously had SARS- CoV-2 infection, or received antibody therapy <u>Source</u> (World Health Organization's Strategic Advisory Group of Experts (SAGE)) 	
	 Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Target of intervention General public High-risk groups Individuals who are hesitant about or opposed to vaccination 	 The risk communication and community engagement (RCCE) strategy was updated to cover COVID-19 related events from December 2020 to May 2021 The four objectives aim for people-centred and community-led approaches to improve trust, social cohesion, and reduce negative impacts of COVID-19, such as: 1) be community-led (reduce stigma, coordinate the management of the infodemic); 2) be data-driven (enhance social media monitoring, advocate for community priorities); 3) reinforce capacity and local solutions (facilitate capacity needs assessments); and 4) be collaborative (include joint assessments and monitoring) Anticipated challenges for the next six months include uncertainty, vaccines distribution and administration, pandemic fatigue, mistrust, increased economic pressure, increased stigma, and increased politicization 	Last update 23 December 2020
	 Allocating vaccines and ancillary supplies equitably Allocation rules (to priority populations, including those listed below, as well as to 'lower levels' in a federation and/or to providers who can reach priority populations) Front-line healthcare workers 	 The priorities for the COVID-19 vaccination program should be the prevention of COVID-19 mortality and the protection of health and social-care staff and systems Secondary priorities should include vaccination of individuals at increased risk of hospitalization and increased risk of exposure, and to maintain resilience in essential services 	Published 6 January 2021

Type of document	Relevance to question	Key findings	Recency or status
	 Residents in long-term care homes and other congregate-care settings People at increased risk of severe COVID-19 (e.g., older and/or frail adults, those with chronic health conditions) Essential workers (beyond front-line healthcare workers) and/or those in work environments that put them at elevated risk (e.g., food processing and transit) Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Target of intervention High-risk groups 	 Based on the proposed guidelines, the order of priority of COVID-19 vaccinations are as follows: Residents in a care home for older adults and their carers All those 80 years of age and over and front-line health and social-care workers All those 75 years of age or over All those 70 years of age and over and clinically extremely vulnerable individuals All those 65 years of age and over All those 65 years of age and over All individuals aged 16 years to 64 years with underlying health conditions which put them at higher risk of serious disease and mortality All those 50 years of age and over All those 50 years of age and over All those 50 years of age and over Immunization advice and communication programs should be tailored to mitigate inequalities. Specifically, programs should be tailored to Black, Asian and minority ethnic groups who have higher rates of infection, morbidity and mortality 	
	 Allocating vaccines and ancillary supplies equitably Allocation rules Front-line healthcare workers Residents in long-term care homes and other congregate-care settings People at increased risk of severe COVID-19 Essential workers and/or those in work environments that put them at elevated risk 	 On December 1, the Advisory Committee on Immunization Practices (ACIP) in the U.S. recommended that healthcare personnel and long- term care facility residents be offered COVID-19 vaccination first (Phase 1a) On December 20, ACIP updated interim vaccine allocation recommendations In Phase 1b, COVID-19 vaccine should be offered to persons aged ≥75 years and non– healthcare frontline essential workers In Phase 1c, COVID-19 vaccine should be offered to persons aged 65–74 years, persons aged 16–64 years with high-risk medical conditions, and essential workers not included in Phase 1b 	Last update 1 January 2021

Type of document	Relevance to question	Key findings	Recency or
		 Federal, state and local jurisdictions should use this guidance for COVID-19 vaccination program planning and implementation <u>Source</u> (Advisory Committee on Immunization Practices, Centers for Disease Control and Prevention) 	Status
	 Securing and distributing a reliable supply of vaccines and ancillary supplies (e.g., needles, diluents) National purchasing Delivery to country Inventory management within country Administering vaccines in ways that optimize timely uptake With what second-dose provisions 	 This guideline describes the rationale and recommendations from the Advisory Committee on Immunization Practices (ACIP) on the use of Moderna COVID-19 vaccine for U.S. adults aged 18 years or older for the prevention of COVID-19 Engagement with community leaders and organizations will be needed to reduce barriers specific to vaccination uptake ACIP states that adults should complete their second vaccination with the same vaccine product as the first dose Source (Advisory Committee on Immunization Practices, Centers for Disease Control and Prevention) 	Last update 20 December 2020
	 Securing and distributing a reliable supply of vaccines and ancillary supplies Inventory management within country Distribution within country and to administration sites Allocating vaccines and ancillary supplies equitably Allocation rules Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Target of intervention General public Surveillance, monitoring and evaluation, and reporting Documenting vaccine status Documenting adverse events and follow-up 	 This guidance document outlined key elements and themes from vaccine strategy and deployment plans in the United Kingdom and countries within the European Union and European Economic Area Within the interim recommendations of European countries, the top priority group for COVID-19 vaccines included older adults, healthcare workers, and individuals with select comorbidities Due to the limited supply of vaccines, certain countries may be further prioritizing from within this group Three key themes have been noted across the European countries: 1) the COVID-19 vaccine will be free of charge; 2) models will use pre-existing vaccination structures and delivery services for the roll-out of COVID-19 vaccines; and 3) electronic immunization registries will be used to help monitor vaccine safety. efference, coverage and accentance 	Published 2 December 2020

Type of document	Relevance to question	Key findings	Recency or status
	• Infrastructure to enable surveillance, monitoring and evaluation	Source (European Centre for Disease Prevention and Control)	
	 Allocating vaccines and ancillary supplies equitably Allocation rules 	 This report follows the process of an expert group established by the Norwegian Institute of Public Health in determining the order in which vaccines should be allocated during the first stage of the Norwegian Coronavirus Immunization Programme Core values were established by the group for the first stage of the program and included, "equal respect, welfare, equity, trust, and legitimacy" These five core values were then translated to the following key goals: "1) reduce the risk of death, 2) reduce the risk of severe illness, 3) maintain essential services and critical infrastructure, 4) protect employment and the economy, 5) re-open society" Through defining the aforementioned key values and goals, the following categories of prioritization were established: a "Risk factors for severe illness and death b The group recommends a dynamic approach to prioritization in accordance with a model published by the Norwegian government illustrating four possible scenario varies based on severity of infection and is accompanied by recommendations for possible response measures. As an example, "Scenario 1a: Control" represents mild infection rates whereas "Scenario 2b: Widespread Transmission" represents more severe infection rates and societal closures are recommended 	Published 15 November 2020

 Allocating vaccines and ancillary supplies equitably Allocating vaccines and ancillary supplies equitably Distribution within country and to administration sites Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Target of intervention General public Individuals who are hesitant about or opposed to vaccination Surveillance, monitoring and evaluation, and reporting Surveillance, monitoring and evaluation, and reporting Additionally, "perceived public was used as a surrogate for the Collicity" of this ray for eview, the following themes were identified as either barriers or facilitators what an benefits, knowledge, social influences, and patient-specific factors." Additionally, "perceived lisks and benefits, knowledge, social influences and patient-specific factors." Additionally, "perceived commentations" and system-level commentations with typically improve vaccine uptake in a vaccinetion" and system-level comments are successful towards improving vaccine uptake in a variety of groups The rapid review also concluded that multi- component interventions and sources to ward in propring populations 	Type of document	Relevance to question	Key findings	Recency or
 Distribution within country and to administration sites Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Target of intervention General public Individuals who are hesitant about or opposed to vaccination Surveillance, monitoring and evaluation, and reporting Surveillance, monitoring and evaluation, and reporting As a result of this rapid review, the following themes were identified as either barriers or facilitators to vaccine uptake, varying based on context: "perceived risks and benefits, hnowledge, social influences, and benefits from vaccinations from healthcare professionals" were reported as factors." Additionally, "perceived also concluded that multicomponent interventions involving both individual- and system-level components are successful towards improving vaccine uptake in a variety of groups The group stressed the importance of ensuring equitable access to the vaccine by varying populations for the group stressed the importance of ensuring equitable access to the vaccine by varying populations for the distribution of the review also concluded that multi- component interventions involving both individual- and system-level components are successful towards improving vaccine uptake in a variety of groups 		 Allocating vaccines and ancillary supplies equitably 	 In pandemic scenario 2b, in which there is widespread transmission, the order of priority should be amended to: "1) health care workers, 2) risk groups, and 3) critical societal functions" Source (Norwegian Institute of Public Health) This report published by the Health Information and Quality Authority was written with the purpose of 	Published 16 December
(i.e., taking into account the location of initialization centres, vaccination costs, etc.) as a means of		 equitably Distribution within country and to administration sites Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Target of intervention General public Individuals who are hesitant about or opposed to vaccination Surveillance, monitoring and evaluation, and reporting 	 Quality Authority was written with the purpose of advising the National Public Health and Emergency Team in Ireland on various factors which influence vaccine uptake as well as possible interventions and communication strategies that can combat these barriers The influenza vaccine was used as a surrogate for the COVID-19 vaccine, and a rapid review was conducted to identify factors (barriers and facilitators) that influence vaccine uptake As a result of this rapid review, the following themes were identified as either barriers or facilitators to vaccine uptake, varying based on context: "perceived risks and benefits, knowledge, social influences, and patient-specific factors." Additionally, "perceived benefits from vaccination" and "recommendations from healthcare professionals" were reported as factors which typically improve vaccine uptake The rapid review also concluded that multicomponent interventions involving both individual- and system-level components are successful towards improving vaccine uptake in a variety of groups The group stressed the importance of ensuring equitable access to the vaccine by varying populations (i.e., taking into account the location of immunization centres, vaccination costs, etc.) as a means of 	December 2020

Type of document	Relevance to question	Key findings	Recency or
		 The following parties should be educated on the COVID-19 vaccine to ensure evidence-based information is being relayed to the general public: Healthcare professionals (who should be educated on the vaccine prior to the initiation of any vaccination program) Community opinion leaders A communication campaign with the purpose of combatting misconceptions about the COVID-19 vaccine should include the following key pieces of information: The mechanism of action of the vaccine Evidence related to the safety and efficacy of the vaccine The rigour of the scientific process used to evaluate the safety and effectiveness of the vaccine, as well as the fact that it is undergoing continuous evaluation Finally, the team stressed that a vaccination campaign based on knowledge and consensus would be a more effective approach than making vaccination compulsory for citizens in Ireland To maintain a relationship of trust with the public, all surveillance information related to the safety and effectiveness of the vacilable 	status
	• Consistent d'attilitation e adiable and de c	Source (Health Informant and Quality Authority)	Last update 16
	• Securing and distributing a reliable supply of vaccines and ancillary supplies (e.g., needles, diluents)	 This document provides guidance on developing COVID-19 national deployment and vaccination plans 	November 2020
	 Allocating vaccines and ancillary supplies equitably Allocation rules (to priority populations, including those listed below, as well as to 'lower levels' in a federation and/or to providers who can reach priority populations) 	 Aspects of this plan include: Regulatory preparedness Planning and coordination Costing and funding Identification of target populations Vaccine-delivery strategies 	

Type of document	Relevance to question	Key findings	Recency or
	 Ensuring equity (including whether and how access through private means can be achieved by those not initially prioritized) Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Administering vaccines in ways that optimize timely uptake Surveillance, monitoring and evaluation, and reporting 	 Preparation of supply chain and management of healthcare waste Human-resource management and training Vaccine acceptance and uptake (demand) Vaccine-safety monitoring, management of adverse effects following immunization (AEFI) and injection safety Immunization monitoring systems COVID-19 surveillance Evaluation of COVID-19 vaccine Source (World Health Organization) 	Status
	 Allocating vaccines and ancillary supplies equitably Allocation rules 	 This document provides guidance on prioritizing limited supply of COVID-19 vaccines It provides a roadmap for priority uses of COVID-19 vaccines including: Staging priority groups in relation to group size and supply Gender considerations Addressing pregnant women Addressing lactating women Addressing children Considering comorbidities in vaccine prioritization Source (World Health Organization) 	Last update 13 November 2020
	 Allocating vaccines and ancillary supplies equitably Approaches to developing and adjusting allocation rules Ensuring equity (including whether and how access through private means can be achieved by those not initially prioritized) 	 The MMWR describes the Advisory Committee on Immunization Practices' ethical principles for the allocation of COVID-19 vaccine in the U.S. The recommended approach for national, state, tribal, local and territorial levels is guided by four ethical principles: 1) maximize benefits and minimize harms; 2) promote justice; 3) mitigate health inequities; 4) promote transparency Additional considerations include decisions based on science (e.g., safety and efficacy) and feasibility of implementation (e.g., storage and handling) 	Last update November 2020

Type of document	Relevance to question	Key findings	Recency or status
		Source (Advisory Committee on Immunization Practices, Centers for Disease Control and Prevention)	
	 Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Target of intervention General public Individuals who are hesitant about or opposed to vaccination Delivery of the intervention By whom (e.g., health worker, research expert, teacher, business leader, government leader, community leader, citizen champion, media) Frequency (e.g., daily, weekly) Duration (i.e., how much or for how long) Modality of delivery (e.g., social media, text, email, telephone, radio, television, face-to-face by video, face-to-face in person) Content of messaging Data and evidence about safety and about effectiveness in terms of both protection against COVID-19 (including duration of protection) and protection against transmission (and other factors that may contribute to vaccine acceptance and hesitancy) Information about novel vaccine platforms (e.g., mRNA), current vaccine options (e.g., number of vaccines available in a country, number of doses required of any given vaccine), prioritized populations, and behaviours after vaccination Information (for health workers) about vaccine-administration protocols 	 This guideline discusses behavioural insights related to drivers of vaccine acceptance and uptake It provides a framework of drivers of vaccine uptake including: 1) an enabling environment, 2) social influences and 3) motivation Source (World Health Organization) 	Last update 15 October 2020

Type of document	Relevance to question	Key findings	Recency or status
	 Risk-mitigation efforts (including complementary public-health measures used at time of vaccination) Anticipated timing of when all those who want a vaccine will have been vaccinated 		
	 Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Target of intervention General public Individuals who are hesitant about or opposed to vaccination 	 This guideline highlights how countries can begin pre-planning for the introduction of COVID-19 vaccines by conducting a series of activities, including activities that focus on demand generation and communication Design a demand plan (includes advocacy, communications, social mobilization, risk and safety communications, community engagement, and training) to generate confidence, acceptance and demand for COVID-19 vaccines The plan must include crisis-communications preparedness planning Source (World Health Organization) 	Last update 21 September 2020
	 Securing and distributing a reliable supply of vaccines and ancillary supplies National purchasing Allocating vaccines and ancillary supplies equitably Distribution within country and to administration sites Distribution procedures Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Target of intervention General public Individuals who are hesitant about or opposed to vaccination Administering vaccines in ways that optimize timely uptake With what partnerships to reach early populations of focus 	 The Vaccine Readiness Assessment Tool (VIRAT) is intended to be used by Ministries of Health as a roadmap for countries to plan for COVID-19 vaccine introduction It also offers a structured framework for countries to self-monitor their readiness progress against key milestones, and a set of recommended indicators (coverage, acceptability, disease surveillance) for a COVID-19 vaccine COVID-19 Vaccine Introduction Readiness Assessment Tool proposes additional activities that focus on demand generation and communication Design a demand plan (includes advocacy, communications, social mobilization, risk and safety communications, community engagement, and training) to generate confidence, acceptance and demand for COVID-19 vaccines. The plan 	Last update 21 September 2020

Type of document	Relevance to question	Key findings	Recency or
	 With what reporting requirements, supporting immunization information systems, and broader healthcare information systems With what safety-monitoring requirements Surveillance, monitoring and evaluation, and reporting 	 must include crisis-communications preparedness planning Establish data-collection systems, including: 1) social media listening and rumour management; and 2) assessing behavioural and social data Develop key messages and materials for public communications and advocacy that are aligned with the demand plan Source (World Health Organization) 	status
	 Allocating vaccines and ancillary supplies equitably Allocation rules 	 This guidance document provides a values framework for COVID-19 vaccine allocation and prioritization The values framework consists of six core principles: Human well-being Equal respect Global equity National equity Reciprocity Legitimacy Source (World Health Organization) 	Last update 13 September 2020
	 Allocating vaccines and ancillary supplies equitably Allocation rules 	 This document describes the WHO Secretariat's proposal for the allocation of COVID-19 vaccines among countries, specifically in the context of the COVID-19 Vaccines Global Access (COVAX) Facility access mechanism, including: An initial proportional allocation of doses to countries until all countries have enough doses to cover 20% of their population A follow-up phase to expand coverage to other populations; if severe supply constraints persist, a weighted allocation approach would be adopted, taking account of a country's COVID threat and vulnerability Source (WHO technical guidance) 	Last update 9 September 2020
	• Securing and distributing a reliable supply of vaccines and ancillary supplies	• In the context of the COVID-19 pandemic, this document outlines the decision-making framework	Last update 22 May 2020

Type of document	Relevance to question	Key findings	Recency or
	 Distribution within country and to administration sites Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Delivery of the intervention By whom (e.g., health worker) Modality of delivery (e.g., social media, text, email, telephone, face-to-face in person) Content of messaging Myths and misinformation about vaccines 	 for implementing mass-vaccination campaigns for the prevention of vaccine-preventable diseases and high-impact diseases (VPD/HID), including: Step 1: assessing the potential impact of the VPD/HID outbreak using key epidemiological criteria Step 2: assessing the potential benefits of a mass-vaccination campaign and the country capacity to implement it safely and effectively Step 3: considering the potential risk of increased COVID-19 transmission associated with the mass-vaccination campaign Step 4: determining the most appropriate actions considering the COVID-19 epidemiological situation Step 5: if a decision is made to proceed with a mass-vaccination campaign, implementing best practice Source (WHO technical guidance) This guideline indicates that people in eligible groups who understand why flu vaccination is particularly important for them are more likely to be vaccinated Thus, professionals need to explain the benefits of vaccination and address people's misconceptions about it The guideline proposes a multi-component approach to develop and deliver programs to increase fluvaccination uptake, including raising awareness among health and social-care staff, and among eligible groups 	status Last update 22 August 2018
		eligible groups <u>Source</u> (National Institute for Health and Care Excellence)	
Full systematic reviews	 Surveillance, monitoring and evaluation, and reporting Documenting adverse events and follow-up 	• This systematic review synthesized the safety data of 11 published clinical trials of COVID-19 vaccines and found that the adverse reactions reported in the 11 trials were mild to moderate with few severe reactions which were unrelated to the test vaccine	Published 27 March 2021

Type of document	Relevance to question	Key findings	Recency or
		 The commonly reported local adverse events were pain at the site of injection, swelling and redness The systemic reactions included fever, fatigue, myalgia and headache This systematic review indicated that COVID-19 vaccines can be safe with no serious adverse events, however, long-term post-marketing surveillance data, particularly in high-risk vulnerable populations (elderly and those with co-morbidities, pregnant women and children) need to be warranted to ensure the safety of COVID-19 vaccines Source (AMSTAR rating 5/10) 	status
	 Surveillance, monitoring and evaluation, and reporting Infrastructure to enable surveillance, monitoring and evaluation 	 This review identified digital solutions that are available globally for COVID-19 vaccine certificates and evaluate them on their purpose, use case, technological architecture, and ethical and legal consequences Eight COVID-19 vaccine certificate technologies were identified and are currently in demo and betatesting trials The COVID-19 vaccine certificates have a number of technological standards for ethical and legal use, however some global leaders such as IBM, World Economic Forum and International Air Transport Association (IATA) have emphasized the need for a single set of standards Similarly to fraud and counterfeit yellow fever vaccine certificates that have been previously used, there is concern for fabricated COVID-19 vaccine certificates 	Preprint (Literature last searched 26 November 2020)
	 Administering vaccines in ways that optimize timely uptake By whom and with what changes to remuneration 	• This review aimed to estimate the effect of pharmacists administering vaccinations for influenza on overall vaccination rates, and to assess whether there is a difference in effect for at-risk sub-groups compared to the general population	Literature last searched July 2019

Type of document	Relevance to question	Key findings	Recency or
		 Findings revealed that: There appeared to be a small positive effect associated with allowing pharmacists to administer influenza vaccinations The largest increase in overall population vaccination rates associated with pharmacists vaccinating for influenza was 10% There was a graduated effect in that pharmacists with the most autonomy had the largest vaccination rate increases 	status
	 Administering vaccines in ways that optimize timely uptake Where Other community settings 	 School and childcare centre-located vaccination programs are effective in increasing vaccination rates, and decreasing rates of vaccine-preventable morbidity and mortality Key components of effective school and childcare centre-located vaccination programs include: Vaccinations provided on site Administration of programs by a wide range of providers including school health personnel, health-department staff, and other vaccination providers Delivery in a variety of different school and organized childcare settings Delivery of one or more of a range of vaccines recommended for children and adolescents Inclusion of additional components such as education, reduced out-of-pocket costs, enhanced access to vaccination services School and childcare centre-located programs may be most useful for improving immunization rates among children and adolescents for new vaccines, where background rates are likely to be very low 	Literature last searched February 2012
	Administering vaccines in ways that optimize timely uptake	• There is strong evidence on the effectiveness of vaccination requirements for childcare, school, and	Literature last searched 2015

Type of document	Relevance to question	Key findings	Recency or
	 Where Other community settings (e.g., schools) Communicating vaccine-allocation plans and the 	 college attendance in increasing vaccination rates and decreasing rates of vaccine-preventable disease and associated morbidity and mortality Vaccination requirements could be: Laws created by states, with the specific vaccines required established by the legislature and embodied in statutes or adopted as administrative rules by health or education departments Additional vaccination policies established by institutions (such as colleges and private schools) for attendance or residence Varied across jurisdictions Source (AMSTAR rating 3/10) Vaccine uptake and coverage can be improved by 	Date of
	 Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Delivery of the intervention Modality of delivery (e.g., social media, text, and email) 	 Vaccine uptake and coverage can be improved by implementing interventions that apply new media such as text messaging, internet promotions, and computerized standing orders and reminders for healthcare providers Computer-generated text messaging sent to parents of newborns and school-aged children were effective at increasing vaccination in these groups Immunization campaign websites and computerized reminders for patients have some influence on uptake of vaccine information, and patient attitudes and behaviours about vaccination There is uncertainty about how effective social-media networks, email communications and smartphone applications are on influencing vaccine uptake Vaccination rates are higher when computerized reminders to encourage providers to recommend vaccination and computer-based standing orders are in use 	literature search not reported (published January 2015)
	 Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Target of intervention 	• Findings about the structure of interventions revealed that:	Literature last searched 2013

Type of document	Relevance to question	Key findings	Recency or
	 General public High-risk groups Individuals who are hesitant about or opposed to vaccination Delivery of the intervention By whom (e.g., citizen champion) Modality of delivery (e.g., face-to-face in person) Content of messaging Myths and misinformation about vaccines Risk-mitigation efforts 	 Engaging religious and other community leaders was a commonly used strategy to address contextual influences (e.g., religion, culture and gender) Across all regions, most interventions were multicomponent Findings about the success (defined as either increase in vaccine uptake, or increase in knowledge and awareness) of interventions revealed that: Few interventions were found to have been evaluated for their success in vaccine uptake or their influence in increasing knowledge and awareness Interventions to increase uptake that have multiple components and/or have a focus on dialogue-based approaches tend to be more effective Interventions that resulted in the largest increases in vaccine uptake were those which directly targeted unvaccinated or under-vaccinated populations, improved convenience and access to vaccination, aimed to increase vaccination knowledge and awareness, targeted specific populations (e.g., healthcare workers), mandated vaccinations, and engaged religious or other influential leaders Interventions that resulted in the greatest increases in knowledge and awareness were education initiatives, especially where new knowledge was embedded into routine processes 	status
	 Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Target of intervention General public Delivery of the intervention 	 This systematic review aimed to investigate whether interventions that present risk messages are able to increase risk appraisal, vaccine intention and vaccine uptake The findings from this review indicate that interventions involving risk messages had no effect 	Literature last searched September 2017

Type of document	Relevance to question	Key findings	Recency or
	 Modality of delivery (e.g., text and telephone) Content of messaging Risk-mitigation efforts 	 on the intention of participants to vaccinate, their behaviour towards vaccines, and their perception of the severity of the disease This review identified very few behaviour-change techniques, though the additional inclusion of studies focusing on efficacy appraisal may increase intervention effectiveness <u>Source</u> (AMSTAR rating 8/11) 	status
	 Administering vaccines in ways that optimize timely uptake With what broader, complementary health interventions (e.g., flu vaccination and routine immunization, ongoing public-health measures) 	 This review examined the effectiveness of process interventions (e.g., education for clinicians, parent presence, education of parents before and on day of vaccination, and education of patients on day of vaccination) on reducing vaccination pain, fear, and distress and increasing the use of interventions during vaccination Findings revealed that: Clinicians should be educated about vaccine-injection pain management Parents should be present Parents should be educated before the vaccination day Individuals three years of age and above should be educated on the day-of-vaccination fear 	Date of literature search not reported (published in 2015)
	 Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Target of intervention High-risk groups Individuals who are hesitant about or opposed to vaccination 	 Combinations of interventions should be used in efforts to increase vaccination rates in targeted populations At least one of the interventions should be focused on increasing demand using approaches found to be most effective, including client reminder and recall systems, clinic-based client education, and manual outreach and tracking One or more of the interventions should address either or both of the following: 	Literature last searched February 2012

Type of document	Relevance to question	Key findings	Recency or status
		 Enhancing access to vaccinations (e.g., through effective interventions such as expanded access in healthcare settings, reducing out-of-pocket costs, or home visits) Ensuring vaccination providers are reminded and supported to deliver vaccinations (e.g., through effective interventions such as reminders, standing orders and assessment and feedback) Source (AMSTAR rating 6/9) 	otartao
	 Administering vaccines in ways that optimize timely uptake Where With what reporting requirements and supporting immunization information systems and broader healthcare information systems 	 Use of an immunization information system (IIS) was an effective intervention to increase vaccination rates, and studies with benefit information focused on administrative efficiency of clinical vaccination activities and savings resulting from decreased over- vaccination Source (AMSTAR rating 4/9) 	Literature last searched March 2012
Rapid reviews	 Administering vaccines in ways that optimize timely uptake With what explicit effort to leverage existing health-system arrangements Where Primary care settings 	 The document by the Knowledge to Policy (K2P) Center and the Lebanese Minister of Public Health describes the requirements for optimal integration, existing challenges, and counter strategies for vaccinations to be delivered by the National Primary Health Care (PHC) network in Lebanon Some requirements for the integration of the PHC network into current vaccination efforts include necessary physical environment and infrastructure, supplies, cold-chain management, workforce requirements, trainings, policies and procedures, technology and record-keeping, waste disposal, financing, public information and communication, and community engagement <u>Source</u> (AMSTAR rating 2/9) 	Published 1 April 2021
	 Allocating vaccines and ancillary supplies equitably Allocation rules Front-line healthcare workers 	• This rapid review summarized key public-health documents and Irish data to investigate the risk of COVID-19 infection for adults aged 18 to 64 years who are living in crowded settings	Published 31 March 2021

Type of document	Relevance to question	Key findings	Recency or status
	 Residents in long-term care homes and other congregate-care settings People at increased risk of severe COVID-19 Migrant workers People in social environments that put them at elevated risk for COVID-19 	 This review identified the following social groups as being at an elevated risk of infection: Travellers aged 18 to 64 Individuals of the Roma ethnic community Individuals, such as residents and staff members, at accommodation centres for refugees and/or international protection applicants Individuals working at meat processing plants Rates of infection were relatively lower for individuals in prison settings and for individuals who are homeless, as well as staff providing services for these populations Authors of the study concluded that lower rates of infection are likely due to the presence of stringent measures taken to protect such populations The following social groups were additionally postulated to be at a potentially higher risk of infection despite the limited availability of reliable data: Undocumented migrants, sex workers and seasonal harvest workers Individuals in settings for addiction-service users, refugees who are women and religious services This review further identified key considerations for decisions surrounding the designation of certain populations as a potential vaccine allocation group, including: Eligibility of individuals in previous vaccine-allocation groups Accurate identification of individuals in certain populations Vaccine roll-out logistics and operationalization for certain groups Degree by which membership in certain groups is mutually exclusive Impact of more transmissible variants 	

Type of document	Relevance to question	Key findings	Recency or status
		 Challenges experienced in certain groups within the context of transmission, outbreak control and transmission to the wider community <u>Source</u> (AMSTAR rating 2/9) 	
	 Surveillance, monitoring and evaluation and reporting Documenting vaccine-related opinions Identifying sources of vaccine hesitancy 	 This rapid review identified and summarized 135 studies on COVID-19 vaccination knowledge, attitudes, and behaviours of Canadian and global populations, consisting of OECD member countries, to understand the factors associated with vaccine uptake Research on vaccination knowledge, attitudes and behaviours was conducted in healthcare workers, post-secondary studies, high-risk populations, expert stakeholders, and the general public For Canadian context, the review identified that 54-75% of the population expressed intention to vaccinate, and the provinces expressing the highest intent being The Atlantic provinces and British Columbia For global context, the countries that have demonstrated the highest intention to vaccinate (79-87%) include Australia, Brazil, China, India, South Korea and the U.K. Common factors positively associated with intention to vaccinate in Canada and globally include: Male gender Older age Higher education Adequate knowledge or health literacy Trust in experts and the government Higher socio-economic status Factors associated with vaccine hesitancy or refusal include: Religious beliefs Vaccine safety and efficacy Belief that the COVID-19 vaccine is unnecessary 	Literature last searched 5 January 2021

Type of document	Relevance to question	Key findings	Recency or status
		 As next steps in this research, longitudinal sampling and monitoring can demonstrate changes in vaccinate intention and uptake over time as vaccines come to market and progression of the roll-out <u>Source</u> (AMST'AR rating 5/9) 	
	 Allocating vaccines and ancillary supplies equitably Allocation rules Front-line healthcare workers Mass public 	 In response to high rates of vaccine refusal during vaccination campaigns in the United States and globally, the authors conducted a review to identify feasibility, legality and ethical considerations associated with mandatory vaccination strategies discussed in the literature The review findings suggest that adopting mandatory vaccinations for specific population groups such as healthcare workers through law or conditional by employment could increase uptake but reduce trust between workers and their institution Education and promotional campaigns supplemented with incentives and on-site vaccination clinics could be effective in environments where mandatory vaccine policies are infeasible Source (AMSTAR rating 2/9) 	Date of literature search not reported (published 31 March 2021)
	 Allocating vaccines and ancillary supplies equitably Allocation rules People at increased risk of severe COVID-19 	 This review identified and summarized published studies, case reports, reviews, meta-analyses, and expert guidelines on the effects of SARS-CoV-2 on neurodegenerative diseases to provide recommendations for the use of current SARS-CoV-2 vaccine candidates on patients with neurodegenerative diseases, including Parkinson's disease, Alzheimer's disease, multiple sclerosis, amyotrophic lateral sclerosis, and epilepsy The authors focused on vaccine candidates who have entered phase three of clinical trials at the time of the review, which include inactivated vaccines, and nucleic acid vaccines 	Date of literature search not reported (published 31 March 2021)

Type of document	Relevance to question	Key findings	Recency or status
		 For inactivated vaccines, CoronaVac developed by Sinovac showed sufficient tolerability and immunogenicity without significant adverse reactions For viruses selected as vaccine vectors, the interim analysis reports of the Oxford-AstraZeneca vaccine candidate showed that it exceeded the minimum WHO standard for vaccine effectiveness, but required further investigation of adverse neurological effects For protein subunit vaccines, the NVX-CoV2372 vaccine by Novavax has demonstrated sufficient immunogenicity with no reports of adverse reactions The effectiveness and safety of SARS-CoV-2 vaccines for people with Alzheimer's disease is still undetermined, with data indicating they can preserve their immune response to the vaccine, but effectiveness may decrease with age The authors conclude with the recommendation that neurodegenerative diseases and their associated treatments may change the safety and effectiveness of SARS-CoV-2 vaccine candidates Vaccine administration should proceed with caution and a vaccine specifically for the elderly and those immunocompromised should be developed to increase safety and effectiveness 	
	 Securing and distributing a reliable supply of vaccines and ancillary supplies Inventory management within country Distribution within country and to administration sites Storage and handling within country Allocating vaccines and ancillary supplies equitably 	 This review provides a summary of the current available COVID-19 vaccines in the U.K., and training recommendations for those providing and administering vaccines Current available COVID-19 vaccines are mRNA vaccines (Pfizer-BioNTech and Moderna) and adenoviral vector vaccines (AstraZeneca) 	Published 25 March 2021

Type of document	Relevance to question	Key findings	Recency or status
	 Allocation rules Front-line healthcare workers Residents in long-term care homes and other congregate-care settings People at increased risk of severe COVID-19 Dosing rules Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Delivery of the intervention By whom 	 The U.K.'s Joint Committee for Vaccination and Immunization (JCVI), an expert advisory committee, has set out nine priority groups for vaccination that are linked to increasing age, pre-existing conditions, and residence and occupation in a care home setting Vaccine administrated is to be done by a range of healthcare professionals and other non-registered staff and volunteers, with training being dependent on the individual employer All three current vaccines (Pfizer-BioNTech, Moderna and AstraZeneca) have their own storage and administration requirements, which require care and precision Mass vaccination will rely on staff with appropriate training and rapid patient assessment to identify any contraindications or cautions in relation to the vaccine (e.g., previous allergic reaction to components of the COVID-19 vaccines, pregnant or breastfeeding, etc.) 	
	 Administering vaccines in ways that optimize timely uptake Where Long-term care homes With what broader, complementary health interventions 	 This rapid review examines the potential benefits, harms, evidence and implementation challenges for routine asymptomatic SARS-CoV-2 screen testing of long-term care staff in order to prevent COVID-19 outbreaks in long-term care homes The findings found no available real-world evidence to support or refute the benefit of routine asymptomatic screen testing to prevent COVID-19 outbreaks There are a number of harms that have been identified, including: Physical discomfort and injury from frequent nasopharyngeal swabbing Staff behaviour change associated with knowledge of negative test result False positive results 	Date of literature search not reported (published 23 March 2021)

Type of document	Relevance to question	Key findings	Recency or status
		 An implementation challenge that has been noted in the review is the use of rapid antigen tests which are quicker but require more frequent testing, and health human resources which may exacerbate long-term care staff shortages The potential harms of screen testing among long-term care staff outweigh the benefits given the high rates of protection of COVID-19 vaccines against symptomatic and asymptomatic SARS-CoV-2 infection Source (AMSTAR rating 2/9) 	
	 Allocating vaccines and ancillary supplies equitably Allocation rules People who have already had confirmed COVID-19 	 The primary focus of this report was to examine the characteristics of immunity/natural immunity and virus transmission in: 1) patients who previously contracted SARS-CoV-2; and 2) vaccinated individuals With respect to natural immunity and virus transmission from individuals who previously contracted SARS-CoV-2, the evidence suggests that: Previously contracting SARS-CoV-2 does not provide sterilizing immunity and reinfected individuals may still be able to transmit the virus COVID-19 reinfection is a rare occurrence On day 14 after contraction, protective immunity is reported to be between 81-100%; this lasts for a period of five to seven months Overall transmission is projected to decrease as the number of individuals, the evidence suggests: The risk of COVID-19 infection in a residence decreases by 30% after having a household member vaccinated Overall transmission is projected to decrease as vaccines continue to be administered 	Literature last searched 8 March 2021

Type of document	Relevance to question	Key findings	Recency or
		 The peak of antibody titres occurs three to four weeks post-vaccination Source (AMSTAR rating 2/9) 	status
	 Allocating vaccines and ancillary supplies equitably Allocation rules People for whom vaccine safety and effectiveness has not yet been established 	 Existing guidelines note the lack of clinical evidence on the safety or effectiveness of COVID-19 vaccines in women who are pregnant, breastfeeding, or attempting to conceive Two major U.S. specialty societies recommend shared decision-making to best balance the risks of vaccination with the risks of remaining unvaccinated, and they do not consider pregnancy or breastfeeding to be an absolute contraindication to COVID-19 vaccination Most U.S. medical centres that have taken a position on COVID-19 vaccination endorse the U.S societies' recommendations for shared decision-making and will offer vaccination to women who are pregnant or breastfeeding Organizations in the United Kingdom consider pregnancy and breastfeeding to be contraindications to COVID-19 vaccination 	Date of literature search not stated (published 24 December 2020)
	 Allocating vaccines and ancillary supplies equitably Allocation rules Front-line healthcare workers Residents in long-term care homes and other congregate-care settings People at increased risk of severe COVID-19 Essential workers (beyond front-line healthcare workers) and/or those in work environments that put them at elevated risk People in social environments that put them at elevated risk for COVID-19 Mass public 	 This rapid review assesses the extent to which individual states' vaccine allocation plans for various population groups differ from federal government (Centers for Disease Control) guidance in the United States There was agreement between all states and the federal government in giving top vaccine priority to front-line healthcare workers and long-term care facilities However, some states distinguished between front-line and non-front-line healthcare workers, assigning lower priority to the latter group First responders were assigned to the second priority group in federal guidance, but 32 states distinguished 	Preprint (Literature last searched 18 February 2021)

Type of document	Relevance to question	Key findings	Recency or
			status
		between medical and non-medical first responders	
		and assigned medical first responders the same	
		priority as healthcare workers	
		• States generally assigned other first responders to	
		the second priority group, but 14 states assigned	
		them to the top priority group	
		• Essential workers were not included in many state	
		priority lists, and of the 37 states that did include	
		them, 12 states assigned essential workers lower	
		priority than federal guidelines	
		 Most states distinguished early education staff 	
		from other essential workers and assigned them	
		the same priority level as federal guidance for	
		essential workers	
		• A broad category of 'other essential workers'	
		which was present in federal guidance and	
		assigned to the third priority group was only	
		present in 22 states' vaccination plans	
		• Only 18 states used people aged 70 or 75 and older as	
		a priority group	
		• However, 47 states used people aged 65 to 74 or	
		people aged 65 and older as priority groups, and	
		these groups were often given higher priority in	
		state plans than in federal guidance	
		• People with underlying medical conditions were	
		included in 40 states' guidelines, and there was	
		significant variability in their placement in relation to	
		federal guidelines	
		• Several groups not captured in federal guidelines	
		were included in states' guidelines	
		• Twenty-eight states included those living or	
		working in congregate settings in their priority	
		lists	
		• Ten states included individuals living with mental,	
		physical, or developmental disabilities in their	
		priority lists	
		Source (AMSTAR rating 4/9)	

Type of document	Relevance to question	Key findings	Recency or
	Allocating vaccines and ancillary supplies	• This review identified and summarized 99 articles on	Literature last
	equitably	vaccination guidance for patients with	searched 12
	o Allocation rules	autoimmune/autoinflammatory rheumatic diseases	January 2021
	o People at increased risk of severe COVID-19	(AIIRDs), to understand the available options for	
		vaccinating this population group during the	
		COVID-19 pandemic	
		• As patients with AIIRDs have been excluded from	
		COVID-19 vaccine studies at the time of this review,	
		the authors made the following recommendations	
		based on the available evidence	
		• Patients with AIIRDs should not receive a	
		vaccination during clinical of serologically active	
		vaccines	
		 COVID-19 vaccines should be administered 	
		during inactive periods of the disease while	
		patients are on lower doses of corticosteroid	
		treatment	
		 Patients taking leflunomide can be vaccinated 	
		without stopping the medication	
		• Patients should skip one to two doses of	
		methotrexate after receiving a COVID-19	
		vaccination to increase effectiveness	
		o vaccines should be administered before starting	
		drugs	
		• Patients receiving rituximab should be vaccinated	
		a minimum of four weeks before or six months	
		after treatment	
		• The authors conclude patients with AIIRDS should	
		receive a COVID-19 vaccine when the spread of	
		disease is under control and there is no risk of	
		concurrent infection	
		Source (AMSTAR rating 1/9)	
	Allocating vaccines and ancillary supplies	• This rapid review identified and summarized four	Literature last
	equitably	guidelines, five reviews, and four research articles on	searched 2
	o Allocation rules	vaccination guidelines for immunosuppressed cancer	

Type of document	Relevance to question	Key findings	Recency or status
	• People at increased risk of severe COVID-19	 patients, to understand the available options for vaccinating this population group during COVID-19 when there are no other vaccine options being tested for their safety The authors found that live vaccines are not recommended for the immunosuppressed due to the risk of vaccine-related diseases from live pathogen transmission, while inactivated, nucleic acid, protein subunit, and virus-like protein vaccines are considered safe, but provide reduced protection and require more than a normal dose for seroconversion Drawing on the available knowledge on how to vaccinate immunosuppressed cancer patients, the authors produced generalized recommendations for all cancer types, genders and age groups Administer a second dose of influenza vaccine to increase seroconversion Adjust vaccination timing by administering vaccines prior to immunosuppressive chemotherapy: inactive vaccines should be administered four weeks prior to or three weeks following therapy; live attenuated vaccines can be administered four weeks prior to or three months after therapy cessation Patients should be re-immunized if they were vaccinated during chemotherapy In treatments such as CAR T-cell therapy, live vaccines should not be administered for a minimum six- to 12-month period following treatment Take precautions before administering vaccines: provide vaccines to those surrounding immunosuppressed cancer patients; replace hospital care with telemedicine or phone calls when possible; replace intravenous drugs with oral drugs to decrease hospital visits and enable patient to remain in the home 	November 2020

Type of document	Relevance to question	Key findings	Recency or
			status
		Source (AMSTAR rating 3/9)	
	 Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Target of intervention General public Individuals who are hesitant about or opposed to vaccination Delivery of the intervention By whom Content of messaging Data and evidence about safety and about effectiveness in terms of both protection against COVID-19 (including duration of protection) and protection against transmission (and other factors that may contribute to vaccine acceptance and hesitancy) 	 This rapid review of over 100 surveys focused on comparing trends in public reception to COVID-19 vaccines over time, and analyzing factors related to vaccine perceptions, concerns and intentions during the COVID-19 pandemic Study results show that vaccine hesitancy is universal across countries and is typically manifested in the preference to wait to be vaccinated or to reject vaccination altogether The most cited reasons for vaccine hesitancy or refusal included fear of side-effects, safety and effectiveness, as well as the expedited development of the COVID-19 vaccines, perceived political interference, and misinformation Survey participants from the U.S. and U.K. with higher skepticism had a lower perceived risk of trust in government or professionals, and therefore had more doubts and objections to being vaccinated The authors recommend that confidence in the COVID-19 vaccines can be improved by emphasizing transparency and compliance with scientific standards throughout the vaccine-development and approval processes Communication strategies could use positive cues to vaccinate through engagement with loved ones and family members, and trusted figures like doctors and religious leaders. Confidence can also be instilled through transparency in access and equitable distribution of the vaccines 	Last search 20 October 2020
	 Administering vaccines in ways that optimize timely uptake With what broader, complementary health interventions 	• There are three models for vaccination delivery in non-healthcare settings: social-distancing immunization clinics, drive-through clinics, and small mobile-team clinics	Date of literature search not reported (published 27 August 2020)

Type of document	Relevance to question	Key findings	Recency or status
		 Social-distancing clinics were found to be effective, although monitoring social distancing was challenging Drive-through immunization clinics allowed for greater social distancing, but with less efficiency and with greater risk of use of an improper vaccine-administration technique Mini-mobile teams increase ability to monitor social distancing and decrease the risk of exposure, but have significant logistical challenges Strict protocols for vaccination sites to manage patient flow and duration of time at site must be established Staff must be screened and appropriately trained to manage the vaccination site Source (AMSTAR rating 3/9) 	
	 Administering vaccines in ways that optimize timely uptake With what explicit effort to leverage existing health-system arrangements (e.g., vaccination systems and primary-care practices/community health centres) With what partnerships to reach early populations of focus 	 Hard-to-reach groups may be reached by vaccine- delivery programs by setting up vaccination sites in familiar and accessible population-specific spaces Community-based teaching methods and community partnerships may be leveraged to enable greater vaccination uptake by hard-to-reach populations Additional considerations must also be made to overcome language and cultural barriers Source (AMSTAR rating 3/9) 	Date of literature search not reported (published 27 August 2020)
	 Administering vaccines in ways that optimize timely uptake By whom and with what changes to remuneration 	 Individuals with or without backgrounds in medicine can be recruited to deliver vaccinations through several avenues In-person immunization trainings and just-in-time trainings were not found to be more effective than distant or traditional training methods, respectively Source (AMSTAR rating 3/9) 	Date of literature search not reported (published 27 August 2020)
	 Surveillance, monitoring and evaluation, and reporting Identifying sources of vaccine hesitancy 	• This rapid review includes 18 surveys on individuals' willingness to receive a COVID-19 vaccine	Literature last searched December 2020

Type of document	Relevance to question	Key findings	Recency or
			status
		• The percentage of respondents inclined towards receiving a vaccine ranged from 58% in a U.Sbased sample to 93% in an Indonesian sample	
		 Greater perceived risk of COVID-19, characteristics such as being older, male, more educated and having higher income, and valuing healthcare providers' recommendations, were positively associated with willingness to receive a COVID-19 vaccine Willingness to receive a COVID-19 vaccine was negatively associated with being of Latino or Black racial/ethnic background, and concerns about vaccine safety Communication strategies to improve willingness to receive a COVID-19 vaccine behaviour-change techniques such as information about health consequences, prompts and cues, and support or encouragement 	
	• Communicating vaccing allocation plans and the	• This brief aimed to support decision makers in	Date of
	• Communicating vaccine-anocation plans and the safety and effectiveness of vaccines	 This biller aimed to support decision-makers in planning and implementing vaccine-communication 	literature
	• Target of intervention	strategies	search not
	 General public 	• Communication strategies with the public about	stated
	 Individuals who are hesitant about or 	vaccines should aim to:	(published
	opposed to vaccination • Content of messaging	 Identify concerns and misconceptions about the vaccine 	October 2020)
	 Data and evidence about safety and about 	• Provide information that is perceived to be	
	against COVID-19 and protection against transmission	 Make information about how the vaccine was developed, what it contains, its effects and safety, 	
	 Information about novel vaccine platforms, current vaccine options, 	and the background for its recommendation easily accessible	
	prioritized populations, and behaviours after vaccination	 Provide transparent, timely, consistent, accessible and easily understandable information, including 	
	 Myths and misinformation about vaccines 	to hard-to-reach groups	
	Risk-mitigation efforts	 Include practical information about where to get the vaccine and what the procedure is 	

Type of document	Relevance to question	Key findings	Recency or
	• Anticipated timing of when all those who want a vaccine will have been vaccinated	Source (AMSTAR rating 4/9)	status
	 Allocating vaccines and ancillary supplies equitably Allocation rules Ensuring equity (including whether and how access through private means can be achieved by those not initially prioritized) Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Content of messaging Anticipated timing of when all those who want a vaccine will have been vaccinated 	 To maintain public support among non-priority groups, it is critical that key stakeholders effectively communicate all evidence-informed decisions clearly To uphold ethical integrity, COVID-19 vaccines must be administered in accordance with the priority groups that have been established Source (AMSTAR rating 4/9) 	Date of literature search not reported (published 27 August 2020)
	 Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Target of intervention High-risk groups Individuals who are hesitant about or opposed to vaccination Delivery of the intervention By whom (e.g., health worker, research expert, teacher, business leader, government leader, community leader, citizen champion, media) 	 This review provides an overview of implementation considerations related to communication between healthcare workers and older adults about vaccines Communicating the aim of vaccine communication with older adults and their role in the decision-making process in relation to patient rights legislation or other standards and policies in the local setting Planners and implementers should consider healthcare workers' views and attitudes about communication and decision-making in terms of Older adults' rights and preferences Communication training Awareness around influence Healthcare workers' vaccine uptake 	Date of last search or publication not stated (listed as forthcoming)

Type of document	Relevance to question	Key findings	Recency or
		 Do healthcare workers view communication about vaccination as part of their role? Is it their responsibility to initiate the conversation about vaccination? Do healthcare workers receive support and guidance to facilitate communication with older adults who do not have the capacity to make their own decisions? Do healthcare workers receive support and guidance when communicating with older adults who speak a minority language? Practical issues encountered by healthcare workers related to communicating with older adults about vaccination include: Sufficient time Lack of appropriate context and preparation to facilitate informed decision-making Limited knowledge of disease vaccine aims to prevent Unable to provide information to address questions, concerns and fears about vaccines Lack of agreement with older adults 	
	 Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Delivery of the intervention Modality of delivery (e.g., social media, text, email, telephone, radio, television, face-to-face by video, face-to-face in person) 	 Source (AMSTAR rating 1/9) This brief provides policy- and decision-makers and operational staff insights about how digital interventions can promote vaccine uptake Evidence on the effectiveness of digital interventions to promote vaccine uptake is mixed and fragmented Mobile reminders may encourage people to vaccinate; online prompts from health providers make little or no difference to adolescent vaccine uptake; the effects of vaccination reminders via online patient portal systems or of educational videos for parents are uncertain 	Date of literature search not stated (published October 2020)

Type of document	Relevance to question	Key findings	Recency or
- ype of document	 Administering vaccines in ways that optimize timely uptake With what appointment/scheduling and screening support, changes to physical spaces and patient flows through these spaces, and changes to hours of operation With what post-vaccination observation period and what physical distancing, personal protective equipment, sanitation and other public-health measures With what safety monitoring requirements 	 Start-up and ongoing costs, acceptability and feasibility of digital interventions should be considered before implementing an intervention in a specific setting Given the limited evidence available, large scale implementation of digital interventions for vaccine uptake should be carefully evaluated, including for unintended consequences and equity impacts Operational staff and decision-makers should consider context, including health-system arrangements, constraints and on-the-ground realities that might shape the feasibility and acceptability of digital interventions Source (AMSTAR rating 4/9) A separate waiting area must be established to allow patients to be monitored post-vaccination for 15 minutes Training staff to identify signs of adverse vaccine reactions, respond to adverse reactions, and enable quick access to emergency medical supplies are central to mitigating risks associated with vaccination Ensuring patients are aware of how to get help in drive-through clinic models (i.e., through honking) and administering vaccines in-clinic for patients with a known history of adverse reactions are also critical 	Date of literature search not reported (published 27 August 2020)
		 to safety For in-clinic vaccine administration, patient flow and clinic layout must be strictly monitored <u>Source</u> (AMSTAR rating 3/9) 	
	 Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Target of intervention Individuals who are hesitant about or opposed to vaccination Delivery of the intervention By whom 	 Barriers to the uptake of vaccinations include: limited trust in vaccine effectiveness; limited knowledge; unhealthy lifestyle; low concern about disease; and safety concerns about immunizations Reliable, frequent and tailored information about vaccines must be shared with community members 	Date of literature search not reported (published 27 August 2020)

Type of document	Relevance to question	Key findings	Recency or
			status
		through multiple platforms, including social media, traditional media and providersProviders must be educated about vaccines and	
		provided with appropriate training to increase provider vaccine recommendations to patients Source (AMSTAR rating 4/9)	
	 Administering vaccines in ways that optimize timely uptake With what explicit effort to leverage existing health-system arrangements With what partnerships to reach early populations of focus With what broader, complementary health interventions With what reporting requirements and supporting immunization information systems and broader healthcare information systems 	 The Global Routine Immunization Strategic Plan (GRISP) is a useful framework for operationalizing programs to increase vaccine coverage in countries where early COVID-19 mitigation measures have had an impact To maximize reach, services should be designed to reach all equitably, vaccinator capacity and training should be increased, and immunization services should be re-integrated as synergistically as possible Efforts should be made to engage communities and create demand for immunization through culturally specific education campaigns and engagement of stakeholders and community partners Vaccination progress should be continuously monitored to ensure availability of vaccine stock and plan for catch-up vaccination 	Literature last searched June 2020
	 Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Target of intervention General public Delivery of the intervention Modality of delivery (e.g., social media, text, email, telephone, radio, television, face-to-face by video, face-to-face in person) Content of messaging Data and evidence about safety and about effectiveness in terms of both protection against COVID-19 (including duration of protection) and protection against 	 Source (AMSTAR rating 3/9) This rapid review focuses on understanding how the public responds to vaccination messages during a pandemic or epidemic, to inform messaging campaigns that encourage the uptake of new vaccines Messages found to improve vaccine uptake include those that provide information about virus risks and vaccine safety, address vaccine misunderstandings, offer vaccination reminders (including vaccination clinic details), and deliver mixed-media campaigns in communities and hospitals Behavioural influences were improved when shorter risk-framing messages were used, concerns among 	Literature last searched May 2020
Type of document	Relevance to question	Key findings	Recency or status
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	 transmission (and other factors that may contribute to vaccine acceptance and hesitancy) Anticipated timing of when all those who want a vaccine will have been vaccinated 	 target populations were addressed, and the benefits of vaccination were described Higher acceptability was found to be associated with clear, credible messages that incorporated personal accounts of people who were previously vaccinated Future messaging campaigns should ensure that communication is clear about vaccine eligibility and availability, and that target groups are involved in the campaign planning, information dissemination and relationship building Source (AMSTAR rating 8/10) 	
Guidance developed using some type of evidence synthesis and/or expert opinion	 Administering vaccines in ways that optimize timely uptake With what broader, complementary health interventions 	 This guidance from the U.S. CDC provides updated healthcare infection prevention and control recommendations in response to the COVID-19 vaccination in the following aspects: Indoor visitation Work restriction for asymptomatic healthcare personnel and quarantine for asymptomatic patients and residents SARS-CoV-2 testing Use of personal protective equipment This guidance is targeted for all healthcare personnel (HCP) while at work and all patients and residents while they are being cared for in healthcare settings Indoor visitation for unvaccinated residents should be limited solely to compassionate care situations: If the COVID-19 county positivity rate is >10% and <70% of residents in the facility are fully vaccinated For vaccinated and unvaccinated residents with SARS-CoV-2 infection until they have met criteria to discontinue transmission-based precautions For vaccinated and unvaccinated residents in quarantine until they have met criteria for release from quarantine 	Published 10 March 2021

Type of document	Relevance to question	Key findings	Recency or
Type of document	Relevance to question Relevance to question • Administering vaccines in ways that optimize timely uptake • With what broader, complementary health interventions	 Key findings Unvaccinated residents who wish to be vaccinated should not start indoor visitation until they have been fully vaccinated Updated recommendations about work restriction: Fully vaccinated HCP with higher-risk exposures who are asymptomatic (except those who have underlying immunocompromising conditions) do not need to be restricted from work for 14 days following their exposure Fully vaccinated inpatients and residents in healthcare settings should continue to quarantine following prolonged close contact with someone with SARS-CoV-2 infection Quarantine is no longer recommended for residents who are being admitted to a post-acute-care facility if they are fully vaccinated and have not had prolonged close contact with someone with SARS-CoV-2 infection in the prior 14 days Source (Centers for Disease Control and Prevention) This guidance provides the first set of public health recommendations for fully vaccinated people and will continue to be updated based on community levels of COVID-19, proportion of the population that is vaccinated, and the evolving evidence of COVID-19 vaccines For these recommendations, people are considered fully vaccinated for COVID-19 if it has been more than or equal to two weeks after they have received the second dose of the Pfizer-BioNTech or Moderna two-dose vaccine series, or if it has been more than 	Recency or status
	 Administering vaccines in ways that optimize timely uptake With what broader, complementary health interventions 	 with SARS-CoV-2 infection in the prior 14 days <u>Source</u> (Centers for Disease Control and Prevention) This guidance provides the first set of public health recommendations for fully vaccinated people and will continue to be updated based on community levels of COVID-19, proportion of the population that is 	Published 8 March 2021
		 Vaccinated, and the evolving evidence of COVID-19 vaccines For these recommendations, people are considered fully vaccinated for COVID-19 if it has been more than or equal to two weeks after they have received the second dose of the Pfizer-BioNTech or Moderna two-dose vaccine series, or if it has been more than or equal to two weeks after they have received the 	
		 single-dose Johnson and Johnson vaccine The following recommendations apply to non-healthcare settings and state that fully vaccinated people can do the following: Indoor visits with other fully vaccinated people without wearing masks or physical distancing 	

Type of document	Relevance to question	Key findings	Recency or
			status
		• Indoor visits with unvaccinated people from a	
		single household who are at low risk of severe	
		COVID-19 symptoms without wearing masks or	
		physical distancing	
		6 Fully vaccinated people with COVID-like	
		symptoms do not need to quarantine or be tested	
		confirmed COVID-19	
		• However, in public spaces fully vaccinated people	
		should continue to follow public-health guidance	
		such as wearing a mask, physical distancing, and	
		other prevention measures when visiting	
		unvaccinated people from multiple households	
		Source (Centers for Disease Control and Prevention)	
	• Administering vaccines in ways that optimize	• This scientific brief provides evidence for currently	Published 8
	timely uptake	authorized COVID-19 vaccines and public-health	March 2021
	• With what broader, complementary health	recommendations for fully vaccinated people	
	interventions	Current evidence shows that COVID-19 vaccines	
		authorized in the United States are effective against	
		symptomatic, lab-confirmed COVID-19, including	
		severe forms of the virus. Growing evidence shows	
		that COVID-19 vaccines may reduce asymptomatic	
		infection and transmission	
		• Through modelling studies, it is highly advisable that	
		public-health preventive measures such as mask use	
		and physical distancing continue to be maintained	
		 Preliminary evidence suggests that authorized 	
		COVID-19 vaccines in the United States may offer	
		some protection against emerging COVID-19 variant	
		strains, with more promise for B.1.1.7 originally	
		identified in the United Kingdom	
		Source (Centers for Disease Control and Prevention)	Dellister 12
	Allocating vaccines and ancillary supplies	• This guideline consolidates guidance issued by the	Fublished 5
	equitably	Centers for Disease Control and Prevention, the	1 Coluary 2021
	O Allocation fules	American College of Obstetricians and	
		Gynecologists, and the Society for Maternal-Fetal	1

Type of document	Relevance to question	Key findings	Recency or
	 People for whom vaccine safety and effectiveness has not yet been established 	 Medicine on COVID-19 vaccine provision to pregnant persons There is a lack of data for pregnancy during vaccine clinical trials, however pregnant persons and their obstetricians will need to use the limited available data to weigh the risks and benefits of the COVID-19 vaccines Considerations to be taken when counselling pregnant persons on the COVID-19 vaccine include: Data from animal studies Timing of planned vaccination during pregnancy Risk of exposure to SARS-CoV-2 Obstetricians will need to keep up to date with the latest information as more data on vaccines for pregnant persons becomes available Source (Centers for Disease Control and Prevention, American College of Obstetricians and Gynecologists, Society for Maternal-Fetal Medicine) 	status
	 Securing and distributing a reliable supply of vaccines and ancillary supplies Inventory management within country Allocating vaccines and ancillary supplies equitably Allocation rules Administering vaccines in ways that optimize timely uptake With what explicit effort to leverage existing health-system arrangements Surveillance, monitoring and evaluation, and reporting Infrastructure to enable surveillance, monitoring and evaluation 	 All 30 EU/EEA countries have initiated national vaccination campaigns, with 26 countries declaring that vaccination is not mandatory Most of the EU/EEA countries are administering Pfizer-BioNTech, Cormirnaty, and Moderna Most countries will not extend the time between the first and second dose (14 countries), while other countries are still undecided As of 29 January 2021, 21.5 to 100% of doses distributed have been administered across the EU countries All EU/EEA countries prioritized population groups with a higher chance of developing severe disease (e.g., healthcare and front-line workers, elderly people, residents and personnel in long-term care facilities, persons with multiple chronic conditions, social care personnel), with some including other 	Last updated 1 February 2021

Type of document	Relevance to question	Key findings	Recency or
		 essential public workers such as police, firefighters, and teachers Most of the countries have adequate storage and management of vaccines, with 20 countries stating that health authorities are leading and coordinating the deployment of vaccines Electronic immunization registries to monitor both individual and population-level vaccine uptake are used in 21 countries, with five countries utilizing an ad-hoc electronic system, four countries using electronic immunization cards, and one country recording them manually Information on which vaccine product and when it was administered are important data elements, in addition to recording any adverse event following immunization Challenges to roll-out include: shortage of equipment (e.g., needles and syringes), misinformation, monitoring systems with consolidating data, logistical challenges, and limited vaccine supply Extensive coordination between national and local authorities and multidisciplinary participation is required 	Status
	 Surveillance, monitoring and evaluation, and reporting Infrastructure to enable surveillance, monitoring and evaluation 	 The report provides an update on vaccine distribution within EU/EEA countries as of 21 February 2021 Germany and France have highest number of doses distributed by manufacturers Malta, Denmark, and Finland have the highest percentage of vaccine uptake of the first dose among their populations (6.3 to 10.6%), with an overall median of 5.2% from 29 reported EU/EEA countries 	Last updated 21 February 2021

Type of document	Relevance to question	Key findings	Recency or status
		 Full vaccination of EU/EEA countries range from 0.5 to 4.5%, with an overall median of 2.5% from 29 reported EU/EEA countries Uptake of the first dose among individuals aged 80 years or older is at a median of 25.1% (range: 0.4 to 77.2%) Source (European Centre for Disease Prevention and Control) 	
	 Surveillance, monitoring and evaluation, and reporting Infrastructure to enable surveillance, monitoring and evaluation 	 EU/EEA countries described their deployment plans albeit they are all in various stages of vaccine administration Most of the countries described that cross-government arrangements were made, such as establishing a task force and electronic systems for logistics management and vaccine registries Vaccination communication campaigns are in progress or launched, which includes the use of social media to support roll-out Countries had the opportunity to compare their vaccination roll-out with an ideal vaccine deployment ('stress test') in order to identify gaps and the robustness of their current efforts Source (European Centre for Disease Prevention and Control) 	Published 3 February 2021
	 Administering vaccines in ways that optimize timely uptake With what safety monitoring requirements Surveillance, monitoring and evaluation and reporting Documenting adverse events and follow-up 	 The guideline from the allergy centres in Germany provides guidance on allergological risk assessment regarding COVID-19 vaccination and suggests a standardized, resource-oriented diagnostic and therapeutic procedure The allergological diagnostic work-up includes, after a thorough history, the determination of basal tryptase, total IgE, and sIgE (depending on the history e.g. of latex, ethylene oxide, α-Gal or gelatine, CCD) If all tests are negative, vaccination can be provided under controlled conditions (e.g., with 	Last update 26 January 2021

Type of document	Relevance to question	Key findings	Recency or
			status
		emergency medication and trained personnel	
		available, and monitoring for at least 30 minutes	
		after vaccination)	
		• If a positive result is received (e.g., if polyethylene	
		glycol is found in the skin test), another vaccine	
		can be considered for vaccination, provided that	
		the vaccine is available (within a reasonable time)	
		• Reports of severe allergic reactions in the context of	
		COVID-19 vaccination can be made via	
		www.anaphylaxie.net using an online questionnaire	
		Source (Allergy centres in Germany)	
	Allocating vaccines and ancillary supplies	ACOG recommends that COVID-19 vaccines	Last update 27
	equitably	should not be withheld from pregnant individuals	January 2021
	o Allocation rules	who meet criteria for vaccination based on ACIP (the	
	People for whom vaccine safety and	Advisory Committee on Immunization Practices)-	
	effectiveness has not yet been established	recommended priority groups	
	• Communicating vaccine-allocation plans and the	• ACOG recommends that COVID-19 vaccines	
	safety and effectiveness of vaccines	should be offered to lactating individuals similar to	
	o Target of intervention	non-lactating individuals when they meet criteria for	
	 High-risk groups 	receipt of the vaccine based on prioritization groups	
	• Delivery of the intervention	outlined by the ACIP	
	 By whom 	• A conversation between the patient and their clinical	
	 Modality of delivery 	team may assist with decisions regarding the use of	
	• Content of messaging	vaccines approved under Emergency Use	
	 Data and evidence about safety and about 	Authorization (EUA) for the prevention of COVID-	
	effectiveness in terms of both protection	19 by pregnant patients, and the important	
	against COVID-19 and protection against	considerations include:	
	transmission	• The level of activity of the virus in the community	
	 Risk-mitigation efforts 	• The potential efficacy of the vaccine	
	Administering vaccines in wave that optimize	• The risk and potential severity of maternal disease.	
	timely uptake	including the effects of disease on the fetus and	
	• Where	newborn	
	Community-based health settings	• The safety of the vaccine for the pregnant patient	
	Other community settings	and the fetus	
	Drimary care softings		
	- Primary-care settings		

Type of document	Relevance to question	Key findings	Recency or
			status
		• A conversation with a clinician should not be	
		required prior to vaccination, as this may cause	
		unnecessary barriers to access	
		• Regardless of their decision to receive or not receive	
		the vaccine, these conversations provide an	
		opportunity to remind patients about the importance	
		of other prevention measures such as hand washing,	
		physical distancing, and wearing a mask	
		• Vaccination of pregnant individuals with a COVID-	
		19 mRNA vaccine may occur in any clinical setting	
		and non-clinical community-based vaccination sites	
		such as schools, community centres, and other mass-	
		vaccination locations, and pregnancy testing should	
		approved COVID 19 vaccine	
		Source (The American College of Obstetricians and	
		Gynecologists ACOG)	
	Allocating vaccines and ancillary supplies	The European Academy of Alleroy and Clinical	Published 16
	equitably	Immunology (EAACI) recommends the	January 2021
	• People at significant risk for severe allergic	administering of COVID-19 vaccines to patients with	Jerre Jerre
	reaction	allergies who do not have a history of allergic	
		reactions to vaccine components	
		• The EAACI highlights that anaphylaxis after	
		vaccination can occur in the absence of a history of	
		allergic reaction and recommends that an observation	
		time of 15 minutes is allotted after vaccination	
		• Patients who had a severe allergic reaction to the first	
		dose of COVID-19 vaccine should be referred to	
		allergist to determine the cause of the allergic reaction	
		(if it is due to the COVID-19 vaccine, they should	
		not receive the second dose)	
		• <u>Source</u> (The European Academy of Allergy and	
		Clinical Immunology)	D 11: 1 100
	Communicating vaccine-allocation plans and the	• A 23-person Working Group on Readying Populations for	Published 20
	safety and effectiveness of vaccines	COVID-19 Vaccine released a set of	October 2020
	o Target of intervention	recommendations and best practices for improving	

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Type of document	Relevance to question	Key findings	Recency or status
	 General public High-risk groups Individuals who are hesitant about or opposed to vaccination Delivery of the intervention By whom Content of messaging Data and evidence about safety and about effectiveness in terms of both protection against COVID-19 and protection against transmission Risk-mitigation efforts Myths or misinformation about vaccines Administering vaccines in ways that optimize timely uptake Where With what broader, complementary health interventions 	 COVID-19 vaccine acceptance and addressing hesitancy Value social science (involve research funding to include social, behavioural and communication science, and develop active partnerships) Inform public expectations about COVID-19 vaccination benefits, risks and supply (forecast range of scenarios, temper expectations, provide transparency of vaccine safety systems, seek input from marginalized populations) Communicate in meaningful ways (public wellbeing at the centre of communication, reject political tensions, conduct qualitative studies to understand local and community needs and concerns, conduct surveys on attitudes and beliefs across sub-groups, engage network of trusted champions and spokespersons to deliver a unified message) Earn public trust and confidence in allocation and distribution (develop strategies that take marginalized populations) Make vaccination available in safe, familiar places (use schools, pharmacies, places of worship, workplaces, grocery stores, health departments, senior centres, home visits; prepare educational materials and train individuals tasked with vaccination; develop hesitancy campaign plans; foster partnerships with government, health departments, media) Establish an independent body to instil public ownership (establish public committees to review and report on public understanding, access and acceptance) 	

Type of document Relevance to question	Key findings	Recency or
		status
 Allocating vaccines and ancillary supplies equitably Allocation rules Administering vaccines in ways that optimize timely uptake By whom (e.g., nurses, public-health workers, retired health workers) and with what changes to remuneration (e.g., increased vaccine-administration fee code) Surveillance, monitoring and evaluation, and reporting Documenting adverse events and follow-up 	 Vaccines should be provided to individuals in accordance with the government-identified priority groups Adverse events and safety concerns following COVID-19 vaccine administration should be reported using the established Coronavirus Yellow Card reporting scheme To ensure that there is a sufficient workforce to deliver the vaccination program, changes to the Human Medicines Regulations now permit non-registered healthcare professionals to administer the COVID-19 vaccine All individuals administering COVID-19 vaccines are required to complete assigned training 	Last update 11 January 2021
 Securing and distributing a reliable supply of vaccines and ancillary supplies National purchasing Ordering within country Storage and handling within country Administering vaccines in ways that optimize timely uptake With what post-vaccination observation period and what physical distancing, personal protective equipment, sanitation and other public-health measures By whom and with what changes to remuneration With what reporting requirements and supporting immunization information systems and broader healthcare information systems With what safety monitoring requirements Surveillance, monitoring and evaluation, and reporting Documenting adverse events and follow-up 	 This guidance is for the administration of COVID-19 Vaccine AstraZeneca (ChAdOx1-S [recombinant]) to individuals in accordance with the national COVID- 19 vaccination program This guidance is separated into the four operational stages of vaccination activity (assessment, preparation, administration and record-keeping), and defines the criteria and required characteristics of persons undertaking the assigned stage(s) In the assessment stage, the staff should assess the individual presenting for vaccination against the inclusion and exclusion criteria; consider any relevant cautions, interactions or adverse drug reactions; provide advice to the individual; obtain and record patient-informed consent; and ensure vaccinator, if another person, is informed of the vaccine product to be administered In relation to the stage of vaccine preparation, the guidance focuses on vaccine presentation, supplies, preparation and disposal 	Last update 10 January 2021

Type of document	Relevance to question	Key findings	Recency or status
	• Monitoring supply safety	 In relation to the stage of vaccine administration, the staff should ensure individual assessment and consent before administering the vaccine, administer COVID-19 Vaccine AstraZeneca, and provide any post-vaccination advice The staff should complete a vaccination record, including individual information, vaccinator and related professionals, name and brand of vaccine, date of administration, dose, form and route of administration of vaccine, quantity administered, batch number and expiry date, anatomical site of vaccination, advice given, and details of any adverse drug reactions and actions taken 	
	 Securing and distributing a reliable supply of vaccines and ancillary supplies National purchasing Ordering within country Storage and handling within country Administering vaccines in ways that optimize timely uptake With what post-vaccination observation period and what physical distancing, personal protective equipment, sanitation and other public-health measures By whom and with what changes to remuneration With what reporting requirements and supporting immunization information systems and broader healthcare information systems With what safety monitoring requirements Surveillance, monitoring and evaluation, and reporting Documenting vaccine status Documenting adverse events and follow-up Monitoring supply safety 	 This guidance is for the administration of COVID-19 mRNA vaccine BNT162b2 to individuals in accordance with the national COVID-19 vaccination program This guidance is separated into four operational stages of vaccination activity (assessment, preparation, administration and record-keeping), and defines the criteria and required characteristics of persons undertaking the assigned stage(s) In the assessment stage, the staff should assess the individual presenting for vaccination against the inclusion and exclusion criteria, consider any relevant cautions, interactions or adverse drug reactions, provide advice to the individual, obtain and record patient-informed consent, and ensure vaccinator, if another person, is informed of the vaccine product to be administered In relation to the stage of vaccine preparation, the guidance focuses on vaccine presentation, supplies, preparation and disposal 	Last update 10 January 2021

Type of document	Relevance to question	Key findings	Recency or
	 Allocating vaccines and ancillary supplies 	 before administering the vaccine, administer CCOVID-19 mRNA Vaccine BNT162b2, and provide any post-vaccination advice The staff should complete a vaccination record, including individual information, vaccinator and related professionals, name and brand of vaccine, date of administration, dose, form and route of administration of vaccine, quantity administered, batch number and expiry date, anatomical site of vaccination, advice given, and details of any adverse drug reactions and actions taken <u>Source</u> (Public Health England) The equitable allocation of vaccines where there is 	Published
	 equitably Allocation rules Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Content of messaging Data and evidence about safety and about effectiveness Myths and misinformation about vaccines 	 limited supply needs to take into account who is most at risk of exposure and severe outcomes, feasibility and acceptability of the vaccine and ethical considerations, and should also ensure flexibility in vaccine-delivery methods Efforts to maintain trust in government throughout the pandemic are key to ensuring vaccine uptake, as well as proper communication to counter misinformation and disinformation related to vaccines, through the development of tailored messages for specific contexts and groups, working with community leaders, media-literacy experts, community organizations and other key influencers Source (The Chief Public Health Officer of Canada, Government of Canada) 	October 2020
Protocols for reviews that are underway	 Surveillance, monitoring and evaluation, and reporting Identifying sources of vaccine hesitancy 	 Uptake as well as safety and efficacy of COVID-19 vaccines for women who are pregnant or breastfeeding Factors influencing uptake of vaccine, and healthcare provider's experiences of providing COVID-19 vaccines to pregnant or breastfeeding women <u>Source</u> 	Anticipated completion date 30 September 2021

Type of document	Relevance to question	Key findings	Recency or
	 Surveillance, monitoring and evaluation and reporting Documenting vaccine-related opinions Identifying sources of vaccine hesitancy 	 Identifying factors predictive of COVID-19 vaccine acceptance Identifying barrier and facilitators associated with vaccination decision-making 	statusAnticipatedcompletiondate 20September2021
	 Surveillance, monitoring and evaluation and reporting Documenting vaccine-related opinions Identifying sources of vaccine hesitancy 	• A systematic review and meta-analysis of healthcare workers' acceptance of COVID-19 vaccines <u>Source</u>	Anticipated completion date 2 July 2021
	 Surveillance, monitoring and evaluation and reporting Documenting vaccine-related opinions Identifying sources of vaccine hesitancy 	 Identifying sources of vaccine hesitancy and strategies for increasing vaccine uptake among people from Black, Asian, and minority ethnic groups in the United Kingdom Source 	Anticipated completion date 15 April 2021
	 Surveillance, monitoring and evaluation, and reporting Identifying sources of vaccine hesitancy 	Acceptance of COVID-19 vaccines across healthcare providers and factors affecting decision to be vaccinated <u>Source</u>	Anticipated completion date 30 March 2021
	 Surveillance, monitoring and evaluation and reporting Identifying sources of vaccine hesitancy 	 Factors associated with the uptake of COVID-19 vaccines among the general population <u>Source</u> 	Anticipated completion date 1 April 2021
	 Surveillance, monitoring and evaluation and reporting Identifying sources of vaccine hesitancy 	 Pooled hesitancy rate for COVID 19 vaccine uptake globally Source 	Anticipated completion date 31 March 2021
	 Surveillance, monitoring and evaluation and reporting Identifying sources of vaccine hesitancy 	 Exploring the barriers to vaccine acceptance in racial and ethnic minorities Source 	Anticipated completion date 28 March 2021
Titles/questions for reviews that are being planned	No highly relevant titles/questions found		
Single studies that provide additional insight	 Allocating vaccines and ancillary supplies equitably Ensuring equity 	• A mathematical modelling study using Ontario-based parameters examined the effects of case notifications, non-pharmaceutical intervention adherence, and	Published 31 March 2021

Type of document	Relevance to question	Key findings	Recency or
			status
		 lockdown in conjunction with a vaccination campaign At a vaccination rate of 1.5% of Ontario's population per week starting January 2021, the oldest-first strategy would reduce COVID-19 mortality by 90.8% on average (followed by 89% in the uniform, 88.9% in the contact-based, and 88.2% in the youngest-first strategies) The authors reported that more deaths could be prevented by first vaccinating with a contact-based strategy for vaccinations (followed by uniform, oldest-first, youngest-first strategies) In both scenarios, the youngest-first strategies were lowest in reducing mortality rates Overall, the authors concluded that interrupting transmission might reduce mortality more effectively than targeting vulnerable groups within populations with high seropositivity and at a later vaccination start date (due to waves) 	
	 Allocating vaccines and ancillary supplies equitably Ensuring equity 	 This study indicated that COVID-19 vaccination coverage was lower in high vulnerability counties than in low vulnerability counties in the first 2.5 months of the U.S. vaccination program, which was largely driven by socio-economic disparities COVID-19 vaccination equity varied among states and practices in states with high equity included: Prioritizing persons in racial/ethnic minority groups during the early stages of the vaccine program implementation Actively monitoring and addressing barriers to vaccination in vulnerable communities Directing vaccines to vulnerable communities Offering free transportation to vaccination sites 	Published 26 March 2021

Type of document	Relevance to question	Key findings	Recency or
		 Collaborating with community partners, tribal health organizations, and the Indian Health Service This study indicated that CDC, state, and local jurisdictions should continue to monitor vaccination coverage by social-vulnerability metrics to develop tailored, local vaccine administration and outreach efforts for reducing vaccination inequities 	status
	 Allocating vaccines and ancillary supplies equitably Allocation rules People at increased risk of severe COVID-19 	 This study examines COVID-19 vaccine prioritization of middle- and older-aged adults with cardiovascular risk factors by using age-stratified and prevalence rates of obesity, diabetes and hypertension data from a large prospective cohort study (Prospective Urban Rural Epidemiology study) The data shows that obesity, diabetes and hypertension are associated with an increased severe COVID-19 infection risk, and prioritizing adults with risk factors for vaccination is necessary and an efficient way of reducing COVID-19 mortality rates Source 	Preprint (last edited 26 March 2021)
	 Allocating vaccines and ancillary supplies equitably Dosing rules 	 This modelling study in the context of the English population investigated prioritization of a one-dose or two-dose vaccination schedule given a fixed number of vaccine doses and with respect to a measure of maximizing averted deaths This study examined two types of strategy for dose allocation: (1) giving as many people one dose or as many people two doses as permitted by the number of doses available (homogeneous strategy); and (2) adding flexibility to the allocation scheme by allowing for a given percentage of vaccine doses being used for first doses, with the remainder used for second doses (heterogeneous strategy) This modelling study indicated that vaccines offering relatively high protection from the first dose 	Preprint (last edited 24 March 2021)

Type of document	Relevance to question	Key findings	Recency or status
		 (compared to the efficacy derived from two doses) favour strategies that prioritize giving more people one dose rather than giving a smaller number two doses The precise timing of first and second doses was contingent on the speed of the vaccine delivery, with more rapid delivery favouring early deployment of second doses Source 	
	 Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Target of intervention General public Content of messaging Information about novel vaccine platforms, current vaccine options, prioritized populations, and behaviours after vaccination 	 The following case study illustrates the successes of Israel's vaccination campaign, with the following key factors: Prioritization of vaccination during the early phases of the campaign (e.g., older and middle-aged adults, healthcare workers, senior home residents and caregivers, people with chronic conditions, followed by teachers and soldiers) Public trust through integrated and familiar health system Transparency regarding vaccine safety information Culturally appropriate messages in digital and offline media (e.g., diverse health-literacy needs) Active participation and role-modelling by political and religious opinion leaders 	Published 13 March 2021
	 Allocating vaccines and ancillary supplies equitably Dosing rules 	 The authors that published initial results on the efficacy of the ChAdOx1 nCoV-19 (Oxford-AstraZeneca vaccine) conducted a pooled analysis of three single-blind randomized controlled trials to determine single-dose efficacy and the efficacy when the timing of the second dose is prolonged from six weeks to 12 weeks The vaccine efficacy was 76% after one dose from 22 to 90 days after vaccination 	Published 6 March 2021

Type of document	Relevance to question	Key findings	Recency or
		 The modelling analysis indicated that protection did not wane during the initial three-month period with minimal waning of antibody levels by day 90 Among individuals who received two doses, the group with a longer prime-boost interval of 12 weeks reported a higher vaccine efficacy (81%) compared to the group with a shorter interval of six weeks (55%) Antibody response was two-fold higher after an interval of 12 weeks compared to six weeks The authors concluded that a three-month dose interval may be advantageous compared to a program with a short dose interval in order to protect a larger number of individuals as soon as possible when vaccine supplies are limited 	status
	 Allocating vaccines and ancillary supplies equitably Allocation rules Residents in long-term care homes and other congregate-care settings People at increased risk of severe COVID-19 	 This study analyzed primary data of over 300,000 samples collected from Israel's general community and nursing homes to examine the effect of Israel's three programs of mass PCR testing, focused protection of the elderly population and prioritized vaccination on the spread of the SARS-CoV-2 B.1.1.7 variant strain The findings showed that within only six weeks, the B.1.1.7. variant strain was capable of out competing the wild-type SARS-CoV-2 strain For the 60 years and over population, the transmission of the B.1.1.7. variant strain had reached a halt which is likely due to successful surveillance testing and vaccination programs in nursing homes and the community in Israel 	Published 2 March 2021
	 Surveillance, monitoring and evaluation, and reporting Documenting adverse events and follow-up 	Two COVID-19 vaccines that received Emergency Use Authorization (EUA) in the United States are undergoing safety monitoring during the initial implementation phases of the COVID-19 national	Published 26 February 2021

Type of document	Relevance to question	Key findings	Recency or status
	 Infrastructure to enable surveillance, monitoring and evaluation 	 vaccination program using the Vaccine Adverse Event Reporting System (VAERS), a spontaneous reporting system, and v-safe, an active surveillance system VAERS is a passive surveillance system for adverse events that accepts input from healthcare providers, vaccine manufacturers and the public V-safe was established by the Centres for Disease Control and Prevention (CDC) and has participants self-enroll and receive smartphone text messages to web surveys asking about local injection site and systemic reactions For both surveillance systems, local and systemic reactions were common, with reports of death coming from long-term care facilities and rare reports of anaphylaxis Providers are encouraged to promote v-safe enrollment and are required under EUA to report to VAERs any vaccination administration errors, serious adverse events, cases of multisystem inflammatory syndrome, and cases of COVID-19 that result in hospitalization or death after COVID-19 vaccination 	
	 Administering vaccines in ways that optimize timely uptake With what explicit effort to leverage existing health-system arrangements Where Other community settings 	Processes for school-located vaccination events (SLVE) such as research, planning and partnerships (within and outside school settings) with leadership from school nurses are described <u>Source</u>	Published 22 February 2021
	 Securing and distributing a reliable supply of vaccines and ancillary supplies National purchasing Delivery to country Inventory management within country Storage and handling within country 	• The study describes key characteristics of 26 candidate COVID-19 vaccines, including efficacy levels, dosing regimens, storage requirements, prices, production capacities in 2021, and stocks reserved for LMIC countries	Published 21 February 2021

Type of document	Relevance to question	Key findings	Recency or status
	 Allocating vaccines and ancillary supplies equitably Ensuring equity Surveillance, monitoring and evaluation and reporting Documenting vaccine-related opinions Identifying sources of vaccine hesitancy 	 The four dimensions of effective global immunization include development and production, affordability, allocation, and deployment The vaccines produced by Johnson & Johnson are likely easier to deploy in LMIC countries and resource-restrained settings given that it only needs to be refrigerated and is one-dose only The diverse options of vaccines are likely needed to control the pandemic Source 	
	 Allocating vaccines and ancillary supplies equitably Approaches to developing and adjusting allocation rules 	 This study employed a large-scale online public opinion survey in 13 countries (Australia, Brazil, Canada, Chile, China, Colombia, France, India, Italy, Spain, Uganda, UK and US) to identify and understand preferences and opinions regarding the allocation of a COVID-19 vaccine 15,536 survey respondents made binary choices on hypothetical vaccine recipients that varied on five attributes that included occupation, age, transmission status, risk of death from COVID-19, and income It was found that the respondents prioritized people based on factors that were directly related to contracting COVID-19 or developing severe symptoms, such as age, vulnerability and risk of transmission Prioritization was also identified for factors related to socioeconomic statuses, such as low-income groups and non-health related key occupations and workers Source 	Preprint (last edited 2 February 2021)
	 Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Target of intervention High-risk groups 	 A national cross-sectional survey on COVID-19 vaccine uptake of 1,058 healthcare workers showed that only 33.3% had either registered or received the vaccine within three weeks of its availability in Saudi Arabia The low vaccine uptake reported in this study, together with earlier studies reporting healthcare 	Preprint (last edited 1 February 2021)

Type of document	Relevance to question	Key findings	Recency or
		workers preference to delay getting vaccinated, should warrant scaling up public health communication efforts targeted towards healthcare workers to enhance vaccine confidence and acceptance <u>Source</u>	status
	 Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Target of intervention General public 	 A cross-sectional longitudinal study of 9,000 respondents to explore changes in COVID-19 vaccine hesitancy, attitudes to the priorities of U.K. government administration, and the emergence of new variants shows that there is a reduction in COVID-19 vaccine hesitancy, particularly attributable to an increased willingness for vaccination upon news of a variant strain. Findings showed that there was a 15% increase in vaccine acceptance in the critical 50 days of case escalation leading to the UK government-mandated new year lockdown, but not enough to achieve herd immunity Respondents raised concerns for the priority list of vaccine allocation, referencing the lack of representation for Black, Asian, and Minority Ethnic groups Considering preferences and concerns raised by the public could help build trust and community engagement in wider public health strategies 	Preprint (last edited 1 February 2021)
	 Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Target of intervention General public Content of messaging Myths and misinformation about vaccines 	• A study exploring exposure to online misinformation around COVID-19 vaccines and its effects on intent to get vaccinated in the UK and USA showed that the treatment of misinformation led to a greater decrease in the number of respondents who had previously reported that they would definitely accept the vaccine relative to those who had received factual information	Published 5 February 2021

Type of document	Relevance to question	Key findings	Recency or status
	 Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Target of intervention General public 	 The exposure to misinformation had reduced the respondents' intent to accept a vaccine relative to exposure to factually correct information Before treatment, 54.1% of 3000 U.K. respondents and 42.5% of 3001 U.S. respondents reported that they would definitely accept the COVID-19 vaccine Exposure to misinformation resulted in a decrease in the number of respondents who had previously reported that they would definitely accept the vaccine relative to the control group by 6.2% in the U.K. and 6.4% in the U.S. Effective public-health communication strategies should be tailored to counter vaccine misinformation Source This study explored Chinese adults' attitudes and intention to get the COVID-19 vaccine and showed that components of persuasive messaging such as message framing, outcome uncertainty and number formats have no significant effects on vaccination 	status Published 27 January 2021
		 attitudes and intention Messaging framing involves gain- and loss-framing, in which when the perceived risk is low, gain-framed messaging has the potential to result in better persuasive outcomes, whereas loss-framed messaging is more effective when the perceived risk is high Perceived low risk is considered certain and perceived high risk is considered uncertain Number format to communicate risk and uncertainty was used through proportions, usually through a percentage format that is more understandable for people Findings showed that age, education and situational factors were more positively correlated with attitudes and intention 	

Type of document	Relevance to question	Key findings	Recency or
			status
	• Securing and distributing a reliable supply of	• Israel's vaccination campaign had achieved a great	Published 26
	vaccines and ancillary supplies	deal both in absolute terms and relative to other	January 2021
	o National purchasing	countries and the study identified and analyzed the	
	• Distribution within country and to	factors contributing to the success of Israel's vaccine	
	administration sites	roll-out in its initial phase, which can be divided into	
	• Storage and handling within country	three major groups	
	• Allocating vaccines and ancillary supplies	• The first group of factors consists of long-	
	equitably	standing characteristics of Israel which are	
	• Approaches to developing and adjusting	Israel's small size in terms of both area and	
		population its relatively young population and	
	• Communicating vaccine-allocation plans and the	its relatively warm weather in December 2020	
	safety and effectiveness of vaccines	Israel's centralized national system of	
	Derivery of the intervention Modeling of delingery	government (as opposed to a federal system of	
		government)	
	• Administering vaccines in ways that optimize	Israel's experience in and infrastructure for.	
	With what avaligit offert to leverage evicting	planning and implementing prompt responses	
	bealth-system arrangements	to large-scale national emergencies	
	• By whom	• The second group of factors relates to long-	
	O by whom	standing health-system features, including:	
		The organizational, IT and logistic capacities	
		of Israel's community-based healthcare	
		providers (the four health plans), which are all	
		large and national in scope	
		The availability of a cadre of well-trained,	
		salaried, community-based nurses who are	
		employed directly by the health plans	
		The tradition of effective cooperation between	
		government, health plans, hospitals, and	
		emergency care providers (particularly during	
		national emergencies) and the trameworks for	
		tacilitating that cooperation	
		I ne existence of well-functioning frameworks	
		support tools for assisting in the	
		implementation of vaccination campaigns	
		implementation of vaccination campaigns	

Type of document	Relevance to question	Key findings	Recency or status
		 The third group consists of factors that are more recent and are specific to the COVID-19 vaccination effort, including: The rapid mobilization of special government funding for vaccine purchase and distribution Timely contracting for a large amount of vaccines relative to Israel's population The use of simple, clear and easily implementable criteria for determining who had priority for receiving vaccines in the early phases of the distribution process A creative technical response that addressed the demanding cold storage requirements of the Pfizer-BioNTech COVID-19 vaccine Well-tailored outreach efforts to encourage the population to sign up for vaccinations While many of these facilitating factors are not unique to Israel, part of what made the Israeli roll-out successful was its combination of facilitating factors (as opposed to each factor being unique separately) and the synergies it created among them 	
	 Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Target of intervention General public Delivery of the intervention Modality of delivery Content of messaging Data and evidence about safety and about effectiveness in terms of both protection against COVID-19 and protection against transmission Myths and misinformation about vaccines 	 A cross-sectional online survey of 2,650 people showed that the majority of respondents (86%) are using traditional media to obtain information on the COVID-19 vaccine and that the use of traditional media sources (both local and national television, national newspaper sources) was found to increase the likelihood of vaccination The survey also showed that those who are less likely to get the vaccine are exclusively using social media as their source of information There appeared to be no significant effects of interaction between the type of media or source of information and trust, and this level of analysis was conducted to determine if trust in a source was a 	Published 20 January 2021

Type of document	Relevance to question	Key findings	Recency or
		 potential mediator of the relationship between the channel of information and vaccine hesitancy Perceived credibility of the sources being cited in traditional media to public-health expertise could be a driving force of these channels for vaccine acceptability There is an opportunity for social-media platforms to consider how to contribute positively to vaccine hesitancy Source 	status
	 Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Target of intervention General public Individuals who are hesitant about or opposed to vaccination Content of messaging Data and evidence about safety and about effectiveness in terms of both protection against COVID-19 and protection against transmission 	 The study examined the casual effect of exposure to distinct pro- and anti-vaccination message frames on individuals' intentions to get vaccinated Several types of message content were focused on the safety and efficacy of the vaccine itself, the likelihood that others will take the vaccine, and the possible role of politics in promoting the vaccine Respondents who received information about the safety/efficacy of the vaccine were more likely to report that they would take the vaccine Respondents who received information that others were reluctant to take the vaccine were more likely to report that they themselves would not take it, that other Americans would not take it, and that it was not important to get the vaccine Respondents who received information about political influences on vaccine development expressed hesitancy to take the vaccine 	Pre-print (last edited 6 January 2021)
	 Securing and distributing a reliable supply of vaccines and ancillary supplies National purchasing Delivery to country 	 This study provided estimates of global, regional and national target population sizes for COVID-19 vaccination to inform immunization strategies on a global scale A strategy for vaccine allocation is proposed based on three main goals: 	Published 15 December 2020

Type of document	Relevance to question	Key findings	Recency or
	 Allocating vaccines and ancillary supplies equitably Allocation rules Front-line healthcare workers Residents in long-term care homes and other congregate-care settings People at increased risk of severe COVID-19 (e.g., older and/or frail adults, those with chronic health conditions) Essential workers (beyond front-line healthcare workers) and/or those in work environments that put them at elevated risk (e.g., food processing and transit) Ensuring equity 	 To maintain core societal functions during the pandemic To protect people from irreversible and devastating harm (e.g., people over 65 years old or with high-risk health conditions) To control community transmission to return to a pre-pandemic baseline of economic and social activities The size of target populations varies significantly by region with a considerable proportion of those needed to maintain essential functions of societies and of those over 80 years of age living in Europe and North America Study estimates reveal that it would take about six to seven months to produce enough vaccines to inoculate 60-80% of the world population in order to achieve herd immunity In countries with sufficient local capacity to produce vaccines, vaccination of a significant proportion of the population can be achieved within months. However, in lower- and middle-income countries that have much less capacity to secure and deliver vaccines, the vaccination process can last much longer The strengthening of national and international supply chains to guarantee the distribution of vaccine allocation and negotiate affordable vaccine prices When designing vaccination programs, each country should consider local epidemiology, underlying population health, the effectiveness of different vaccines, and projections of available vaccine doses Source 	Status

Type of document	Relevance to question	Key findings	Recency or
			status
	• Securing and distributing a reliable supply of	 This cross-sectional analysis describes the premarket purchase commitments for COVID-19 vaccines from 	Published 15 December
	• National purchasing	manufacturers to recipient countries	2020
	Allocating vaccines and ancillary supplies	• As of November 15, 2020, premarket purchase	
	equitably	commitments of 7.48 billion doses of COVID-19	
	\circ Ensuring equity	vaccines from 13 manufacturers have been made	
		• High-income countries have secured 51% of these	
		doses even though they represent only 14% of the	
		• Only six manufacturers have sold premarket	
		vaccines to low- and middle-income countries	
		with the majority of vaccines being provided by	
		AstraZeneca/Oxford University, Novavax, the	
		Gamaleya Research Institute of Russia, and the	
		Chinese firms, SinoVac and CanSino	
		• At least 500 million doses, or 250 courses, have	
		been secured to ensure access to COVID-19	
		vaccines for developing countries through the	
		COVAX facility of the WHO's ACT Accelerator,	
		along with financing for half of its 2 billion dose-	
		target by the end 2021	
		Vaccine prices vary substantially – from US\$6.00 per course to \$74.00 per course	
		• There has been limited transparency about	
		purchasing contracts between manufacturers,	
		countries and COVAX facility, which can lead to	
		increased concerns about vaccine nationalism and	
		access to vaccines	
		• It is unknown how many countries will follow the	
		WHO's proposed equitable allocations scheme for	
		population-based distribution of vaccines, as several	
		countries participating in the COVAX facility have	
		Dilateral agreements with manufacturers	
		• Global collective action is needed to pool	
		equitable way so that there is fair access to	
		populations around the world	
		populations atound the world	

Type of document	Relevance to question	Key findings	Recency or
			status
		Source	
	 Allocating vaccines and ancillary supplies equitably Allocation rules Front-line healthcare workers Essential workers and/or those in work environments that put them at elevated risk Children (school aged) Migrant workers People in social environments that put them at elevated risk for COVID-19 Ensuring equity Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Target of intervention General public Individuals who are hesitant about or opposed to vaccination 	 Among 9,122 respondents in the U.K. (49.4% response rate), 71.5% indicated wanting COVID-19 vaccination, and 9.6% would refuse Age and female gender were, respectively, strongly positively and negatively associated with wanting a vaccine Although 2,068 respondents (22.7%) disagreed with the government's order of priority, 6,416 (70.3%) were against being able to expedite vaccination through payment Teachers, Black, Asian and Minority Ethnic (BAME) groups, general key workers, children, and university students were most cited by respondents for prioritization 32.6% of respondents were concerned that the priority list makes no reference to BAME groups 	Pre-print (last edited 8 December 2020)
	 Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Target of intervention General public Delivery of the intervention By whom 	 The study examined how timing and elite endorsement affect public opinion about COVID-19 vaccines in the United States Approval before the election reduced willingness to vaccinate and confidence in COVID-19 vaccinations A positive statement by President Donald Trump and Dr. Anthony Fauci had significant positive effects on public reactions towards COVID-19 vaccine The effect was found to be four times larger amongst Democrats than Republicans If President Trump endorsed the COVID-19 vaccine, confidence was raised about as much as Dr. Fauci's statement amongst Republicans, but confidence among Democrats was lowered These studies demonstrated that the public opinion toward COVID-19 vaccinations may be responsive to political motivation and support 	Pre-print (last edited 28 October 2020)

Type of document	Relevance to question	Key findings	Recency or
		 Further research should be directed towards developing strategies to accurately disseminate information and gain public support within future COVID-19 vaccination campaigns Source 	
	 Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Target of intervention General public Delivery of the intervention By whom 	 A global survey (13,426 people in 19 countries) showed respondents reporting higher levels of trust in information from government sources were more likely to accept a vaccine and take their employer's vaccine advice Differences in COVID-19 vaccine acceptance rates ranged from almost 90% (in China) to less than 55% (in Russia) 	Published 20 October 2020
	 Allocating vaccines and ancillary supplies equitably Allocation rules Essential workers and/or those in work environments that put them at elevated risk 	 This study aimed to evaluate the optimal allocation of COVID-19 vaccines in the U.S. based on age and occupational status (i.e., essential worker or non-essential worker) The optimal allocation of COVID-19 vaccines is reported to prioritize the treatment of older-aged essential workers Younger essential workers should be prioritized when trying to control the spread of the disease, while prioritization should be given to seniors when trying to control mortality With the developed model, approximately 15,000 deaths are predicted to be prevented 	Published 6 October 2020
	 Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Target of intervention General public Delivery of the intervention Modality of delivery Content of messaging 	 The main objectives of this study were to examine the attitude of participants towards a COVID-19 vaccine and highlight any challenges that may pose a barrier to vaccine uptake The findings from this study reported that an estimated 68% of participants would be open to receiving a COVID-19 vaccine 	Published 3 October 2020

Type of document	Relevance to question	Key findings	Recency or status
	 Data and evidence about safety and about effectiveness in terms of both protection against COVID-19 and protection against transmission Administering vaccines in ways that optimize timely uptake With what broader, complementary health interventions 	 The survey also found that longer vaccine-testing periods, increased efficacy and vaccines that would be developed in the U.S. were found to be significantly associated with increased COVID-19 vaccine acceptance Based on the findings of this study, it was determined that targeted messages that promote COVID-19 vaccination and that alleviate concerns of individuals who are hesitant to receive vaccines should be disseminated, and that sufficient amount of time should be dedicated to these efforts prior to COVID-19 vaccine release to ensure maximum vaccine uptake The indicator that can best predict COVID-19 vaccine acceptance was found to be previous vaccine history; the authors note that interventions (e.g., messages) that relay information regarding the safety of vaccines should help to improve COVID-19 vaccine acceptance 	
	 Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Target of intervention General public Delivery of the intervention By whom Content of messaging Data and evidence about safety and about effectiveness in terms of both protection against COVID-19 and protection against transmission Myths and misinformation about vaccines 	 A survey randomly assigned 7,064 respondents in the United States to read pro-vaccine communication materials with information emphasizing personalhealth risks, economic costs or collective publichealth consequences of not vaccinating, that had the message source (ordinary people or medical experts) also randomly assigned Messages that emphasize personal-health risks and collective health consequences of not vaccinating were found to significantly increase intentions to vaccinate, and the effects were similar regardless of the message source and efforts to pre-emptively debunk concerns about safety of expedited clinical trials Economic cost frames were found to have no discernible effect on vaccine intentions 	Last updated 8 September 2020 (pre- print)

Type of document	Relevance to question	Key findings	Recency or
			status
	Allocating vaccines and ancillary supplies	• A heavy lift UAV quadcopter can expand COVID-19	Last updated
	equitably	vaccine delivery to Indigenous people living in	12 January
	o Allocation rules	villages impeded by rugged terrain	2021 (pre-
	 People in social environments that put 	• The travel time to a village normally accessible via	print)
	them at elevated risk for COVID-19	walking a 2km trail that takes almost one hour took	
	• Administering vaccines in ways that optimize	an estimated 1.23-1.38 minutes, 1.57-1.66 minutes,	
	timely uptake	and an average of 3.13 minutes, for drones with 100,	
	0 Where	250 and 500 vial loads, respectively	
	 Other community settings 	Source	
	Communicating vaccine-allocation plans and the	• A survey of 311 older adults and 216 chronic	Published 5
	safety and effectiveness of vaccines	respiratory patients in the U.K, showed 86% are	September
	 Target of intervention 	willing to receive a future vaccine for COVID-19	2020
	 High-risk groups 	• The willingness to receive a COVID-19 vaccination	
	• Delivery of the intervention	was:	
	By whom	• Positively associated with the belief that COVID-	
	• Content of messaging	19 will persist over time	
	 Data and evidence about safety and about 	• Negatively associated with the perception that the	
	effectiveness in terms of both protection	media has over-exaggerated the risks of catching	
	against COVID-19 and protection against	the virus	
	transmission	• Perceived facilitators to the COVID-19 vaccination	
		uptake included perceptions of risk to personal	
		health, severity of COVID-19, and health	
		consequences to others from COVID-19	
		• Concerns about vaccine safety acted as a barrier to	
		COVID-19-vaccination uptake	
		• Content of mass-media interventions to improve	
		vaccine uptake should focus on the behaviour-change	
		techniques (BC1s) of information about health,	
		enouonal, social and environmental consequences,	
		Source	
		Source	

Type of document	Relevance to question	Hyperlinked titled	Recency or status
Guidelines	• Allocating vaccines and ancillary supplies equitably	Updated APLAR consensus statements on care for patients with rheumatic diseases during the COVID-19 pandemic	Published 4 May 2021
	• Allocating vaccines and ancillary supplies equitably	Practical recommendations for the management of patients with ITP during the COVID-19 pandemic	Published 1 May 2021
	• Allocating vaccines and ancillary supplies equitably	National Psoriasis Foundation COVID-19 Task Force guidance for management of psoriatic disease during the pandemic: Version 2—Advances in psoriatic disease management, COVID-19 vaccines, and COVID-19	Published May 2021
	Surveillance, monitoring and evaluation, and reporting	<u>Guidance for conducting a country COVID-19 intra-</u> action review (IAR): Addendum 1	Published 28 April 2021
	Allocating vaccines and ancillary supplies equitably	<u>COVID-19 vaccine guidance for patients with cancer</u> participating in oncology clinical trials	Published 15 March 2021
Full systematic reviews	• Surveillance, monitoring and evaluation, and reporting	Lymphadenopathy following COVID-19 vaccination: Imaging findings review	Literature last searched 25 March 2021
Rapid reviews	• Surveillance, monitoring and evaluation, and reporting	<u>Gender differences in vaccine therapy: Where are we in</u> <u>COVID-19 pandemic?</u>	Literature last searched 30 June 2020
	 Securing and distributing a reliable supply of vaccines and ancillary supplies 	Modeling COVID-19 vaccine rollout in Lebanon for better impact	Literature last searched 10 May
	• Administering vaccines in ways that optimize timely uptake		2021
	 Surveillance, monitoring and evaluation, and reporting 		
	• Administering vaccines in ways that optimize timely uptake	An updated review of SARS-CoV-2 vaccines and the importance of effective vaccination programs in pandemic times	Published 27 April 2021
	• Communicating vaccine-allocation plans and the safety and effectiveness of vaccines	What might be effective methods of communicating with the public (including healthcare professionals) to address concerns about the vaccine and encourage uptake?	Not reported

Appendix 2c: New evidence documents of medium and low relevancy to the questions, but that may provide additional insights

Protocols for reviews	• Surveillance, monitoring and evaluation, and	A systematic review and meta-analysis of nationally	Anticipated
that are underway	reporting	representative studies examining COVID-19	completion date 20
		vaccination intentions	December 2020
	• Surveillance, monitoring and evaluation, and	Side-effects of COVID-19 vaccines in pregnant and	Anticipated
	reporting	breastfeeding women: A systematic review/meta-	completion date 1
		analysis protocol of randomized trials	December 2021
	• Surveillance, monitoring and evaluation, and	Side-effects of COVID-19 vaccines: A systematic	Anticipated
	reporting	review/meta-analysis protocol of randomized trials	completion date 1
			November 2021
	• Surveillance, monitoring and evaluation, and	Population-level prevalence and geographical	Anticipated
	reporting	heterogeneity in COVID-19 vaccine acceptance in the	completion date 30
		United States: A rapid systematic review and meta-	September 2021
		<u>analysis</u>	
	• Surveillance, monitoring and evaluation, and	A rapid systematic review of factors influencing	Anticipated
	reporting	COVID-19 vaccination uptake in minority ethnic	completion date 29
		groups in the U.K.	July 2021
	• Surveillance, monitoring and evaluation, and	Willingness to obtain COVID-19 vaccination among	Anticipated
	reporting	general population: A systematic review and meta	completion date 14
		<u>analysis</u>	July 2021
	• Surveillance, monitoring and evaluation, and	Safety and efficacy of COVID-19 vaccine: A protocol	Anticipated
	reporting	for systematic review and meta-analysis	completion date 1
			July 2022
	• Surveillance, monitoring and evaluation, and	Cultural and social attitudes towards COVID-19	Anticipated
	reporting	vaccines and factors associated with the vaccine	completion date 30
		acceptance in adults across the globe: A systematic	June 2021
		review	
	• Surveillance, monitoring and evaluation, and	Meta-analysis on the impact of COVID-19 pandemic	Anticipated
	reporting	on the willingness to vaccinate against influenza	completion date 21
			June 2021
	• Surveillance, monitoring and evaluation, and	A systematic review of vaccine safety studies with	Anticipated
	reporting	routinely collected healthcare data to inform COVID-	completion date 10
		<u>19 vaccines: Study design and statistical methods</u>	June 2021
	• Surveillance, monitoring and evaluation, and	Willingness of pregnant women for COVID-19	Anticipated
	reporting	vaccination: a systematic review and meta-analysis	completion date 10
			June 2021
	• Surveillance, monitoring and evaluation, and	Evaluating COVID-19 vaccine hesitancy: A systematic	Anticipated
	reporting	review	completion date 31
			May 2021

	• Surveillance, monitoring and evaluation, and reporting	<u>COVID-19 vaccine hesitancy and population</u> <u>vaccination intentions in African countries: A</u> <u>systematic review with meta-analysis</u>	Anticipated completion date 31 May 2021
	• Surveillance, monitoring and evaluation, and reporting	<u>COVID-19 vaccine hesitancy in Black, Asian and</u> <u>minority ethnic groups in the U.K.: A rapid systematic</u> <u>review</u>	Anticipated completion date 15 April 2021
	• Surveillance, monitoring and evaluation, and reporting	Incidence of adverse events to vaccines administered against SARS-CoV-2. A systematic review	Anticipated completion date 29 March 2021
Titles/questions for reviews that are being planned	No highly relevant titles/questions found		
Single studies that provide additional insight	• Surveillance, monitoring and evaluation, and reporting	Ethnic differences in SARS-CoV-2 vaccine hesitancy in United Kingdom healthcare workers: Results from the UK-REACH prospective nationwide cohort study	Preprint (last edited 19 May 2021)
	• Surveillance, monitoring and evaluation, and reporting	<u>"This choice does not just affect me." Attitudes of</u> pregnant women toward COVID-19 vaccines: A mixed-methods study	Published 19 May 2021
	• Surveillance, monitoring and evaluation, and reporting	<u>Tweet topics and sentiments relating to COVID-19</u> vaccination among Australian Twitter users: Machine learning analysis	Published 19 May 2021
	• Surveillance, monitoring and evaluation, and reporting	Public attitudes to COVID-19 vaccines: A qualitative study	Preprint (last edited 18 May 2021)
	• Surveillance, monitoring and evaluation, and reporting	<u>COVID-19 vaccination intent among London</u> <u>healthcare workers</u>	Published 18 May 2021
	• Communicating vaccine-allocation plans and the safety and effectiveness of vaccines	<u>A mega-study of text-based nudges encouraging</u> <u>patients to get vaccinated at an upcoming doctor's</u> <u>appointment</u>	Published 18 May 2021
	• Surveillance, monitoring and evaluation, and reporting	<u>COVID-19 vaccine intentions in the United States</u> <u>December 2020 to March 2021</u>	Preprint (last edited 17 May 2021)
	• Surveillance, monitoring and evaluation, and reporting	Parents' intention to get vaccinated and to have their child vaccinated against COVID-19: Cross-sectional analyses using data from the KUNO-Kids health study	Published 17 May 2021
	• Surveillance, monitoring and evaluation, and reporting	Acceptability and willingness to pay for a hypothetical vaccine against SARS CoV-2 by the Brazilian consumer: A cross-sectional study and the implications	Published 17 May 2021
	• Surveillance, monitoring and evaluation, and reporting	Determinants of COVID-19 vaccine hesitancy and vaccine uptake in a national cohort of U.S. adults	Preprint (last edited 15 May 2021)

• Surveillance, monitoring and evaluation, and reporting	Primary-care interventions to address COVID-19 vaccine hesitancy among Israel defense forces soldiers	Published 14 May 2021
• Surveillance, monitoring and evaluation, and reporting	Acceptance of the coronavirus disease-2019 vaccine among medical students in Uganda	Published 13 May 2021
• Surveillance, monitoring and evaluation, and reporting	Factors affecting COVID-19 vaccine hesitancy in Bangladesh: An empirical investigation	Preprint (last edited 11 May 2021)
 Surveillance, monitoring and evaluation, and reporting 	Social and racial/ethnic differences in parental willingness to vaccinate children against COVID-19 in Montreal, Canada	Preprint (last edited 10 May 2021)
• Surveillance, monitoring and evaluation, and reporting	The role of trauma in mothers' COVID-19 vaccine beliefs and intentions	Published 10 May 2021
 Allocating vaccines and ancillary supplies equitably 	Allocation of COVID-19 vaccination: when public prioritization preferences differ from official regulations	Published 10 May 2021
• Surveillance, monitoring and evaluation, and reporting	<u>Changes in legislator vaccine-engagement on Twitter</u> <u>before and after the arrival of the COVID-19</u> <u>pandemic</u>	Published 10 May 2021
• Surveillance, monitoring and evaluation, and reporting	<u>Willingness to receive COVID-19 vaccination among</u> people living with HIV and AIDS in China: A nationwide online survey	Preprint (last edited 8 May 2021)
 Surveillance, monitoring and evaluation, and reporting 	<u>A comparison between people with HIV in the</u> <u>Southeastern United States and Argentina: COVID-19</u> <u>vaccine hesitancy</u>	Preprint (last edited 8 May 2021)
 Surveillance, monitoring and evaluation, and reporting 	Estimating COVID-19 vaccine effectiveness against severe acute respiratory infections (SARI) hospitalizations associated with laboratory-confirmed SARS-CoV-2: An evaluation using the test-negative design	Published 6 May 2021
• Communicating vaccine-allocation plans and the safety and effectiveness of vaccines	YouTube videos and informed decision-making about COVID-19 vaccination: Successive sampling study	Published 6 May 2021
• Surveillance, monitoring and evaluation, and reporting	<u>COVID-19 vaccine hesitancy among healthcare</u> <u>workers</u>	Published 5 May 2021
• Surveillance, monitoring and evaluation, and reporting	<u>Understanding COVID-19 misinformation and vaccine</u> <u>hesitancy in context: Findings from a qualitative study</u> <u>involving citizens in Bradford, U.K.</u>	Published 4 May 2021
• Surveillance, monitoring and evaluation, and reporting	Women's views on accepting COVID-19 vaccination during and after pregnancy, and for their babies: A multi-methods study in the U.K.	Preprint (last edited 3 May 2021)

• Surveillance, monitoring and evaluation, and reporting	Factors associated with behavioural intention of free and self-paid COVID-19 vaccination based on the social cognitive theory among nurses and doctors in China	Published 3 May 2021
• Surveillance, monitoring and evaluation, and reporting	COVID-19 vaccine acceptance among healthcare workers in a United States medical center	Preprint (last edited 30 April 2021)
• Surveillance, monitoring and evaluation, and reporting	Safety monitoring of COVID vaccines and perception of post-vaccination side-effects: Preliminary findings from the first month of routine monitoring in a hospital vaccination setting of China	Preprint (last edited 30 April 2021)
• Surveillance, monitoring and evaluation, and reporting	Race-ethnicity and perceptional determinants of COVID-19 vaccination intentions: A cross-sectional study among health workers and the general population in the San Francisco Bay Area	Preprint (last edited 29 April 2021)
• Surveillance, monitoring and evaluation, and reporting	Dental students' attitudes and hesitancy toward COVID-19 vaccine	Published 29 April 2021
• Surveillance, monitoring and evaluation, and reporting	SARS-CoV-2 vaccine hesitancy in a sample of U.S. adults: Role of perceived satisfaction with health, access to healthcare, and attention to COVID-19 news	Published 29 April 2021
• Surveillance, monitoring and evaluation, and reporting	<u>SARS-CoV-2 vaccine acceptability in patients on</u> <u>hemodialysis: A nationwide survey</u>	Published 29 April 2021
• Allocating vaccines and ancillary supplies equitably	SARS-CoV-2 vaccination uptake in a correctional setting	Preprint (last edited 29 April 2021)
• Securing and distributing a reliable supply of vaccines and ancillary supplies	The role of good governance in the race for global vaccination during the COVID-19 pandemic	Preprint (last edited 28 April 2021)
• Communicating vaccine-allocation plans and the safety and effectiveness of vaccines	The impact of health information exposure and source credibility on COVID-19 vaccination intention in Germany	Published 28 April 2021
• Surveillance, monitoring and evaluation, and reporting	Individual and social determinants of COVID-19 vaccine uptake	Published 28 April 2021
• Surveillance, monitoring and evaluation, and reporting	The barrier to vaccination is not vaccine hesitancy: Patterns of COVID-19 vaccine acceptance over the course of the pandemic in 23 countries	Preprint (last edited 27 April 2021)
• Surveillance, monitoring and evaluation, and reporting	COVID-19 vaccine hesitancy and related fears and anxiety	Published 27 April 2021
• Surveillance, monitoring and evaluation, and reporting	<u>COVID-19 vaccination and intention to vaccinate</u> among a sample of college students in New Jersey	Published 27 April 2021

• Surveillance, monitoring and evaluation, and reporting	Determinants of COVID-19 vaccine acceptance in six lower- and middle-income countries	Preprint (last edited 26 April 2021)
 Surveillance, monitoring and evaluation, and reporting 	COVID-19 vaccine acceptance, barriers and facilitators among healthcare workers in Pakistan	Preprint (last edited 26 April 2021)
• Surveillance, monitoring and evaluation, and reporting	Surveying willingness towards SARS-CoV-2 vaccination of healthcare workers in Italy	Published 26 April 2021
• Surveillance, monitoring and evaluation, and reporting	<u>COVID-19 vaccination beliefs, attitudes, and</u> <u>behaviours among health and social-care workers in the</u> <u>U.K.: A mixed-methods study</u>	Preprint (last edited 25 April 2021)
• Surveillance, monitoring and evaluation, and reporting	Exploring the behavioural determinants of COVID-19 vaccine acceptance among an urban population in Bangladesh: Implications for behaviour change interventions	Preprint (last edited 25 April 2021)
• Surveillance, monitoring and evaluation, and reporting	<u>COVID-19 vaccine hesitancy among the adult</u> population in Bangladesh: A nationally representative cross-sectional survey	Preprint (last edited 25 April 2021)
• Surveillance, monitoring and evaluation, and reporting	Monitoring global trends in COVID-19 vaccination intention and confidence: A social media-based deep learning study	Preprint (last edited 25 April 2021)
• Surveillance, monitoring and evaluation, and reporting	Higher COVID-19 vaccination rates among unemployed in the United States: State level study in the first 100 days of vaccine initiation	Preprint (last edited 21 April 2021)
• Surveillance, monitoring and evaluation, and reporting	<u>Factors influencing COVID-19 vaccine acceptance</u> <u>across subgroups in the United States: Evidence from a</u> <u>conjoint experiment</u>	Published 24 April 2021
• Surveillance, monitoring and evaluation, and reporting	Acceptance and attitudes toward COVID-19 vaccines: A cross-sectional study from Jordan	Published 23 April 2021
• Surveillance, monitoring and evaluation, and reporting	<u>Gender differences in the determinants of willingness</u> to get the COVID-19 vaccine among the working-age population in Japan	Preprint (last edited 20 April 2021)
• Surveillance, monitoring and evaluation, and reporting	#Scamdemic, #Plandemic, or #Scaredemic: What Parler social media platform tells us about COVID-19 vaccine	Published 22 April 2021
 Communicating vaccine-allocation plans and the safety and effectiveness of vaccines Surveillance, monitoring and evaluation, and reporting 	Behavioural and attitudinal correlates of trusted sources of COVID-19 vaccine information in the U.S.	Published 20 April 2021
• Allocating vaccines and ancillary supplies equitably	Strategies and action points to ensure equitable uptake of COVID-19 vaccinations: A national qualitative interview study to explore the views of undocumented migrants, asylum seekers, and refugee	Preprint (last edited 19 April 2021)
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• Surveillance, monitoring and evaluation, and reporting	The Community Opinions on Vaccine Issues and Decisions (COVID) Survey: Using a rapid Knowledge, Attitude and Practice (KAP) survey in supporting a community engagement approach to address COVID- 19 vaccine	Preprint (last edited 17 April 2021)
• Surveillance, monitoring and evaluation, and reporting	<u>Cross-sectional analysis of COVID-19 vaccine</u> intention, perceptions and hesitancy across Latin <u>America and the Caribbean</u>	Published 16 April 2021
• Surveillance, monitoring and evaluation, and reporting	Pediatricians' COVID-19 experiences and views on the willingness to receive COVID-19 vaccines: A cross- sectional survey in Turkey	Published 16 April 2021
• Surveillance, monitoring and evaluation, and reporting	Differences in COVID-19 vaccine concerns among Asian Americans and Pacific Islanders: The COMPASS survey	Published 14 April 2021
• Surveillance, monitoring and evaluation, and reporting	<u>The perception and attitudes toward COVID-19</u> <u>vaccines: A cross-sectional study in Poland</u>	Published 14 April 2021
• Surveillance, monitoring and evaluation, and reporting	<u>COVID-19 vaccine perceptions: An observational</u> <u>study on Reddit</u>	Preprint (last edited 13 April 2021)
• Surveillance, monitoring and evaluation, and reporting	<u>Vaccination willingness, vaccine hesitancy, and</u> <u>estimated coverage at the first round of COVID-19</u> <u>vaccination in China</u>	Published 13 April 2021
• Surveillance, monitoring and evaluation, and reporting	<u>COVID-19 vaccination intention among healthcare</u> workers in Vietnam	Published 12 April 2021
• Surveillance, monitoring and evaluation, and reporting	Predictors of willingness to get a COVID-19 vaccine in the U.S	Published 12 April 2021
• Surveillance, monitoring and evaluation, and reporting	Intention to get COVID-19 vaccinations among Ophthalmology residents in Poland: A cross-sectional survey	Published 11 April 2021
• Surveillance, monitoring and evaluation, and reporting	Women perception of SARS-CoV-2 vaccination during pregnancy and subsequent maternal anxiety: A prospective observational study	Published 11 April 2021
• Surveillance, monitoring and evaluation, and reporting	Attitudes toward COVID-19 vaccines in Chinese college students	Published 10 April 2021

• Allocating vaccines and ancillary supplies equitably	Public perspectives on COVID-19 vaccine prioritization	Published 9 April 2021
Surveillance, monitoring and evaluation, and reporting	<u>COVID-19 vaccination acceptability in the U.K. at the</u> start of the vaccination program: A nationally representative cross-sectional survey (CoVAccS – wave 2)	Preprint (last edited 8 April 2021)
• Surveillance, monitoring and evaluation, and reporting	Artificial intelligence-enabled analysis of public attitudes on Facebook and Twitter toward COVID-19 vaccines in the United Kingdom and the United States: Observational study	Published 5 April 2021
• Surveillance, monitoring and evaluation, and reporting	Acceptance of COVID-19 vaccine among persons experiencing homelessness in the City of Rome, Italy	Published April 2021
• Surveillance, monitoring and evaluation, and reporting	Determinants of intention to get vaccinated against COVID-19 among healthcare personnel in hospitals in Greece	Published 31 March 2021
• Surveillance, monitoring and evaluation, and reporting	Will Africans take COVID-19 vaccination?	Preprint (last edited 29 March 2021)
• Surveillance, monitoring and evaluation, and reporting	Will Africans take COVID-19 vaccination?	Preprint (last edited 29 March 2021)
Allocating vaccines and ancillary supplies equitably	Parents' willingness to pay for a COVID-19 vaccine for themselves and their children in the United States	Published 30 April 2021
Surveillance, monitoring and evaluation, and reporting	Pregnant women perspectives on SARS-COV-2 vaccine	Published 22 March 2021

Appendix 3: COVID-19 vaccine roll-out elements from other countries

Country	Securing and distributing a reliable supply of vaccines and ancillary supplies	Allocating vaccines and ancillary supplies equitably	Communicating vaccine-allocation plans and the safety and effectiveness of vaccines	Administering vaccines in ways that optimize timely uptake	Surveillance, monitoring and evaluation, and reporting
Australia	• Australia has partnered	• On 7 January 2021, the	• To inform residents,	• In addition to	 All successfully
	with the <u>University of</u>	Australian Government	the Government of	residential disability	administered COVID-
	<u>Oxford-AstraZeneca</u> ,	released its <u>COVID-19</u>	Australia will be	and aged-care facilities,	19 vaccinations will be
	<u>Novavax, Pfizer-</u>	<u>Vaccine National Rollout</u>	promoting an	a total of <u>30-50</u>	documented into
	<u>BioNTech, and COVAX</u>	<u>Strategy</u> , which outlines the	educational campaign	<u>hospital sites</u> will serve	reporting and
	<u>Facility</u> to secure a range	targeted number of doses to	on its COVID-19	as centres (i.e., Pfizer	monitoring systems
	of COVID-19 vaccine	be administered during each	vaccination program	Hubs) for vaccine	(e.g., Australian
	supply	phase:	• This campaign will	administration,	<u>Immunisation Register</u>)
	• Australia has secured	• Phase 1A: 1.4 million	include medical	<u>including:</u>	o This will include
	an estimated 53.8	• Phase 1B: 14.8 million	experts discussing	o Three in New South	<u>personal information</u>
	million doses of the	• Phase 2A: 15.8 million	vaccine roll-out	Wales:	such as name_date of
	University of Oxford- AstraZeneca vaccine – 3.8 million doses will be imported, while the	 Phase 2B: 16 million Phase 2B: 16 million Phase 3: 13.6 million The <u>COVID-19 Vaccine</u> National Bollout Strategy 	priority populations, and projected timelines	 Four in Victoria; Three in Queensland; Two in South 	birth, contact details, gender, and if applicable, healthcare number and
	remaining 50 million	highlights the priority	towards priority	 Australia; and One in each of	Medicare identifier
	will be manufactured	populations for each of the	groups, culturally	Western Australia,	O Information from the
	domestically by CSL	five phases:	diverse groups, and	Teamaria	Australian
	 51 million doses of the Novavax vaccine have been secured, which will be manufactured 	 Phase 1A: quarantine and border workers, front-line healthcare workers, and aged-care and disability staff/residents 	 Aborginal and Torres Strait Islander people On <u>1 March 2021</u>, the second phase of this expression 	 Australian Capital Territory, and Northern Territory Pfizer-BioNTech 	Register is routinely uploaded to the Enterprise Data Warehouse (EDW)
	internationally from Europe • Australia has secured a	• Phase 1B: older adults aged 70 years and over, other healthcare workers, adults with pre-existing	 this campaign was launched The Australian Government's 	vaccines will only be administered at <u>Hospital/Pfizer Hubs</u> o General practices	o De-identified data from the EDW will be transferred to the Vaccine Data
	total of 40 million	conditions, high-risk	Department of Health	will provide	Solution, a software
	Pfizer-BioNTech	workers (e.g., fire, police,	released a series of	vaccines to	that helps to monitor
	vaccine doses as of 9	and meat processing staff),	<u>campaign materials</u> to	individuals aged 70	the coverage and
	April 2021 – 10 million	household members of	inform citizens on the	and over,	logistics of the
	doses were purchased	quarantine and border	COVID-19 vaccine,	individuals with pre-	COVID-19 vaccine
	in November 2020 and	workers, residents living	using television ads,	existing conditions,	roll-out

again in February 2021, and another 20 million	with a medical condition or disability, caregivers,	videos, posters, presentations, and	and in Phase 1B, Aboriginal and	• The Australian Government has
doses were purchased	and Aboriginal and Torres	social-media graphics	Torres Strait Islander people	partnered with
• On 13 May 2021, the	50 years and older	(e.g., videos) with	• The <u>Oxford-</u>	monitoring program for
Australian Government	• Phase 2A: Adults aged 50	translated subtitles	AstraZeneca	COVID-19 vaccines
announced an agreement	years and over, Aboriginal	are now available in	vaccine will be	• The Government of
to secure 25 million doses	and Torres Strait Islander	<u>multiple languages</u> , such as Arabic	administered at	Australia released a
(10 million doses of their	and other high-risk	Korean, Italian,	led respiratory	series of informative
current vaccine and 15	workers	Hindi, Spanish, and	clinics, select	residential aged-care
million doses of booster	• Phase 2B: People aged 16	Russian	general practices,	providers with the
or variant-specific	to 49 years)	• This includes health	state-run	vaccine roll-out (e.g.,
\circ If approved by the	than 16 years of age	researchers	and Aboriginal	monitoring and
TGA, the current	Vaccine roll-out commenced	responding to public	Controlled	A public form is
Moderna vaccine will	as scheduled on <u>22 February</u>	enquiries through a	Community Health	• A public <u>torin</u> is available for health
be available in the	2021	series of " <u>Top 3</u>	Centres	professionals and the
second half of 2021	• Phase 1B of the vaccine	<u>COVID-19 Vaccine</u> Overtiges"	• Over 4,500 accredited	general public to make
and variant-specific	March 2021	• The Government of	general practices will serve as administration	enquiries related to
to arrive in the first	• Phase 2A started on 3	Australia launched a	sites in Phase 1B of	COVID-19 vaccines
half of 2022	May 2021 (people aged 50	new website feature,	the vaccine roll-out	• The <u>reporting</u> of adverse effects after
• The Australian	years and over at state and	" <u>Is it true?</u> ", in an	o COVID-19 vaccine	COVID-19 vaccine
Government <u>is in</u>	territory vaccination	attempt to combat	appointment	administration can be
discussions with Moderna	(people aged 50 years and	reduce vaccine	commenced on 19	directed to the TGA,
manufacturing facility in	over at participating	hesitancy among	March 2021 at	healthcare providers,
Australia	general practice)	residents	general practitioner-	departments, and the
• On 25 January 2021, the	• The administration of the	• The Government of	led respiratory	NPS MedicineWise
Therapeutic Goods	Oxford-AstraZeneca vaccine	Australia invested a	<u>clinics</u> , and	Adverse Medicine
Administration (TGA)	commenced on <u>5 March</u> 2021 in South Australia	total of <u>\$23.9 million</u>	sites began on 22	Events (AME) Line
provisionally approved the use of the Pfizer-	$\bullet On 8 April 2021 the$	of this vaccine	March 2021	
BioNTech COVID-19	Australian Technical	information campaign	• Vaccinations started	
vaccine in Australia	Advisory Group on	• On 8 March 2021, a	with 1,000 general	
0 On <u>15 February 2021</u> ,	Immunisation released a	COVID-19 vaccine	practices and this	
Australia received its	statement regarding the	eligibility tracker was	gradually increase to	
first supment of over		launched to help	gradienty mercase to	

 142,000 doses of the Pfizer-BioNTech vaccine Delivery of the Pfizer-BioNTech vaccine will consist of verifying dispatched batches at the border and distributing imported doses to vaccination sites On 16 February 2021, the TGA provisionally approved the use of the Oxford-AstraZeneca COVID-19 vaccines for citizens aged 18 years and older On 28 February 2021, 300,000 doses of the Oxford-AstraZeneca vaccine arrived in Australia On 24 December 2020, 	 safety of the Oxford-AstraZeneca vaccine The advisory group noted evidence of thrombosis with thrombocytopenia syndrome upon the administration of the Oxford-AstraZeneca vaccine Recommendations have been adjusted to prioritize the administration of the Pfizer-BioNTech vaccine in adults under the age of 50 years Residents who have already been vaccinated with the first dose of the Oxford-AstraZeneca vaccine, without any prior side-effects, will still be able to receive their second dose Under specific situations, when the benefits 	provide Australians with a projected vaccination timeline	 over 4,000 by the end of April 2021 Community pharmacies are eligible to serve as vaccine- administration sites as part of Phase 2A of the distribution plan Vaccines will be administered to long- term care home residents in an estimated <u>240 aged</u> care facilities in over <u>190 regions</u> across all states and territories in Australia On 2 February 2021, an investment of \$1.9 billion was announced to boost the national COVID-19 vaccine roll-out plan The Government of 	
 COVID-19 vaccines for citizens aged 18 years and older On <u>28 February 2021</u>, 300,000 doses of the Oxford-AstraZeneca vaccine arrived in Australia On 24 December 2020, the government announced that <u>DHL</u> <u>Supply Chain and Linfox</u> will lead the COVID-19 vaccine distribution in Australia, which will be required to track the temperature of the vaccines and manage ancillary supplies (e.g., needles, syringes, and personal protective equipment) In order to <u>safely store and handle</u> the Pfizer- 	 Residents who have already been vaccinated with the first dose of the Oxford-AstraZeneca vaccine, without any prior side-effects, will still be able to receive their second dose Under specific situations, when the benefits outweigh the risks, residents under the age of 50 years can consent to receiving the Oxford- AstraZeneca vaccine On <u>11 May 2021</u>, the Australian Technical Advisory Group on Immunisation granted a provisional determination (first stage of assessment approval process) to Pfizer- BioNTech for the use of 		 states and territories in Australia On 2 February 2021, an investment of \$1.9 billion was announced to boost the national COVID-19 vaccine roll-out plan The Government of Australia has called upon the following four providers to help support the vaccine workforce with increased staff and training initiatives: Aspen Medical Healthcare Australia International SOS Sonic Clinical Services In partnership with the Australian College of 	

BioNTech vaccine th	e their vaccine in individuals	Nursing the federal
Coverement of	agod 12 years or older	rousing, the rederat
Australia is proparing		Australia is creating
to socure cold chain	• As of 25 May 2021, a total of $2.600.622$ COVUD 10	fully funded
to secure cold-chain	3,690,622 COVID-19	accordited training
storage, start training	vaccine doses have been	accreated training
and regular	administered to Australians	modules for
management of	• 2,061,522 of these doses	vaccination providers,
equipment and	have been delivered	and non-clinical and
monitoring systems	through primary care	administrative staff;
		training will be
		available to:
		0 Health professionals
		in hospitals
		 General practices
		o State and
		Commonwealth
		clinics
		0 Aboriginal
		Community
		Controlled Health
		Organizations
		0 Pharmacies
		• The subset of "Core"
		modules will cover:
		 Handling and
		storage
		o Communication and
		purpose
		o Multi-dose vial
		training
		o Documentation and
		reporting
		o Safety and
		surveillance
		• The second /
		"additional" subset of
		training modules will
		cover detailed topics
		pertaining to the
		pertaining to the

China	 China has established and implemented whole- process traceability systems for COVID-19 vaccines, including in-out incomposition out 	 China implemented a two- step strategy for COVID-19 vaccination The first step is the vaccination of priority acculation of priority 	 On 3 February 2021, The Ministry of Public Security of China has deployed <u>a national</u> campaign to combat 	 Pfizer-BioNTech, Novavax, and Oxford- AstraZeneca vaccines The <u>Australian</u> <u>Defense Force</u> will provide additional personnel to assist with the vaccine roll- out in residential aged- care facilities As of <u>17 May 2021</u>, Australia is not pursuing a no-fault COVID-19 vaccine injury compensation as serious side-effects are extremely rare On 2 April 2021, China's NHC and CDC developed the guideline on administration of COVID 10 vaccines 	 The <u>Vaccine</u> <u>Administration Law of</u> the People's Republic of <u>China</u> indicates that the state shall implement whele process electronic
	 Inventory registration, production, transportation, storage and administration, and to ensure the supply of vaccines through various methods such as precise deployment, accelerated turnover, and matching demand according to the vaccine plan of each province The pricing of COVID- 19 vaccines is developed by the vaccine industry based on the attributes of 	 workers in the cold-chain industry, port inspection and quarantine, ship piloting, aviation, public transport, fresh markets, healthcare settings, and those who plan to work or study in countries and regions with medium or high risk of COVID-19 infection With COVID-19 vaccines officially approved to enter the market or the yield of vaccines improving steadily, the 	 vaccine-related chines, including manufacture and sale of fake vaccines, illegal operations, and smuggling of vaccines, illegal medical practice and related fraud activities China's State Council Joint Prevention and Control Mechanism against COVID-19 holds regular press conferences that include information 	 and vaccination sites The administration of COVID-19 vaccines is carried out in vaccination sites that are approved by local health-administration departments Generally, the vaccination sites are set up in the health service centres, township health centres or general hospitals in the jurisdictions 	 whole process electronic traceability systems for vaccines China has established a national electronic vaccine traceability platform, where all localities can timely and accurately report required information so that vaccines can be traced throughout the whole process The related vaccine laws have clear regulations on the monitoring,

public products and the	second step is to put more	about COVID-19	• For the enterprises	reporting and handling
related costs	vaccines into use,	vaccines	and organizations	of adverse events
• The government of	inoculating the eligible	Multiple approaches	where the priority	following immunization
China will provide	population as widely as	for communicating the	populations are	• As of 31 January 2021,
COVID-19 vaccines to	possible, with priority for	COVID-19 vaccines,	concentrated, the	the surveillance analysis
the public for free	the elderly and high-risk	such as popular social	temporary	showed that the
 As COVID-19 vaccines 	populations with	media (e.g., <u>WeChat</u>),	vaccination sites will	incidence of severe
are put into use in China,	underlying diseases	24-hour hotline service	be set up	abnormal reactions
the government will make	• According to the National	and <u>community</u>	 Information on 	caused by the COVID-
the vaccine a global	Health Commission (NHC),	campaigns, are being	vaccination sites will	19 vaccines currently
public product and supply	China aims to vaccinate the	used	be made available to	used in China was no
the vaccines to the world	eligible population as widely	• State Councillor and	the public	higher than that of the
at a fair and reasonable	as possible and gradually	Foreign Minister Wang	• During the vaccination	influenza vaccines, and
price	build an immune barrier	Yi said on 7 March	process, the recipients	the surveillance of
• Until 5 January 2021, the	within the whole population	2021 that China	should pay attention to	adverse events related to
Ministry of Industry and	to control the epidemic	opposes "vaccine	and cooperate with the	COVID-19 vaccination
Information Technology	• The vaccination is being	nationalism" and	following aspects:	in different places will
(MIIT) has moved to	administered first to key	rejects any "vaccine	o Recipients need to	be ongoing and dynamic
facilitate corporate	groups, then to high-risk	divide" or any attempt	bring identification	• On 6 February 2021. a
cooperation along	groups and then to the	to politicize vaccine	documents, and	mobile application
industrial chains to	general population, as the	cooperation	wear personal	"Health Kit" was
accelerate the	vaccine's production	• On 31 March 2021	protection	developed for checking
industrialization of	capacity increases	China's CDC updated	equipment	the vaccination status.
COVID-19 vaccines and	• As of 21 March 2021,	34 frequent questions	according to local	including four types of
expand production	China started vaccinations	and answers about	prevention and	status: "no inoculation
capacity to ensure the	for people 60 and older,	COVID-19 vaccines	control	history", "having
supply of vaccines	aiming to reach nearly 254	• Op 22 March 2021	requirements, and	applied for and yet to
• As 21 March 2021,	million seniors	HKSAR chief	truthfully provide	receive vaccination",
China's annual vaccine	 <u>A guideline published on</u> 	executive urged Hong	information such as	"first dose
production can fully	29 March 2021	Kong residents to	health status and	administered" and
meet the whole	recommended to use the	actively receive	vaccination	"immunization series
country's needs, as	same vaccine product to	COVID 19 vaccine	contraindications	completed", and this
judged by the existing	complete immunization	and to refer to the	• After vaccination,	application could be in
production	0 China's NHC	official vaccine	recipients should	Chinese or English
arrangements	recommended COVID-19	information and	stay for 30 minutes;	language
The Hong Kong Special	vaccination for people	professional opinions	if there is a	• In Macao, vaccination
Administrative Region	aged 60 and older in the	of health experts	suspected adverse	records are updated in
(HKSAR) government	guideline published on 29	instead of rumours and	reaction,	the health code with
has secured a total of 22.5	March 2021	disinformation	immediately report	hyperlinks
		monnation		71

million doses of COVID-	• As of 26 March 2021, Beijing	• On 11 April 2021,	to the vaccination	• On 2 April 2021,
19 vaccines, enough to	has started <u>COVID-19</u>	China's NHC	institution and seek	China's NHC and CDC
cover Hong Kong's 7.5-	vaccination for foreign	encouraged more	medical advice	developed guidelines on
million population, as	nationals in the city	people to get	• In Macao, <u>the</u>	adverse events following
each person needs to take	• As of <u>25 April 2021</u> , the	vaccinated against	vaccination certificate	immunization (AEFI)
two jabs	vaccination is available for	COVID-19 <u>on a</u>	and record card will be	monitoring and
• As of 3 March 2021,	foreigners in Shanghai,	voluntary, informed	issued after completing	management, and
China has put the	Beijing, Tianjin, Zhejiang	basis instead of a	two doses of	vaccination registration
Sinopharm inactivated	province, Jiangsu province	<u>compulsory one</u>	vaccinations, which	and reporting
COVID-19 vaccines into	and Guangdong province	• On 2 April 2021,	will be updated in the	
mass production and <u>the</u>	• As of 25 May 2021, more	China's NHC and	health code with	
output is expected to	than 546.71 million doses of	CDC developed a	hyperlinks	
surpass 1 billion doses in	COVID-19 vaccines have	series of COVID-19	People's Insurance	
<u>2021</u>	been administered across	vaccination training	Company of China	
• As of 29 March 2021,	China	materials for	(PICC) Life Insurance	
China has approved four	• As of 25 May 2021, over 2.2	vaccination providers	took the lead in	
COVID-19 vaccines for	million vaccine doses have	and staff, including	launching medical-	
conditional market use	been administered in Hong	guideline on the use of	accident insurance for	
and one for emergency	Kong with 934 341 people	COVID-19 vaccines,	COVID-19 and other	
use, which include	having been fully vaccinated	adverse events	vaccines, which covers	
inactivated vaccines (three	• In Hong Kong, the priority	following	compensation for	
products), adenovirus	groups include medical	immunization (AEFI)	abnormal reactions	
vector vaccine (one	workers and the aged	management guideline,	• On 21 March 2021.	
product), and	pursing home staff, public-	vaccination	China's CDC	
recombinant protein	service providers such as	administration	recommended that	
subunit vaccine (one	street cleaners, postmen and	guideline, registration	people, vaccinated or	
product)	discipline force members	and reporting guideline	not, still need to wear	
o On 15 May 2021,	and workers in cross-border		masks in indoor or	
China approved one	transport including truck		closed sites where	
more inactivated	drivers and crews		people gather.	
COVID-19 vaccine for	• Op 8 March 2021 the		maintain personal	
emergency use, which	• On o March 2021, the		hygiene, and comply	
was developed by	will be expected according		with local COVID-19	
Shenzhen Kangtai	will be expanded, covering		prevention and control	
Biological Products	tourism oublic		measures, until	
• As of 8 March 2021	transportation property		population-level	
China has 17 COVID-19	management construction		immunity is achieved	
vaccines currently in	sites schools		through vaccination in	
clinical trials, among	51105, 5010015		China	
,				

1.1				[]
which seven are	• As of 26 May 2021, <u>a total of</u>	•	On 8 March 2021, the	
undergoing phase-III	157,263 vaccine doses have		Ministry of Foreign	
clinical trials	been administered in Macao,		Affairs officially	
• On <u>25 January 2021</u> , the	with 58,837 people having		launched the	
Ministry of Transport of	been fully vaccinated		international travel	
China, the National	• In <u>Macao</u> , the priority was		health certificate	
Health Commission, the	given to certain groups of		showing one's nucleic	
General Administration	people, including those		acid test and serum	
of Customs and the	engaged in front-line work		antibody results,	
National Medical	for epidemic control and		vaccine inoculation	
Products Administration	those who are at high risk in		and other information,	
issued the technical	terms of occupational		which is available for	
guideline about road	exposure		Chinese citizens via a	
transportation of	o On 22 February 2021, the		WeChat mini program	
COVID-19 vaccines and	Macao Special	•	China has eased visa	
related products	Administrative Region		application procedures	
• The vehicles	(SAR) started inoculating		for people inoculated	
transporting COVID-	local residents who are not		with Chinese COVID-	
19 vaccines will <u>be</u>	in prioritized groups with		19 vaccines	
exempted from tolls	mainland-made COVID-	•	Different areas	
before 31 December	19 vaccines		explored different	
2021	China deploys mobile		administration	
• The <u>Civil Aviation</u>	vaccination vehicles to speed		methods for example	
Administration of	up the immunization process		setting up temporary	
China (CAAC) updated	with offering a one-stop		vaccination locations	
the guidebook for	service for registration		and establishing online	
COVID-19 vaccine	disinfection and vaccination		vaccination	
transport in February	\circ The vehicle is equipped		appointments for	
2021 and established a	with vaccination stations		priority populations	
special team to support	medical refrigerators and		On 24 January 2021	
and coordinate vaccine	first-aid equipment and	•	Chipa CDC issued the	
transportation	the refrigerators are able		technical	
• On 7 May 2021, the	to store 1 200 vaccine		recommendations on	
Sinopharm COVID-19	doses		anvironmental	
vaccine was listed for	 Based on the guideline 		specimen monitoring	
WHO Emergency Use	published on 20 March 2021		in vaccination sites	
Listing (EUL).	the recommendations on		including the	
• The vaccine is	doses and vaccination		disinfection	
produced by Beijing	intervals were as follows:		recommendations	
1 ,) 0	million vais were as tomows.		recommendations	

Bio-I	Institute of O Ina	ctivated vaccines: two	
Biolo	ogical Products Co dos	es, interval (three to	
Ltd, s	subsidiary of eigl	nt weeks)	
China	a National Biotec o Ad	enovirus vector	
Grou	ıp vac	cine: one dose	
• As of 20	0 May 2021, China 0 Red	combinant protein	
has expe	orted vaccines to sub	unit vaccine: three	
more th	dos	es, interval (no less	
and coll	aborated with tha	n four weeks between	
over 10	countries in two	shots, second dose	
vaccine	research and adr	ninistered within eight	
develop	ment (R&D) and we	eks after the first shot.	
product	thin	d dose administered	
As of 8	May 2021 Chipa wit	hin six months after	
has prov	vided vaccine aid the	first shot)	
to 80 co	vided vaccine and o For	people who have not	
	ional COI	noleted the vaccination	
internation	ations which Wit	hin the schedule. they	
<u>organiza</u>	alions, which sho	uld resume the	
24 A Fric	20 Asian countries, Vac	cination as soon as	
	in Europe 10 in Dos	sible without needing	
Amoria	and six in to s	tart over again, and a	
	the A friend boo	oster shot is not	
Union	the Areb League fee	ommended	
<u>ond</u> UN	League China	will launch a "spring	
	60 countries have sprou	" program to assist	
0 <u>Over</u>	and market and se	cure vaccination for its	
appro	or issued citizer	is with Chinese or	
acces	rancy use permits foreig	n vaccines	
for C	γ binese vaccines \circ Thi	s program will include	
	e factors are set	ing up vaccination	
	idered in Stat	ions in countries where	
form	ulating an aid cor	ditions allow to	
	the benefits of adr	ninister Chinese	
plan.	able and timely Vac	cines to nationals living	
equit	able and unitely vac	urrounding countries	
acces	loping countries 0 On	16 March 2021	
the a	overity of the Chi	na's embassy in Equat	
	eventy of the law	nched a COVID-19	
epide			

specific vaccine aid	vaccination drive for over		
needs of the countries	5,000 Chinese citizens		
concerned, and the			
capacity of the Chinese			
government to provide			
vaccines			
o <u>China provides</u>			
syringes for vaccine			
administration for			
some countries that			
have difficulties			
accessing them			
• China is willing to			
cooperate with the			
International Olympic			
<u>Committee</u> to provide			
vaccines to Olympians			
• As of 1 April 2021, over			
<u>11,000 tonnes of</u>			
COVID-19 vaccines have			
shipped from Beijing,			
China to the world			
• On 24 March 2021.			
China's HKSAR and			
Macao SAR governments			
suspended Pfizer-			
BioNTech vaccination			
due to packaging defects			
• On 9 April 2021, China's			
HKSAR government			
asked AstraZeneca to			
delay the delivery of its			
COVID-19 vaccines			
• On 21 May 2021, Chinese			
President Xi Jinping said			
China supports its vaccine			
companies in transferring			
technologies to other			
developing countries and			

	carrying out joint				
France	 France has been allocated a total of 200 million vaccine doses through partnerships secured by the European Commission On 29 January 2021, the Oxford-AstraZeneca vaccine was approved for use in France On 12 March 2021, the Janssen (Johnson & Johnson) vaccine was approved for use in France Distribution of Pfizer- BioNTech vaccines to administration sites follows one of the following processes: Delivery from the production plant to one of 11 private platforms capable of storing the vaccine at - 80°C. Vaccines are then transported to pharmacies and institutional care facilities (e.g., long- term care) for use, or Direct delivery to one of 100 hospitals in the country that can safely store and administer them 	 Based on the recommendations set forth by the French National Authority for Health, the Ministry for Solidarity and Health announced its <u>vaccine</u> strategy, which outlines a three-phase approach for vaccine allocation: Priority groups in phase one include older adults, residents with disabilities, at-risk staff members in institutional care and healthcare workers Phase two includes individuals aged 65 to 74 years Phase three consists of other at-risk groups from within the population that have yet to be targeted (e.g., teachers and retail staff) Administration of the Oxford-AstraZeneca and Janssen (Johnson & Johnson) vaccines are only recommended in eligible population groups over the age of 55 years, while the Pfizer-BioNTech and Moderna vaccines can be administered to all eligible groups regardless of age Health authorities have broadened the eligible 	 On 9 November 2020, the French National Authority for Health issued a press release which stressed the importance of transparency among the general public in the vaccination-campaign process In partnership with the Economic, Social and Environmental Council, a citizen collective was announced on 16 January 2021 to help support the COVID-19 vaccination campaign This panel consists of a total of 35 citizens The aim of this panel will be to collate the concerns and queries posed by the public and present them to the federal government As of <u>31 March 2021</u>, a vaccine campaign has been launched via text and call to reach out to residents older than 75 years who have yet to be vaccinated 	 COVID-19 vaccinations require an appointment to be made at a select vaccination centre 1,700 vaccination centres are fully operational and currently administering Pfizer-BioNTech and Moderna vaccines to all residents aged 70 and older The Government of France has authorized both medical practices and pharmacies to assist in the administration of the Oxford-AstraZeneca and Janssen vaccines The Government of France is currently planning the launch of "mega-vaccination centres" 25,000 firefighters have been trained for vaccine administration 2,500 firefighters are in charge of logistics of this operation A weekly total estimate of 530,000 	 Public Health France has stated that the vaccination campaign will be coupled with publicly available <u>surveillance, monitoring</u> and evaluation indicators Surveillance systems will be updated to help track the percentage of individuals that have been vaccinated Additional indicators, such as vaccine efficacy, vaccine- related opinions (e.g., vaccine intentions), and vaccine adherence will also be documented Supervised by both the National Health Insurance Fund and the General Directorate of Health, the "<u>SI</u> <u>Vaccin Covid</u>" system will be used for surveillance, monitoring, evaluation, and reporting of COVID- 19 vaccine data Insights gleaned by the <u>Economic, Social and</u>

be administered by nurses and physicians, and the second dose will be	Ancillary supplies were mass ordered prior to the arrival of the COVID-19 vaccine Pharmacies and hospitals are responsible for delivering these supplies to institutional care facilities (e.g., long-term care homes)	 priority population groups in the vaccine distribution plan and as of <u>12 April 2021</u>, the groups eligible to receive a COVID-19 vaccine consist of: All residents aged 55 and older Long-term care home residents and staff High-risk individuals (e.g., Trisomy 21, cancer, transplant patients, and rare diseases, body mass greater than 30) Older adults in healthcare facilities and serviced residences Residents aged 60 and older in migrant worker homes Disability care home residents Healthcare professionals Individuals aged 50 to 54 who are living with comorbidities Individuals who have previously contracted COVID-19 Pregnant (from second trimester) or breastfeeding women The two-dose Pfizer-BioNTech vaccine is only to 	doses can be administered through the addition of these centres • Vaccinated individuals are still required to respect and follow <u>public-health measures</u> (e.g., face masks and physical distancing)	Environmental Council found that the possibility of adverse side-effects caused by the COVID-19 vaccine is the primary reason for hesitancy/rejection among participants
		be administered by nurses and physicians, and the second dose will be		

• The Ministry for Solidarity		
and Health recommends that		
patients who have previously		
contracted COVID-19 wait		
at least three months, and		
preferably six months, prior		
to receiving a single dose of		
the COVID-19 vaccine		
• As of 24 May 2021 Emprop		
• As of <u>24 May 2021</u> , Ffance		
opened vaccination to all		
people aged 18 years and		
older within a priority		
profession		
• Professionals concerned		
will be able to be		
vaccinated on presentation		
of proof of eligibility, such		
as professional card, pay		
slip for employees,		
declaration on honour for		
others		
• <u>List of professionals</u> over the		
age of 18 years and		
considered to be more		
exposed to COVID-19 who		
are eligible as of 24 May		
2021 include:		
• Teachers from schools,		
colleges, high schools		
• Early childhood		
professionals		
• National and municipal		
police		
• Bus and taxi drivers		
• Waste collection agents		
• Employees and business		
managers of food		
businesses (e.g., cashiers,		
food vendors)		

		Event workersGiven the significant			
		vaccination coverage, as of			
		31 May 2021 France will			
		open vaccination to all			
		older			
		• As of 26 May 2021 France			
		has administered 34 200 676			
		vaccines doses			
		o 24,098,326 individuals			
		have received their first			
		dose (45.9% of the total			
		population)			
		o 10,102,350 individuals			
		have received their second			
		are fully			
		total population)			
Germany	• Germany has approved	• Group 1 the highest priority	• The Government of	Vaccines are	• According to the
5	the use of the Moderna,	group, is eligible to receive	Germany has launched	administered in	National COVID-19
	Pfizer-BioNTech,	vaccines in the first stage:	a COVID-19 vaccine	vaccination centres	Vaccination Strategy,
	Johnson & Johnson, and	 Individuals aged 80 and 	information campaign,	and in care facilities by	the Robert Koch
	Oxford-AstraZeneca	older	" <u>Germany Pulls Up Its</u>	mobile teams during	Institute will collate
	vaccines	• Healthcare workers in	<u>Sleeves</u> ", to help	the centralized	non-personal data from
	• As per the distribution	intensive care, accident,	educate and inform the	vaccination phases	vaccinated individuals
	formula of the	and emergency units, and	public	• Federal states are	(e.g., age, sex, residence,
	Cermany is expected	• Staff/residents of pension	o The first phase of	responsible for	place and date of
	to receive over 70	care and nursing homes	focuses on raising	operations of	details) into a web-based
	million vaccine doses	• Nurses who care for at-	awareness regarding	vaccination centres	data portal
	in the second quarter	risk patients	priority populations	and ensuring safe	• The Robert Koch
	of 2021	• <u>Group 2</u> follows second and	• The campaign	management of	Institute and Paul
	• As of <u>12 May 2021</u> ,	consists of:	consists of	vaccines	Ehrlich Institute will
	updated vaccine	o Individuals between 70	educational videos,	• As of <u>5 April 2021</u> ,	lead the surveillance and
	projections for the 2021	and 80 years of age	posters, and	vaccine administration	evaluation of COVID-
	year include:	• At-risk individuals who	advertisements	sites have expanded to	19 vaccines
	• In the first quarter of	may sutter a severe	• A <u>Communications</u>	include 50,000 general	
	the year, 12.4 million	outcome (e.g., transplant	<u>Management</u>	practitioner clinics	

doses of Pfizer- BioNTech, 1.8 million doses of Moderna, and 5.7 million doses of Oxford-AstraZeneca are expected • In the second quarter of the year, 50.2 million doses of Pfizer- BioNTech, 6.4 million doses of Moderna, 12.4-15.4 million doses of Oxford- AstraZeneca, and 10.1 million doses of Johnson & Johnson are expected • By the end of 2021, 119 million doses of Pfizer-BioNTech, 78 million doses of Moderna, 56.3 million doses of Oxford- AstraZeneca, and 36.7 million doses of Johnson & Johnson are expected The Oxford-AstraZeneca vaccine was approved for use on 29 January 2021 Distribution of the Pfizer- BioNTech vaccine to federal states is based on the proportion of the population that reside in those regions • Pfizer-BioNTech will deliver the vaccine to one of the designated	 patients, individuals with Trisomy 21, and dementia) Close contacts of long- term care home residents Public order units in law enforcement Pregnant women Individuals living in homeless shelters As of <u>24 February 2021</u>, this now includes elementary school, childcare, and day-care staff Group <u>3</u>, which is the third- highest priority group, includes: Individuals between the ages of 60 and 70 years At-risk individuals with pre-existing medical conditions (e.g., obesity, liver disease or autoimmune condition) Emergency medical- services staff (e.g., police officers and firefighters) Staff in the education and judiciary sector Staff in retail, the meat- processing industry and seasonal workers As of <u>31 March 2021</u>, administration of the Oxford-AstraZeneca vaccine is now being prioritized for residents aged 60 years and older 	Committee has been established on the federal level to help disseminate information relating to vaccine development, roll-out, and timelines o This committee will primarily be targeting priority groups including healthcare workers, vulnerable populations, and the general public	 As of <u>24 May 2021</u>, 12,512,810 vaccinations had been delivered to doctors' offices In April 2021, <u>medical</u> <u>practices</u> began administering vaccinations An additional 2,500 <u>military personnel</u> are scheduled to be deployed to vaccination centres in order to assist with the vaccine roll-out An individual who suffers damage from the COVID-19 vaccine will <u>receive</u> <u>care in accordance</u> with the Federal <u>Supply Act</u> 	 This will include monitoring: Vaccination rates by conducting online surveys Vaccine safety through routine pharmacovigilance, surveillance of pregnant women, short-term app-based cohort studies, and long-term hospital- based case-control studies Vaccine efficacy by using case reports Digital health data

delivery centres, from	• Residents under the age of		
where it will then be	60 years, who previously		
distributed to regional	received their initial dose		
vaccination centres for	of the vaccine, will be able		
administration	to choose whether to		
 COVID-19 vaccine 	delay their second dose		
distribution to medical	 STIKO is scheduled to 		
practices follows:	provide further		
• Delivery from the	recommendation(s)		
federal government to	regarding this by the end		
wholesalers	of April 2021		
 Delivery from 	• According to the Standing		
wholesalers to	Committee on Vaccination		
pharmacies	(STIKO), the Oxford-		
 Delivery from 	AstraZeneca vaccine requires		
pharmacies to	two doses in a <u>12-week</u>		
physician clinics	interval		
• A <u>statement</u> by Pfizer-	• As of <u>6 May 2021</u> , Germany		
BioNTech on 10	lifted restrictions banning		
February 2021 announced	those under 60 from getting		
a new production plant	the Oxford-AstraZeneca		
has been created in	vaccine,		
Marburg, Germany, with	• The country is now		
the initial manufacturing	expanding eligibility for all		
process of the COVID-	adults		
19 vaccine having	 Second doses can be 		
commenced	administered four weeks		
• It is projected that 250	after receiving the first		
million vaccine doses	vaccine		
will be manufactured at	• As of <u>10 May 2021</u> , the		
this facility in the first	government lifted		
half of 2021	prioritization of the Johnson		
• On <u>26 March 2021</u> , the	& Johnson vaccination, now		
European Medicines	allowing all adults to receive		
Agency approved the	a dose		
manufacturing of the	• On <u>7 June 2021</u> , the		
COVID-19 vaccine	government will lift its		
drug product at this	vaccination prioritization		
tacılıty	plan and allow anyone over		

	 Distribution of the first batch of vaccines was scheduled to begin in April 2021 As of 23 May 2021, Germany has received 50,910,572 vaccine doses through partnerships with Pfizer-BioNTech, Oxford-AstraZeneca, and Moderna On <u>19 March 2021</u>, it was announced that Germany will be receiving an additional 580,000 Pfizer-BioNTech vaccine doses 	 the age of 16 to make a vaccination appointment As of <u>24 May 2021</u>, Germany has administered 45.4 million vaccine doses 40.4% of the population has received the first dose of the vaccine, and 14.3% of the German population has been fully vaccinated 669,641 doses are administered each day 			
Israel	 Distribution of <u>Pfizer-BioNTech COVID-19</u> vaccine started in <u>December 2020</u>, where the government received permission from the manufacturers to repackage doses into tens or hundreds per shipment (instead of 1,000 per shipment) in order to avoid waste and create safer mobilization of doses to remote areas According to <u>Health</u> <u>Minister, Yuli Edelstein,</u> <u>Israel entered vaccine</u> <u>procurement negotiations</u> <u>early in the pandemic</u> <u>Hospitals and medical</u> <u>facilities</u> follow the 	 To simplify the implementation process, the Ministry of Health revised the vaccination allocation to include all Israeli residents aged 60 or older and all health workers from December 2020 to February 2021, with vaccines available to all Israeli residents after this phase Additional doses due to overstock were communicated and administered to local individuals As of 3 February, all residents aged 16 years and older became eligible for the COVID-19 vaccine 	 Current priority and eligible population groups receive text messages from their health maintenance organizations (HMO) (health services that are provided to every citizen through a universal, compulsory medical insurance plan) about information on booking an appointment (either by phone or through the HMO online portal) The Ministry of Health's website provides information to the general public 	 <u>Roles and</u> <u>responsibilities for</u> <u>administering</u> vaccines are organized according to the following: four HMOs for vaccinating older adults aged 60 or older and individuals with chronic conditions national emergency services organizations for vaccinating nursing home residents hospitals and health insurers for vaccinating front- line health workers 	 Israel has a single electronic medical record system that is shared and accessed by the four HMOs, which provided health data information to identify priority groups among all insured citizens As of 17 January 2021, the Ministry of Health and Pfizer-BioNTech signed an agreement to share anonymized medical-record data between hospitals or health plans and research entities in order to measure vaccine rollout, immunity

 distribution processes ascribed by their central health maintenance organizations (HMO) Vaccines are repackaged to contain 300 doses or <u>60 doses</u>, which are sent to national centres and subsequently repackaged in small boxes to ship three times a week to communities Vaccines are transported (and monitored under electronic surveillance to ensure proper shipping storage) from the U.S. to Israel, which are then transferred to the logistics department of a pharmaceutical company <u>"Teva"</u> then distributed to the Health Plans 	 Human rights and health organizations have called out on inequities related to the vaccine roll-out and allocation As of 8 March 2021, vaccination has begun for 100,000 Palestinians who work in Israel or are in Israeli settlements in the West bank, with efforts to vaccinate 1,000 people per day (with additional categories to include Palestinians with relatives who live in Jerusalem, and Palestinians prisoners) The vast majority of Palestinian citizens and residents (of Israel) have been vaccinated, but the majority of individuals living in the West Bank and the Gaza Strip remain unvaccinated (as of 20 May 2021, 5.5% of Palestinians have received at least one dose of COVID-19 vaccine) Vaccine shipments from the COVAX facility arrived to Palestine (as of 17 March 2021) 	 on vaccine roll-out, priority groups for vaccine, and safety and efficacy The Ministry of Health focused on tailored messaging to the general population on daily updates on the number of vaccinated individuals and addressing anti- vaccination messages on social media Endorsements from political and religious leaders encouraged the general population, and religious Orthodox Jewish and Muslim populations to get vaccinated respectively Media campaigns (including messages about social responsibility and use of celebrities) have launched to promote the green pass To increase accessibility and improve areas with low vaccination rates, mobile vaccination units have experts who 	 Vaccination sites and portable immunization stations in remote areas were designated by the Ministry of Health with assistance from the military and local authorities Within less than a month, the campaign shifted some of these sites to a focus on primary-care clinics to increase uptake in remote areas The Ministry of Health plans to provide vaccinations 24/7, with health plans responding by recruiting nurses for vaccine administration The Ministry of Health recruited community-based nurses, physicians, paramedics and EMTs to administer the vaccine (with vast majority administered by nurses), in addition to recruiting at least 7,000 reserve medics to vaccination centres 	 With the agreement, the Ministry of Health will receive weekly epidemiological reports on confirmed cases (total, by age, and other stratifications), hospitalizations, severe cases, ventilator use, number of deaths, symptomatic cases, and weekly number of vaccinations (total, by age, and other stratifications) The Ministry of Health stated that for Israelis who received both doses of vaccine, 14 days after the second dose, vaccines were 98.9% effective at preventing death and hospitalizations caused by COVID-19, 99.2% effective against serious illness, and reduced morbidity by 95.8% The Israeli Ministry of Health can transfer personal identification of people who have not received their first dose to local authorities and the Ministry of Education in order to be a strate of the second dose is a strate of the second dose.
	• To avoid wastage, an explicit decision was made by health authorities when there was a decline in vaccination rates, where they <u>moved to the</u> <u>next priority group instead of</u>	vaccination rates, mobile vaccination units have <u>experts who</u> <u>travel with the units to</u> <u>answer questions, and</u> <u>also use free food or</u> <u>drink</u> to persuade	 Adverse-event reporting was conducted electronically, with 	to local authorities and the Ministry of Education in order to improve low vaccination rates

	waiting for everyone in the	individuals who are	individuals monitored	(parliament bill passed
	current priority group to be	hesitant or undecided	for at least 15 minutes	on 24 February, 2021)
	vaccinated (which led to	about vaccination	after vaccination or 30	
	surges in people travelling		minutes for individuals	
	from larger cities to the		with history of	
	outskirts to get vaccinated		anaphylaxis	
	from the unused supply)		 <u>Professionals have</u> 	
•	• As of <u>25 May 2021</u> , 62.9% of		access to a 24/7 call	
	the population in Israel have		<u>centre</u> to ask for	
	received at least one dose of		guidance and shipment	
	COVID-19 vaccine and		information	
	59.1% of the population are		• As of 21 February	
	fully vaccinated		2021, <u>university</u>	
	\circ 92% of Israelis aged 50		campuses and	
	years and older are fully		workplaces have	
	vaccinated		launched vaccination,	
	• The Ministry of Health is		with the use of mobile	
	currently considering		units from the Magen	
	vaccination for children aged		David Adom	
	12 to 15, with current		(emergency care	
	authorization to vaccinate		services)	
	children aged 12 years and		• As of 7 March 2021,	
	older who belong to a high-		fully vaccinated Israeli	
	risk group		residents do not have	
			to quarantine after	
			entering the country	
			(while unvaccinated	
			individuals are	
			required to isolate in	
			designated hotels or in	
			an alternate location	
			using an electronic	
			bracelet)	
			• As restrictions	
			continue to ease, the	
			Ministry of Health	
			unveiled a "Green	
			Pass" system that	
			allows fully vaccinated	

		(one week after last	
		dose) or those	
		recovered from	
		COVID-19 to enter	
		specific businesses	
		with a "green	
		pass/certificate" and	
		photo ID (limited to	
		six months and failure	
		to comply will result in	
		a fine)	
		0 Israeli residents with	
		a <u>"green</u>	
		pass/certificate" can	
		attend cultural and	
		sports events, gyms,	
		exhibitions, hotels,	
		tourist areas, and	
		worship houses	
		(with restrictions),	
		exempt from	
		quarantine upon	
		international travel,	
		and can volunteer in	
		hospital wards	
		 Occupancy 	
		restrictions have	
		been removed for	
		places under the	
		green pass	
		• Non-vaccinated	
		people can enter	
		indoor attractions	
		• Private gatherings	
		have increased to up	
		to 500 people	
		outdoors and 50	
		people indoors	

• It is mandatory for
non-essential
businesses to
require people to
hold a green pass to
enter
The Green Pass
system will end on 1
June 2021, which
means that a proof of
vaccination is no
longer required to
enter businesses (e.g.,
venues, stores,
restaurants)
<u>All remaining</u>
COVID-19 public-
health measure
restrictions on
gatherings will be lifted
as of 1 June 2021
• The requirement to
wear masks indoors
remains in place for
the next two weeks
• To increase the
efficiency of the
vaccination campaign,
Israel has increased the
hours of nurses and
reduced their non-
COVID-19 duties, and
are also <u>vaccinating</u>
populations confined
to their homes and
remote places (either
home to home or carry
confined people to

				vaccination sites by	
				ambulance)	
				• The Ministry of Health	
				is currently considering	
				financial incentives for	
				physicians for	
				vaccinating certain	
				population age groups	
New Zealand	• The New Zealand	• On 10 March 2021, the New	 Information on the 	 New Zealand is 	New Zealand's <u>National</u>
	government has secured	Zealand government released	COVID-19 vaccine	planning for an extra	Immunisation Register
	four pre-purchase	its official COVID-19	roll-out, procedures for	2,000-3,000 full-time	is being replaced by the
	agreements for COVID-	vaccine roll-out plan with	getting a vaccine, and	vaccinators to be	National Immunisation
	<u>19 vaccines</u>	four main groups for phased	the safety and	trained and available	Solution to allow health
	o 750,000 courses from	vaccination:	effectiveness of the	throughout New	workers to record
	Pfizer-BioNTech	o Group 1 consists of	vaccines are posted on	Zealand during its	vaccinations anywhere,
	 Five million courses 	50,000 border and MIQ	the <u>New Zealand</u>	vaccination campaign	anytime, and to fully
	from Janssen	workers and their	government's official	• Vaccinators will be	support the COVID-19
	• 3.8 million courses	household contacts	United Against	sourced from non-	roll-out
	from Oxford-	(vaccination began in	COVID-19 vaccine	practising nurses,	• According to the Prime
	AstraZeneca	February 2021)	website	doctors or	Minister, New Zealand
	 5.36 million courses 	• Group 2 includes	 Information on the 	pharmacists, final-	started with a gradual
	from Novavax	approximately 480,000	vaccination program	year medical,	roll-out to test its
	• The government has	front-line workers and	is now available in	nursing or	distributions systems
	secured enough vaccine	people living in high-risk	25 languages on the	pharmacy students,	and logistical
	doses to vaccinate the	settings (vaccination	website	and other health	arrangements for
	entire population of New	began in February 2021)	• The Minister for	professionals who	transporting the Pfizer-
	Zealand as well as the	• Group 3 will include	COVID-19 Response	have vaccinations	BioNTech vaccine
	Pacific Islanders	approximately 1.7 million	said in <u>a 27 January</u>	within their scope	• According to the
	• An <u>inventory</u>	people who are at higher	2021 press conference	• At a press conference	Director-General of
	management system is	risk if they contract	that preparation is	<u>on 7 April 2021</u> , Dr.	<u>Health</u> , as of 27 April
	being developed for	COVID-19 (vaccination	underway for a public	Ashley Bloomfield,	2021, all employers of
	COVID-19 vaccines that	anticipated to begin in	awareness and	Director-General of	border workers are
	will store data on where	May 2021)	reassurance campaign	Health, mentioned that	mandated to use the
	vaccines are allocated,	• Group 4 will consist of	centred around vaccine	an exemption was	COVID-19
	their volumes,	the remainder of the	safety that will include	approved for non-	immunization register to
	temperatures, and	population of	paid advertising	regulated workforces	upload information
	expiration dates to	approximately 2 million	• The New Zealand	to be able to be trained	about their workers who
	minimize wastage	people (anticipated to	Ministry of Health has	to be vaccinators in	require vaccination; the
	~	begin July 2021)	published information	order to increase the	register is connected to

ſ	• The Ministry of Health	• As of 30 April 2021, <u>95% of</u>	on its website about	vaccination workforce	New Zealand's NHI
	has <u>purchased nine</u>	MIQ workers in New	the <u>safety</u> ,	in Mãori and other	system
	<u>freezers</u> to store more	Zealand have been	effectiveness and side-	similar communities	 Four distinct online
	than 1.5 million doses of	vaccinated	effects of the Pfizer-	• The Ministry of Health	<u>surveys</u> have been taken
	the Pfizer-BioNTech	• Every person in New	BioNTech vaccine,	has <u>contracted the</u>	on the attitudes and
	vaccine	Zealand will be eligible for	how to get a vaccine	Immunisation	sentiments of New
	• Following the provisional	free vaccination regardless of	(for border and MIQ	Advisory Centre	Zealanders towards
	approval of the Pfizer-	their immigration status, and	workers), and <u>what to</u>	(IMAC) to begin	COVID-19 vaccines,
	BioNTech vaccine by	any information collected	<u>expect at your</u>	training health	and the latest survey
	Medsafe on 3 February	will not be used for	vaccination	professionals in	indicated that potential
	2021, the <u>first doses</u>	immigration purposes	 New Zealand's 	February 2021 on	uptake overall has
	arrived in Auckland on 15	• The Ministry of Health is	COVID-19 Response	COVID-19 vaccine	increased in April to
	February 2021	working in partnership with	Minister said on <u>17</u>	administration	77% from 69% in
	• Pfizer-BioNTech will be	the Maori and Pacific	March 2021 that the	• The government of	March 2021
	responsible for delivering	neighbours to plan for their	government	New Zealand	 Those unlikely to
	all of its vaccines to New	roll-out programs and	introduced paid	announced on 18 May	take a vaccine if
	Zealand	determine their vaccine	advertising with	<u>2021</u> that 5,358	offered has dropped
	New Zealand is	preferences	messaging about	vaccinators have	to 12% from 20% in
	reportedly due to receive	 Medsafe has recommended a 	vaccines during the	completed the IMAC	March
	249,600 doses of Oxford-	dose interval of at least 21	weekend and that the	training program	• The two most
	AstraZeneca vaccine	days between the first and	advertising campaign	 Initiatives are 	common reasons for
	through the COVAX	second doses of the Pfizer-	will ramp up	underway to further	hesitancy are the
	<u>facility</u> , including a few	BioNTech vaccine	throughout the year	boost the pool of	quick turnaround
	doses in quarter one of	• The government announced	• On 17 March 2021, the	vaccinators in time	time for development
	2021	on 24 March 2021 that early	COVID-19 Response	for vaccination roll-	of the vaccine and
	• Over <u>\$66 million has</u>	vaccinations will be made	Minister released a	out peaks later in	the unknown about
	been allocated by the	available for people who	graph illustrating how	the year, including	the long-term effects
	New Zealand government	need to leave New Zealand	the government plans	possibly allowing	of the vacchie
	to support the roll-out of	on compassionate grounds	to administer vaccines	people with health-	Adverse reactions to
	COVID-19 vaccines,	or for reasons of national	over the course of	and disability-sector	vaccines are reported to
	including purchasing	significance		experience across	Reactions Manite ring
	supplies to vaccinate the	 Compassionate grounds 	• On <u>22 March 2021</u> , the	the country to work	<u>Reactions Monitoring</u>
	population and providing	that will be considered	government released	as supplementary	independent sefety
	support to Pacific	include needing to provide	an <u>online tool</u> to help	vaccinators	monitoring board that
	countries	critical care for a	INEW Zealand residents	• A <u>small group of</u>	reviews all reports of
	 New Zealand's Prime 	dependent, needing to	uetermine which	their first doese of the	concern in country as
	Minister <u>announced</u> on 8	access medical care that is	vaccination group they	Deven BioN/Tech	well as from overseas
	March 2021 that the	not available in New	are in and when they	<u>r nzer-bioin recii</u>	reporting according to
				vaccine on 19	reporting, <u>according to</u>

		1		
government has decided	Zealand, and visiting an	can expect to get a	February 2021 as part	New Zealand's
to make Ptizer-BioNTech	immediate family member	COVID-19 vaccine	ot New Zealand's trial	COVID-19 Response
the country's primary	who is dying	• The government is	run for the roll-out of	Minister
vaccine provider and has	• Requests for national	in the process of	its vaccination	
signed an advance	significance overseas	having the tool	program	
purchasing agreement	travel will need to be	translated into 24	• <u>New Zealand began</u>	
with Pfizer-BioN Tech for	made by the appropriate	languages	vaccinating its border	
an additional 8.5 million	agency on behalf of the	• The tool has been	workers in Aotearoa	
vaccine doses to bring	individual and not the	translated into	on 20 February 2021	
their total order to 10	individuals themselves	• On 31 March 2021, the	and in Wellington on	
million doses, enough for	o Eligibility criteria include	COVID-19 Response	22 February 2021	
New Zealand's entire	being a New Zealand	Minister and the	• Vaccination of the	
population to be fully	citizen, resident or visa	Associate Minister of	household contacts of	
vaccinated	holder, needing to travel	Health both <u>received</u>	<u>border workers</u> began	
o The government is	before 31 August 2021,	the first dose of Pfizer	on 9 March 2021 at	
working on a delivery	for return to New Zeeland	vaccine and publicly	the first large-scale	
Bis NT set to receive	for return to New Zealand	discussed their	COVID-19	
bioin Tech to receive	• As of 25 May 2021, New	experience afterwards	vaccination clinic in	
the accord half of 2021	Zealand has administered	to demonstrate	New Zealand	
	562,149 doses of the Pfizer-	confidence in the	o Initially 150 people	
• The decision to make $\mathbf{D}_{\mathbf{C}}^{*}$ $\mathbf{D}_{\mathbf{C}}^{*}$ $\mathbf{D}_{\mathbf{C}}^{*}$ $\mathbf{D}_{\mathbf{C}}^{*}$ $\mathbf{D}_{\mathbf{C}}^{*}$	bioin Tech vaccine	vaccine	will be vaccinated a	
Pfizer-BiolN Lech New	0.3/1,043 first doses	• The <u>Associate Minister</u>	day at the clinic, but	
Zealand's primary vaccine	o 191,106 second doses	<u>of Health (Mãori</u>	these numbers will	
provider was based on	• As of 25 May 2021, New	Health) indicated that	ramp up over the	
officiency of the Device	Zealand has used 98% of its	several initiatives had	next week	
PicN/Tech vegging and	vaccine stock	begun to promote	• About 55,000 front-	
bioin rech vacchie and		vaccinations within	line health workers	
the simplification of the		Maori communities,	will be vaccinated in	
vaccine foil-out when		including a roadshow,	the next stage of the	
administering one type of		networking by 1wi	roll-out	
auministering one type of		leaders and	• The government has	
vaccine throughout the		communications	also partnered with	
		networks, and the	some Mãori and	
• The New Zealand		expansion of the	Pacific NGOs to set	
government is still		engagement strategy to	up small community	
determining now to make		a number of social	vaccination clinics in	
use of other vaccines that			South Auckland to	
it has already procured		• An <u>online tool</u> was	support the roll-out of	
		launched to help New	vaccines to household	

o Options under	Zealand residents	contacts of border and	
consideration include	determine which	MIO workers	
delaying delivery to	vaccination group they	• As of 1 May 2021 all	
New Zealand until	are in and when they	MIO and government	
2022 and donating	can expect to get a	border workers must	
surplus vaccines to	COVID-19 vaccine	show proof of	
other countries	• The Ministry of Health	vaccination in order to	
\circ The government may	lounched a dashboard	aptor their workplace	
consider procuring a	on its website detailing	o Initially current	
vaccine that is more	key vaccination	workers who have	
easily transported as a	statistics, including the	received one dose	
"backup option" to	statistics, including the	of wareing will be	
make vaccines more	vaccinated with first	of vaccine will be	
accessible for rural	and second desses the	vaccinated	
communities	and second doses, the	o By 5 June 2021 all	
	number of adverse	O By 5 June 2021, an	
• At a <u>press conference on</u> 15 April 2021 New	reactions following	current workers	
<u>IS April 2021</u> , New	vaccillations, and the	hust have had two	
Canand's Director-	forecasted and actual	doses of vaccine to	
General of Health said	number of	be considered	
that Johnson & Johnson	vaccinations	vaccinated	
plans to deliver the two	administered each	o New Workers will	
million doses of their	week	need to have had	
Janseen vaccine that the	• New Zealand ramped	their first dose	
country has pre-ordered	up its <u>public</u>	before starting	
in the third quarter of	information campaign	work, and then have	
2021, giving the country	around vaccines during	35 days from	
time to decide if and	the week of 18 April	starting work to	
when those vaccines will	2021, according to the	receive their second	
be used	Minister for COVID-	dose	
o The Janseen vaccine	19 Response	 New Zealand's 	
has not yet been	• There are two main	Ministry of Health	
approved for use in	layers of the	recommends a <u>two-</u>	
New Zealand	campaign, consisting	<u>week gap between the</u>	
• With regards to delivery	of 1) fact-based	influenza vaccine and	
of vaccines, vaccines	information, and 2)	the COVID-19	
arrive at a distribution	encouragement for	vaccine	
centre in Auckland and	people about the	0 It is recommended	
then are distributed by a	benefits of	that if an individual	
third-party company	vaccination	has a vaccination	

called "PACE" to the	• The compaign	appointment
different health regions	includes TV and	booked for
and Dr. Ashlow	radio ada	COVID 10 they
Bloomfield	information	should get the
DIOOITITEIC	headster	COVID 10 maging
	DOOKIEts, VIdeos OI	COVID-19 vaccine
	influential persons,	first, but if not, they
	and social media	should get the
	• <u>Brochures have been</u>	influenza vaccine
	<u>sent to all households</u>	tirst
	in New Zealand to	o New Zealand's 2021
	advise residents of	influenza
	which group they are	immunization
	in and how to book an	program began on
	appointment for a	14 April 2021 for
	vaccination	people 65 years and
		older
		<u>Vaccine administration</u>
		is being managed
		differently by each
		district health board
		(DHB) in New
		Zealand, and will be
		made available at a
		range of locations,
		including pop-up
		clinics, general
		practitioners, Mãori
		and Pacific healthcare
		providers, mobile
		clinics, and community
		clinics
		• Vaccinations for
		group 3 of the
		vaccine roll-out
		have begun in
		different regions at
		different times in
		May

		 According to the Director-General of Health, each vaccination site in New Zealand goes through an accreditation process to ensure that the site can administer vaccines safely and in a measured way A national vaccination- booking system is in 	
		 booking system is in its trial phase and will be scaled up to the broader population in the second half of the year Individuals who have booked vaccinations but missed their appointments are allowed to "walk-up" to vaccination centres and get their vaccine, according to the Minister for the 	
		 COVID-19 Response According to the Minister for the COVID-19 Response, vaccinations are being offered to staff and residents of aged residential care facilities around the country at community vaccination centres 	

				• Mobile clinics have	
				also been deployed	
				to some rest homes	
U.K.	 A U.K. Government <u>Vaccination Taskforce</u> was established in April 2020, and the task force signed deals to buy vaccines from multiple developers and suppliers The task force also expanded the U.K.'s vaccine manufacturing capability to further increase vaccine production A domestic manufacturing deal was announced on 29 March 2021 with GlaxoSmithKline for 60 million doses of <u>Novavax</u> <u>COVID-19 vaccine</u> The U.K. has ordered more than <u>400 million</u> <u>doses</u> of seven of the most promising vaccines, of which only three have been approved so far in the country – Oxford- AstraZeneca, Pfizer- BioNTech, and Moderna The U.K. government has <u>announced</u> a deal with an eighth biopharmaceutical company, CureVac, and has placed an order for 50 million doses to be 	 In December 2020, the United Kingdom Government released advice on priority groups for <u>COVID-19 vaccination</u>, which reported that vaccination priorities should be the prevention of COVID-19 mortality, and the protection of health and social-care staff and systems Secondary priorities should include vaccination of individuals at increased risk of hospitalization and increased risk of exposure, and to maintain resilience in essential services The order of priority of COVID-19 vaccination is: 1) residents in a care home for older adults and their carers; 2) all those aged 80 and over and front-line health and social-care workers 3) all those 75 years of age and over; 4) all those 65 years of age and over; 5) all those 65 years of age and over; 6) all individuals aged 16 to 64 with underlying health conditions which put 	 The U.K. government released a vaccine- delivery plan that stated that they are working at the national, regional and local levels to establish partnerships with authorities, communities, healthcare staff and patients to ensure that accessible information is available to the public It is also working to ensure that local implementation plans are tailored to support all individuals The Mosques and Imams National Advisory Board is leading a campaign to reassure its faithful are among those publicly advocating that COVID-19 vaccinations are safe and compatible with Islamic practices Leading businesses, employers and industry bodies, including IKEA, Asda, Metro 	 Three types of vaccination sites have been established: 1) vaccination centres using large-scale venues such as football stadiums; 2) hospital hubs; and 3) local vaccination services, using primary-care services and pharmacy teams In largely rural areas, vaccination centres will be a mobile unit To ensure that there is a sufficient workforce to deliver the vaccination program, changes to the Human Medicines Regulations now permit non-registered healthcare professionals to administer the COVID-19 vaccine Local vaccination service sites are being run by a mixture of primary-care networks and community pharmacies The vaccination cancel as many people as 	 Adverse events and safety concerns following COVID-19 vaccine administration should be reported to the Medicines and Healthcare Products Regulatory Agency using the established Coronavirus Yellow Card reporting scheme Public Health England released its updated COVID-19 vaccine surveillance report, current as of 20 May 2021 Findings show that one in three adults in England are already fully vaccinated with both doses

delivered later this year if	them at a higher risk of	Bank, and Proctor &	possible was boosted	
required	serious disease and	Gamble U.K., have	by a shift in policy in	
• The UK government has	mortality:	come togethe r to	early January, which	
ordered 30 million doses	7) all those 60 years of age	support the COVID-	prioritized the first	
of the Johnson &	and over:	19 vaccination	dose of a vaccine, with	
Johnson vaccine, despite	8) all those 55 years of age	program and	a second dose up to 12	
Johnson & Johnson	and over: and	encourage staff to	weeks later	
halting deployment of its	9) all those 50 years of age	receive their vaccine	• As of the week of 5	
vaccine across Europe	and over	when eligible	April 2021 Moderna	
and the UK not yet	Those remaining people in	when engible	Npili 2021, Modellia	
approving the vaccine	• Those remaining people in the top pipe priority groups		begun in Wales and	
	who have yet to receive their		Scotland	
• The U.K. government	second dose can do so earlier		• $A = a f the area b = f 12$	
<u>released a statement on /</u>	as the interval for second		• As of the week of 12 A stil 2021 Madama	
May 2021 Tollowing	doses has been shortened		April 2021, Moderna	
Loint Committee on	from 12 to eight weeks		begun in England and	
Vagaination and	\circ This follows the latest		begun in <u>England</u> and	
Vaccillation and	recommendation from the		will be available at 21	
the Oxford AstroZonego	Ioint Committee on		sites	
the Oxford-AstraZeneca	Vaccination and			
vacchie	Immunization (ICVI) to			
	reduce dosing interval to			
	protect the most			
	vulnerable from the			
	B1 617 2 variant of			
	concern identified in India			
	• The U.V. server ment has			
	• The U.K. government has			
	ill assidants in share 1 and is			
	all residents in phase 1 and 1s			
	now <u>moving into phase 2</u>			
	• The Joint Committee on			
	Vaccination and			
	Immunization (JCVI)			
	released advice on			
	prioritization of age groups			
	tor the U.K. government for			
	phase 2			

• Four nations of the U.K.		
have agreed to follow JCVI's		
approach		
o Phase 2's recommended		
approach will follow an		
age-based strategy starting		
with adults aged 40 to 49		
vears followed by those		
aged 30 to 39 years and		
lastly 18 to 20 years		
• The U.K. government will		
follow <u>updated advice</u> that		
for individuals aged 30 years		
and younger without		
underlying health conditions		
that put them at higher risk		
of severe COVID-19 disease,		
there should be a preference		
for an alternative to the		
Oxford-AstraZeneca		
vaccine, if available		
• As of <u>5 May 2021</u> , Northern		
Ireland has invited		
individuals 18 years and older		
to receive a COVID-19		
vaccine		
• As of 26 May 2021, England		
has invited individuals aged		
30 years and older to receive		
a COVID-19 vaccine and/or		
their first vaccine dose		
• As of 26 May 2021, the UK		
has administrated 61 906 062		
vaccine doses		
○ 38 378 564 individuals		
have received their first		
dose		
uose		

		o 23,616,498 individuals			
		have received their second			
		dose and are fully			
		vaccinated			
U.S.	• The Department of Health and Human	• The CDC provided recommendations to federal,	CDC updates and disseminates	<u>OWS's COVID-19</u> vaccine distribution	• The CDC, FDA and other federal partners
	Services (HHS) and the	state and local governments	information about	process utilizes	have many existing
	Department of Defense	about who should receive	vaccine safety.	existing networks.	systems and data
	(DoD) jointly lead a	COVID-19 vaccines first	effectiveness.	partnerships, and	sources to facilitate
	vaccine production and	based on recommendations	allocation strategy and	processes to provide	continuous safety
	distribution strategy called	from the Advisory	distribution process for	access to vaccines	monitoring of vaccines
	Operation Warp Speed	Committee on Immunization	the general public, as	across the United	• The CDC and FDA
	(OWS)	Practices (ACIP)	well as additional	States as safely and	have also expanded
	• Its main goal is to	• On 1 December 2020.	information for	quickly as possible	safety monitoring
	deliver 300 million	ACIP recommended that	<u>healthcare</u>	• The Pfizer-BioNTech	systems and strategies
	doses of safe and	healthcare personnel and	professionals	and the Moderna	have been developed as
	effective vaccines	long-term care facility	• The FDA's Center for	COVID-19 vaccines	an additional laver of
	 Actions supporting 	residents be vaccinated	Biologics Evaluation	are being allocated	safety monitoring to
	OWS include HHS	first (Phase 1a)	and Research (CBER)	across states and	evaluate COVID-19
	funding development	• A subsequent update on 20	and Office of Minority	jurisdictions, that	vaccine safety in real
	and manufacturing of	December 2020	Health and Health	follow procedures for	time
	vaccine candidates,	recommended that Phase 1b	Equity (OMHHE)	ordering first- and	• These additional
	securing agreements to	include persons aged 75 or	collaborate to address	second-dose	strategies include a
	acquire vaccine doses,	older and non-healthcare	vaccine confidence	allocations	smartphone-based,
	and building	front-line essential workers,	concerns in racial and	• On 8 March 2021, the	post-vaccine health
	manufacturing capacity	and that Phase 1c, include	ethnic minority	CDC released interim	checker for those who
	for successful vaccine	persons aged 65-74 years,	communities through	public-health	have received COVID-
	candidates	persons aged 16-64 with	several initiatives:	recommendations for	19 vaccines called \underline{V} -
	• DoD is partnering with	high-risk medical conditions,	 Holding listening 	people who have been	safe, which uses text
	the Centers for Disease	and other essential workers	sessions with	fully vaccinated for	messaging and web
	Control and	not covered in Phase 1b	diverse health	COVID-19	surveys from CDC to
	Prevention (CDC) and	• On 13 April 2021, the <u>CDC</u>	professional	 Fully vaccinated 	check in with vaccine
	other parts of HHS to	and FDA made a joint	organizations and	people may visit	recipients as well as
	coordinate supply,	statement to pause the use of	other stakeholders;	other fully	provide second dose
	production and	the Johnson & Johnson	 Building awareness 	vaccinated people as	reminders if needed
	distribution of vaccines	COVID-19 vaccine to	about <u>clinical trial</u>	well as unvaccinated	• They also include the
	• On 12 February 2021,	review cases of cerebral	diversity	people at low-risk	CDC's <u>National</u>
	Ptizer-BioNTech	venous sinus thrombosis that	• Providing weekly	for severe COVID-	Healthcare Safety
	announced that the U.S.		COVID-19	19 from a single	<u>Network (NHSN)</u> , an

• On <u>26 April 2021</u> ,		from testing	
Moderna announced an		following a known	
agreement with Sanofi for		exposure unless	
fill and finish		they are residents or	
manufacturing of the		employees of a	
Moderna COVID-19		correctional or	
vaccine in the U.S.		detention facility or	
• On <u>19 May 2021</u> , the		a homeless shelter	
FDA authorized longer			
time for refrigerator			
storage of thawed Pfizer-			
BioNTech COVID-19			
vaccine prior to dilution			
to make the vaccine more			
widely available			

Province/ territory	Securing and distributing a reliable supply of vaccines and ancillary supplies	Allocating vaccines and ancillary supplies equitably	Communicating vaccine-allocation plans and the safety and effectiveness of vaccines	Administering vaccines in ways that optimize timely uptake	Surveillance, monitoring and evaluation, and reporting
Pan-Canadian	 Through <u>advance</u> <u>purchasing agreements</u> with seven companies developing COVID-19 vaccines, Canada has secured enough doses for all Canadians who wish to be vaccinated o The doses were secured on the advice of the <u>COVID-19</u> <u>Vaccine Task Force</u> Health Canada authorized the use of <u>Pfizer-BioNTech</u> <u>COVID-19 vaccine</u> on 9 December 2020 and the <u>Moderna COVID-19</u> <u>vaccine</u> on 23 December 2020 Advance purchasing agreements were previously secured with manufacturers of both of these vaccines To facilitate easier handling and distribution of the Pfizer-BioNTech vaccine, <u>Health Canada</u> <u>authorized</u> that the vaccine can be stored and shipped at "standard 	 On 12 January 2021, the National Advisory Committee on Immunization (NACI) issued a statement outlining their most up-to- date recommendations to help guide the COVID-19 vaccine response in Canada In November 2020, NACI released its initial <u>Preliminary guidance on key populations for early COVID-19 immunization report to inform planning for the efficient, effective and equitable allocation of COVID-19 vaccines upon authorization for use in Canada</u> Key populations identified included those at high risk for severe illness or death, those most likely to transmit to those at high risk, essential workers, and those living or working in conditions with 	 In December 2020, the Public Health Agency of Canada released a report stating that federal, provincial and territorial governments are required to provide ongoing access to comprehensive, accurate and clear information about COVID-19 vaccines and immunization plans in partnership with First Nations, Inuit and Metis leaders, health professionals and other stakeholders <u>NACI</u> recommends making further communication efforts (e.g., cultural and linguistically diverse educational resources) to help improve the relay of vaccine information and establish transparency with the general public The Government of Canada's <u>Planning</u> guidance for 	 The Government of Canada's Planning guidance for administration of COVID-19 vaccine states that all provinces and territories are responsible for developing processes and preparing their health systems and providers to allocate, deliver, store, distribute and administer vaccines <u>Online tools</u> have been developed to help Canadians find COVID- 19 vaccination sites and determine their eligibility Vaccinated individuals are still required to follow all public-health measures in Canadian provinces and territories According to modelling of the Public Health <u>Agency of Canada</u> on 23 April 2021, by maintaining public- health measures until at least 75% of the 	 The Government of Canada's Planning guidance for administration of COVID-19 vaccine states that the safety approach will build upon the systems in place for monitoring other vaccines Post-marketing surveillance will be undertaken by the Public Health Agency and Health Canada through the following mechanisms: Canada Vigilance Program, which collects and assesses reports of suspected adverse reactions to the vaccines from manufacturers and from healthcare providers,

Appendix 4: COVID-19 vaccine roll-out elements from Canadian provinces and territories
freezer temperatures" of	elevated risk for	administration of	Canadian population has	patients and their
-25C and -15C for up to	infection	COVID-19 vaccine	received their first dose	families
14 days	• On 18 December 2020,	states that multiple	of COVID-19 vaccine	o <u>Canadian</u>
Canada has experienced	NACI <u>recommended</u> to	strategies, such as local	and 20% of the	Adverse Events
delays in expected	further sequence its initial	and ethnic media and	population has received	Following
shipments of Moderna	subset of key populations	social media, should be	their second dose,	Immunization
vaccine during the	using a stage-based	used to provide	infection rates of	Surveillance
month of April, which	approach	vaccination information,	COVID-19 would be	System, which is
has led to cancelled	• Stage 1 includes	and that tailored	driven low enough to lift	a post-market
vaccination	residents/staff of care	approaches are needed	restrictions without	vaccine safety
appointments in some	facilities, adults aged 70	for vulnerable	overwhelming the	monitoring
provinces	and older (priority will	populations	healthcare system	system
• On 26 February 2021	initially be given to	 Indigenous Services 	5	o Immunization
• On 20 rebruary 2021,	those over 80 years of	Canada (ISC) is		Monitoring
Outord AstroZonoco	age until supply	developing resources		Program ACTive
<u>Oxford-AstraZelieca</u>	increases) front line	to guide vaccination		(IMPACT)
<u>COVID-19 Vaccine</u>	healthcare and	delivery messaging		network, which
O Canada <u>pre-ordered</u>	personal support	and education		monitors for
<u>22 million doses</u> of	workers and at risk	• The report also states		adverse effects
the vaccine and	adulta in Indiannous	• The <u>report</u> also states		from vaccines
received the first		crowided to healthcare		vaccine failures
shipment of $500,000$		provided to nearthcare		and vaccino
doses from the Serum	o Stage 2 includes	providers, and the		and vacchie-
Institute of India on 3	essential workers, other	healthcare sector should		disease
March 2021	healthcare	be involved in vaccine		uiseases O Extornal
• Canada expects to	professionals, and	communication efforts		
receive 2 million more	remaining congregate	• The government of		the Consider
doses of Oxford-	facility residents/staff	Canada's website has a		the <u>Canadian</u>
AstraZeneca vaccines	(e.g., homeless shelters	designated <u>COVID-19</u>		Immunization
from the Serum	and correctional	webpage with links to		<u>Research</u>
Institute of India and	facilities)	sources and information		Network will also
a total of 1.9 million	 NACI recommends 	on vaccines that have		be involved in
doses from the	planning the efficient and	been authorized, the		the COVID-19
COVAX facility	equitable distribution of	vaccines that have been		vaccine safety
Canada negotiated a	COVID-19 vaccines in	purchased in advance,		initiatives
procurement agreement	accordance with the	and how to get		• The <u>Canadian</u>
with the U.S. to purchase	established sub-	vaccinated or register		Vaccine Safety
1.5 million doses of	prioritization of key	• The Canadian		<u>Network</u> , which
unused Oxford-	populations	government maintains a		assesses vaccine
AstraZeneca vaccine on		database of COVID-19		safety in various

loan with the	 Under specific 	announcements	age groups
understanding that they	circumstances (e.g.,	(inclusive of updates on	following
will pay the U.S. back	when excess doses	vaccine efficacy and	vaccinations
with doses in the future	remain after	procurement) on its	o The <u>Special</u>
• In order for the doses	immunizing all stage	website that can be	Immunization
to be received, <u>Health</u>	one groups in a facility),	filtered by	Clinics Network,
<u>Canada had to</u>	NACI acknowledges	announcement type	which manages
approve the sites	the benefit in	(e.g., news releases),	patients with
where the vaccines	vaccinating on-site	minister, and	adverse events
were made in the U.S.	stage-two populations	government institution	following
• A shipment of	in lieu of transporting	The Canadian	immunizations
approximately <u>317,000</u>	remaining doses to	government also has a	 Vaccination
doses of Oxford-	another facility with	dedicated <u>telephone line</u>	coverage across
AstraZeneca vaccines	stage-one individuals to	for providing COVID-	Canada is
procured from the	avoid the risk of	19 information	monitored by the
COVAX facility were	wastage during delivery		government and
received in Canada on 8	• The Government of		reported on its
April 2021	Canada's <u>Planning</u>		website every Friday
• Another 655.000 doses	guidance for		at 12 noon Eastern
of the Oxford-	administration of		Standard Time
AstraZeneca vaccine	COVID-19 vaccine		• The Angus Reid
procured from the	document stated that		Institute for
COVAX facility arrived	vaccines for second doses		independent
in Canada on 13 May	will be allocated at the		research in Canada
2021 and have been	same time as the first-dose		conducts ongoing
distributed to most	quantities to ensure		surveys and
provinces	sufficient supply for the		research on public
• On 5 March 2021.	second dose at the		opinions about the
Canada approved the	appropriate interval after		COVID-19 vaccine
Johnson & Johnson	the first dose.		roll-outs across
COVID-19 vaccine	• The federal government		Canada and
which is the first single	reported that 36 million		vaccination in
dose vaccine to be	Canadians are expected to		general
approved	be vaccinated by the end		• Canada reported its
o Canada has pre-	of September 2021		first case of rare
ordered 10 million	 Most provinces have 		blood clotting after
doses of the vaccine	completed vaccinations in		vaccination with the
• Canada received its	long-term care, or are		Oxford-
first shipment of the	close to doing so, and		AstraZeneca

Johnson & Johnson	vaccinations will now be		vaccine in Quebec
vaccine on <u>28 April</u>	expanded to seniors living		on 13 April 2021
<u>2021</u> containing	independently		• The <u>first death</u>
300,000 doses	• On 3 March 2021, the		due to these
0 Health Canada has	NACI issued new		blood clots was
held off on	guidance advising that the		also reported in
distributing the	time between shots for the		Quebec on 27
vaccine to provinces	Pfizer-BioNTech		April 2021
after learning that the	Moderna, and Oxford-		An Angus Reid
doses were processed	AstraZeneca vaccines be		survey released 26
in a U.S. plant where	extended to four months		May 2021 revealed
guality control	in order to vaccinate and		that most Canadians
problems were	hopefully protect more		showed strong
reported	noperany protect, more		support for vaccine
Health Canada	o NACI's Advisory		passports use in
appounced that as a	Committee reconfirmed		international travel
result of reported cases	this recommendation in		$\sim 79\%$ of
of rare thrombosis in	its updated guidance on		respondents
combination with	7 April 2021		supported
thrombocytopenia	• NACL state of the table in		mandatory
(blood clotting) in the	• NACI stated that their		vaccine passports
US the labels on	recommendations are		for international
Johnson & Johnson	guidance and not rules,		travel outside of
vaccine vials have been	and that the provinces and		the U.S. while
updated with	territories can tailor their		76% supported
information about the	vaccination roll-out		vich a
possible side affects of	campaigns to each region		such a
the wagging	• After a series of changing		traval to the U.S.
	advice, <u>NACI</u>		11 Lawer to the U.S.
• <u>Canada expects to</u>	recommended on 29		0 However, 4170 01
receive more than one	March 2021 that Canadian		respondents did
million doses of	provinces pause the use of		ile support the
COVID-19 vaccines	the Oxford-AstraZeneca		idea of using
each week in April and	vaccine on people under		vaccination proof
May of 2021 and	the age of 55 because of		domestically,
approximately 44 million	evidence of safety		such as when
doses of vaccines by the	concerns of blood clots		entering
end of June 2021	caused by the vaccine		restaurants, malls
Canada's Prime Minister	reported in Europe		and movie
announced on 16 April			theatres

2021 that Canada has	• Op 23 April 2021 NACI		
signed a new agreement	changed its		
with Pfizer-BioNTech	the the the		
for eight million more	recommendation on the		
doses of their vaccine	A stra Zara sa sa sa sa ha		
a Four million of these	AstraZeneca vaccine by		
desse will be delivered	lowering the		
	recommended age for use		
in May 2021 (for a	of the vaccine to adults		
total of 8 million	aged 30 and above		
doses) and two	• NACI also announced a		
million doses will be	preferential		
delivered in both June	recommendation for		
and July	authorized mRNA		
• With this new	vaccines (Pfizer-		
agreement, Canada is	BioNTech and		
now on track to	Moderna) for adults		
receive a total of 24	under 55, and advised		
million doses of	that the Oxford-		
Pfizer-BioNTech	AstraZeneca vaccine		
vaccine between April	should only be used if		
and June	the individual does not		
• Canada also expects	wish to wait for an		
to receive 9 million	mRNA vaccine and the		
doses of Pfizer-	benefits outweigh the		
BioNTech vaccine in	risks		
July alone	• On 3 May 2021 NACI		
• On 23 April 2021, the	released a		
Government of Canada	recommendation for the		
announced that Canada	Johnson & Johnson		
has secured COVID-19	vaccine for adults 30 years		
vaccines from Pfizer-	and older		
BioNTech for 2022 and	\circ Similar to its advice for		
2023 with flexibility to	the Oxford-		
extend into 2024	AstraZeneca vaccine		
• This agreement	NACL advised that		
includes access to a	adults under 55 should		
guaranteed 35 million	only take the Johnson		
doses in 2022 and 30	& Johnson vaccine if		
million in 2023 with	they do not wish to wait		
million in 2023, with	they do not wish to wait		

options for 20 million	for an mPNA magina		
options for 50 million			
more doses in each	and the benefits		
year	outweigh the risks		
• An immunization	Canadian provinces are in		
National Operations	the midst of deciding if		
Centre within the Public	and how to administer		
<u>Health Agency of</u>	doses of the Oxford-		
Canada was established	AstraZeneca vaccine that		
as the federal logistical	arrived between 17-23		
coordination entity for	May 2021 from Health		
managing COVID-19	Canada after reports and		
vaccine delivery and	concerns of rare blood		
collaboration with	clotting from the vaccine		
provinces and territories	and the supply of		
for vaccine distribution	alternative mRNA		
0 The National	vaccines has increased in		
Operations Centre is	recent weeks		
supported by a	• On 5 May 2021, Health		
national team of	Canada authorized the		
experts and the	Pfizer-BioNTech vaccine		
Canadian Armed	for use in children age 12		
Forces	to 15 years in Canada.		
0 The National	followed by NACI's		
Operations Centre has	similar recommendation		
14 vaccine delivery	on 18 May 2021		
sites across Canada,	• As of 26 May 2021 85 7%		
and FedEx Express	of doses delivered to		
Canada and Innomar	Canada have been		
Strategies are	administered		
positioned to support	\circ 20.052.430 first doses		
the National	and 1 720 486 second		
Operations Centre	doses of COVID-19		
with vaccine	vaccine have been		
distribution	administered		
• The Government of	• As of 26 May 2021 about		
Canada is responsible for	52.8% of the Canadian		
securing storage facilities	population has been		
and ancillary supplies	vaccinated with at least		
and anemary supplies	vaccinated with at least		

		r		1
	• A total of <u>75 million</u>	one dose of COVID-19		
	immunization supplies	vaccine		
	have been secured			
	(e.g., syringes, needles,			
	gauze, and sharps			
	containers)			
	• A total of <u>422 freezers</u>			
	have been purchased			
	• Following the approval			
	by <u>Health Canada</u> for the			
	extractions of six doses			
	of vaccine from Pfizer-			
	BioNTech vaccines			
	rather than five, the			
	federal government			
	ordered 64 million of the			
	special syringes required			
	to extract the additional			
	dose			
	• On 16 March 2021, the			
	federal government			
	announced that it is			
	investing millions of			
	dollars in domestic			
	biomanufacturing			
	companies to boost			
	future vaccine and			
	medicine development			
	capacity			
	• The Prime Minister of			
	Canada announced on			
	18 May 2021 that			
	Canada will be <u>investing</u>			
	<u>nearly \$200 million</u>			
	towards a facility based			
	in Mississauga, Ontario			
	to produce millions of			
	mRNA vaccines each			
	year			

	• As of <u>25 May 2021</u> , Health Canada has confirmed distribution of 25,541,882 COVID- 19 vaccines to the provinces and territories				
	 Pfizer-BioNTech vaccine 5,593,760 doses of Moderna vaccine 2,852,880 doses of Oxford-AstraZeneca vaccine 				
British Columbia	 In January 2021, British Columbia's Centre for Disease Control released a <u>plan for vaccine</u> <u>distribution</u> which stated that the province is preparing for a range of COVID-19 vaccines with varying distribution methods The province was <u>scheduled</u> to receive 274,950 doses of the Pfizer-BioNTech vaccine per week throughout the month of May, with shipments increasing to 337,000 doses per week in June Health Officials also reported that between April and June an average of 203,077 doses are expected to be administered per week, 	 The Government of British Columbia reported that it is working closely with the Provincial Health Services Authority, First Nations Health Authority, Health Emergency Management BC, Canadian Red Cross and Canadian Armed Forces to prepare a system that is ready to receive and distribute all vaccine types as they become approved and available British Columbia's Centre for Disease Control released a plan for vaccine distribution which stated that the first groups to be vaccinated will be residents, staff and essential visitors to long- term care residents; individuals waiting for a 	 ImmunizeBC has provided evidence- based immunization and tools specific to COVID-19 for residents of British Columbia British Columbia's Centre for Disease Control and the Government of British Colombia have created designated public webpages that contain vaccine and eligibility FAQs, information sheets, a COVID-19 Digital Assistant Chat Box, and links to the online vaccine registration and booking system Resources for Indigenous communities aiming to 	 The fourth phase of the province's COVID-19 roll-out plan is occurring at immunization clinics throughout the province including school gymnasiums, arenas, convention halls, community halls, malls, and mobile clinics Through a partnership between the First Nations Health Authority and First Nations communities, community-based clinics are being operated for First Nations people living on reserve and those living nearby off-reserve to be vaccinated Youth aged 12 to 17 will be vaccinated in community clinics, not in schools 	 British Columbia's Centre for Disease Control reported that they will closely monitor COVID-19 vaccine safety, uptake and effectiveness and report adverse events following vaccination to the Public Health Agency of Canada <u>Weekly reports</u> on adverse events following vaccination are published on the B.C. Centre for Disease Control website Vaccine providers in British Columbia are asked to refer to the B.C. Centre for

suggest that between July and September 471,538 doses will be administered per week	 hong term care placement, healthcare workers providing care for COVID-19 patients; First Nations communities in remote and isolated locations The vaccination program expanded to include community-based seniors; individuals experiencing homelessness or using shelters; adults in group homes or mental health residential care; long-term care home support recipients and staff; hospital staff, community physicians and medical specialists; Indigenous communities not vaccinated in the first stage On <u>1 March 2021</u>, British Columbia health officials decided to follow NACI recommendations, and expand the interval between vaccine doses to four months, which will go into effect as of 8 March 2021 Since <u>29 March 2021</u>, B.C. health officers have suspended the use of the Oxford-AstraZeneca vaccine for those under the age of 55 in British Columbia following 	address vacence analety and hesitancy are provided	 vaccination appointments for front- line priority workers are organized by employers, with appointment information being communicated directly to each employer and sector On <u>23 February 2021</u>, the Provincial Health Officer also reported that a public-health order was issued to expand the number of health professions able to administer a COVID- 19 vaccine Dentists, paramedics, midwives, pharmacy technicians and retired nurses are now among those who can join the vaccination work force over the next six months Healthcare practitioners can sign up as immunizers and join a registry maintained by the Ministry of Health to support the COVID-19 emergency response As of <u>10 April 2021</u>, 170 mass-vaccination sites across the province are in operation 	 Priscuse controls reporting <u>adverse</u> <u>events following</u> <u>immunization</u> <u>resource</u> British Colombia's Centre for Disease Control has created a <u>public dashboard</u> displaying vaccination dosage rates in the province
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 recommendations by Canada's National Advisory Committee on Immunization As of <u>12 May 2021</u>, provincial health officers are allowing appointments for second doses of the Oxford-AstraZeneca vaccine to continue through pharmacies, but no new appointments may be made regardless of age group As of <u>22 May 2021</u>, the province is in Phase 4 of its immunization plan where residents aged 18 to 59 may call and book a vaccine appointment in five-year increments between May and June 2021 59 to 55 in May 54 to 50 in May 49 to 45 in May 44 to 40 in May/June 39 to 35 in May/ June 34 to 30 in June 29 to 25 in June 24 to 18 in June As of <u>19 May 2021</u>, provincial health officers announced that residents aged 12 to 17 years old 	 Provincial Health Officials reported that mobile clinics in self- contained vehicles will be available for some rural communities and for people who are homebound due to mobility issues On 15 March 2021 the province opened mass- immunization clinics The province opened the "Get Vaccinated" <u>online</u> registration and vaccine <u>booking system</u> for the general public on 6 April 2021
announced that residents aged 12 to 17 years old can register for vaccination through the provincial booking system	

		 Parental consent forms will not be required to receive a vaccination under the Infants Act As of <u>12 May 2021</u>, the province passed the 50% threshold of eligible adults receiving a first vaccination dose, with health officials reporting that all eligible adults should receive at least their first dose by the middle of June 2021 By <u>20 May 2021</u>, 142,406 residents had received their second vaccination dose As of <u>20 May 2021</u>, there has been a total of 3,298,560 doses delivered to the province, and 82.3% of doses delivered have been administered 			
Alberta	 Forecasted weekly allocations for Alberta for each of the COVID- 19 vaccines approved in Canada are updated regularly on the Government of Canada's <u>website</u> As of <u>25 May 2021</u>, Alberta has received 2,708,685 doses of COVID-19 vaccines from the Government of Canada 	 Alberta began its vaccination roll-out in December 2020 with a phased approach to vaccinating prioritized groups Phase 1a group (started in December 2020): workers and residents of acute-care sites in Edmonton and Calgary with the highest COVID-19 concerns (e.g., front-line healthcare workers and 	 Alberta Health Services has a <u>COVID-19</u> immunization booking webpage and a <u>Frequently-asked</u> <u>Questions page</u> on their website that is regularly updated with information on the COVID-19 vaccination roll-out and how to book an appointment The government of Alberta's <u>COVID-19</u> 	 COVID-19 immunization facilities will be designated by AHS in congregate-care settings The AHS will collaborate with Indigenous Services Canada to designate congregate-care services on reserve Alberta Health Services has an <u>online booking</u> tool for eligible 	 <u>Alberta's</u> <u>Immunization</u> <u>Regulation</u> requires health practitioners to report immunizations electronically to Alberta Health within a week, effective 1 January 2021 Alberta Health Services provides a <u>COVID-19 Client</u>

				÷ · ·
• The Alberta governme	nt residents of long-term	vaccine program	healthcare workers to	Immunization
has a <u>policy</u> describing	care homes)	webpage provides	book immunization	<u>Record</u> for
the requirements for	• Phase 1b group (started	information on:	appointments	individuals who
storing and handling th	e in February 2021):	• The number of	• Eligible healthcare	have been
Pfizer-BioNTech and	Seniors 75 years and	vaccines administered	workers will receive	administered a
Moderna vaccines, as	older as well as First	in the province	an email with a link to	COVID-19 vaccine
well as vaccines that	Nations, Inuit, Métis,	• Adverse events	book their	• Adverse events
require storage between	and persons 65 years	following	immunization	following
2°C and 8°C	and older living in a	immunization	appointment online	immunization
 Although Health 	First Nations	reported	• Alberta's <u>guideline</u> for	(AEFI) are reported
Canada approved	community or Métis	• Access to the	COVID-19 vaccination	to Alberta Health
eased temperature	settlement	appointment portal	provides advice for	and Alberta Health
requirements for the	• Alberta released its <u>plan</u>	for booking	individuals who may	Services and posted
Pfizer-BioNTech	for Phase 2 vaccinations	vaccinations	experience reactions	on Alberta's
vaccine, Alberta	on 19 February 2021	• Resources for seniors	after immunization,	COVID-19 vaccine
continues to follow	• Group A: anyone aged	who need	including calling a Health	distribution website
the original guideline	es 65 to 74, First Nations	transportation to and	Service hotline	• Alberta reported its
for transport and	and Métis people aged	from their vaccine	 The guideline also 	first case of rare
storage of the vaccin	te 50 and older, staff of	appointments	describes infection	blood clotting
• In a <u>recent interview</u> , a	n licensed supportive-	• Vaccine safety and	prevention-and-	following
executive director in	living facilities not	the vaccine approval	control measures for	vaccination with the
Alberta Health Service	included in Phase 1	process	vaccination venues	Oxford-
(AHS) central zone	(began 15 March)	• Details on the	and healthcare	AstraZeneca
described how COVIE	• Group B: Albertans	province's phased	practitioners,	vaccine on <u>17 April</u>
19 vaccines are moved	in aged 16 to 64 with high-	vaccine roll-out,	including frequent	<u>2021</u> , and its first
the province from the	risk underlying	including timelines	disinfecting and use of	death due to the
airport to people's arm	s conditions (began 30	• Who should and	PPE	blood clotting on 5
o All of Alberta's	March)	should not get	 Starting 19 February 	<u>May 2021</u>
vaccine supply is	o Group C: Residents and	vaccinated	2021, Alberta Health	
flown into Calgary	staff in congregate-	• The province also	Services (AHS) began	
International Airpor	t living settings,	communicates with	vaccinating residents 75	
and AHS staff check	healthcare workers who	Albertans through their	years and older in	
the shipments to	have a high potential	social-media handles	retirement centres,	
make sure that the	for spread, and	and <u>regular news</u>	lodges, supportive living	
cold-chain	caregivers who are most	conferences and releases	facilities, and other	
temperature did not	at risk of severe	• Information on the	congregate-living	
get disrupted during	outcomes (began 12	efficacy of the Oxford-	facilities	
transport	April)	AstraZeneca vaccine	• As of 12 April 2021,	
		after the first dose and	eligible individuals in	

 Contracted courier companies transport the vaccines from the airport to 36 vaccine- storage sites set up around the province that are capable of administering vaccines In the case where vaccines need to be transported from storage sites to other sites, like pharmacies, the vaccines are thawed and transported within a limited six-hour window Thawed Pfizer- BioNTech vaccine can be stored in refrigerators at administration sites for up to five days and thawed Moderna vaccine for up to 30 days Additional complications that must be managed 	 Group D: Albertans aged 50 to 74 and First Nations and Métis people aged 35 to 49 on and off reserve (began 30 April) Starting <u>27 April 2021</u>, vaccines were offered to more than 15,000 workers at 136 federal and provincial meat-packing plants in Alberta Meat-packing plant workers were identified as an eligible group for vaccination under Phase 2C of Alberta's roll-out plan Starting 4 May 2021, Alberta expanded its vaccine eligibility groups under Phase 2C again to include teachers, early childhood educators and support staff provincewide to help protect schools Bookings for this group operate on an honour system and no proof of employment is required 	the second dose when administered at different intervals is provided on the Alberta government's <u>website</u>	 <u>Phases 1, 2A, 2B, and 2C</u> of the vaccine roll-out are able to book appointments for vaccination through the AHS online booking tool or by calling 811 A tool has been provided to help eligible individuals <u>find a</u> <u>pharmacy</u> that is providing COVID-19 vaccinations in the province At a <u>press conference on</u> <u>12 April 2021</u>, Alberta's Prime Minister announced that the province is administering vaccines in more than 1,300 pharmacies and 103 clinics The Prime Minister also said that Alberta is on track to distribute over 300,000 vaccine doses per week if supplies allow Starting 10 March 2021 	
administration sites for up to five days and thawed Moderna vaccine for up to 30	include teachers, early childhood educators and support staff provincewide		• The Prime Minister also said that Alberta is on track to	
 vacchie for up to so days Additional complications that 	 o Bookings for this group operate on an honour system and no proof of 		distribute over 300,000 vaccine doses per week if supplies allow	
must be managed include that both the Pfizer-BioNTech and the Moderna vaccines	employment is required to attend a vaccination appointment		• Starting 10 March 2021, eligible Albertans were able to book <u>first dose</u>	
must be used within six hours of the vaccine vials being	Alberta began <u>Phase 3 of</u> <u>its vaccine roll-out</u> on 6 May 2021, opening vaccine appointment		accordance with the province's decision to extend the second dose	
punctured, and the Pfizer-BioNTech vaccine must be	bookings to the general public		interval to 16 weeks o Individuals will receive a reminder	

diluted with sodium	• On 6 May 2021,	from AHS or
chloride prior to	residents 30 years and	participating
administration	older became eligible to	pharmacies to book a
	book a vaccination	second dose
	appointment	appointment at a later
	\circ On 10 May 2021, every	date
	resident of Alberta age	Alberta's Immunization
	12 and older became	record provides post-
	eligible to book a	vaccination care
	vaccination	instructions including a
	appointment	list of potential side-
	• Residents 12 to 15 years	effects contact
	old are only eligible to	information for Health
	receive the Pfizer-	Link and a reference to
	BioNTech vaccine as	the COVID-19 Self-
	authorized by Health	Assessment for
	Canada	Albertans if unusual
	• Alberta aims to offer all	side-effects persist
	adult residents a vaccine	• As of 21 April 2021 all
	before 30 June 2021	employees covered by
	Alberta's Premier	the Employment
	appounced on 7 May 2021	Standards Code in
	that the province had	Alberta are allowed three
	reached an agreement with	hours of paid job-
	the U.S. state of Montana	protected leave to get
	to allow about 2.000	each dose of COVID-19
	Alberta truck drivers who	vaccine
	transport goods into the	• The Alberta government
	U.S. to receive the	has appoinced a three-
	Johnson & Johnson	stage Reopening Plan for
	vaccine at a rest stop in	summer 2021 based
	Montana at no cost	partially on vaccination
	• On 29 March 2021	rates
	Alberta temporarily	\circ Stage one of the plan
	paused the administration	is anticipated to begin
	of the Oxford-	on 2 June 2021 and
	AstraZeneca vaccine for	requires two weeks to
	people under 55 years old	have passed after 50%
	after rare blood clots were	of Albertans 12 years
	paused the administration of the Oxford- AstraZeneca vaccine for people under 55 years old after rare blood clots were	is anticipated to begin on 2 June 2021 and requires two weeks to have passed after 50% of Albertans 12 years

upported in population	and older have
Experied in people in	
Europe several days after	received at least one
taking the vaccine	dose of a COVID-19
• Alberta <u>adjusted its roll-</u>	vaccine
<u>out of Oxford-</u>	• As of <u>25 May 2021</u> ,
<u>AstraZeneca vaccines</u>	49.7% of the
during Phase 2 following	population in Alberta
changes to	have received their
recommendations on use	first dose
of the vaccine by NACI	
o Starting 6 April 2021,	
Albertans aged 55 to 64	
who do not have	
underlying health	
conditions became	
eligible to receive the	
vaccine	
• On 19 April 2021,	
Alberta lowered the age	
eligibility for the	
Oxford-AstraZeneca	
vaccine to adults 40	
years and older in	
response to increasing	
levels of COVID-19	
transmission in the	
province	
• Due to limited supply of	
the Oxford-AstraZeneca	
vaccine, existing doses in	
Alberta will be reserved	
for individuals who have a	
contraindication to an	
mRNA vaccine or are	
eligible to receive their	
second dose of the vaccine	
• On 4 March 2021,	
Alberta's Minister of	
Health <u>announced</u> that the	

province will follow	
NACI's recommendations	
and delay the interval	
between the first and	
second doses of COVID-	
19 vaccines to 16 weeks as	
of 10 March 2021, in	
order to give more	
Albertans access to first	
doses of COVID-19	
vaccines more quickly	
• All existing second dose	
appointments made for	
individuals who	
received their first	
doses prior to 10 March	
2021 will be honoured	
According to the Minister	
of Health at a press	
conference on 8 March	
2021, Alberta has reached	
a milestone of being the	
first Canadian province to	
fully vaccinate every	
resident of long-term care	
and designated supportive	
living	
• As of $24 \text{ May } 2021$,	
Alberta has administered	
2,552,317 doses of	
COVID-19 vaccines	
• 49.7% of the	
population in Alberta	
have received their first	
dose	
0 354,462 Alberta	
residents have been	
fully vaccinated with	
two doses	

Saskatchewan	 Forecasted weekly allocations for all COVID-19 vaccines distributed to Saskatchewan are updated regularly on the Government of Canada's website As of <u>25 May 2021</u>, Saskatchewan has received 752,795 doses of COVID-19 vaccines from the Government of Canada Efforts have been made to secure COVID-19 vaccine storage equipment (freezers, fridges, power generators) for Saskatchewan First Nations communities 	 Saskatchewan began its phased COVID-19 vaccination plan in December 2020 A pilot program was conducted on 15 December 2020 where 1,950 healthcare workers were vaccinated with their first dose of the Pfizer- BioNTech vaccine Second doses were received 21 days later during Phase 1 of the vaccination plan After completing the pilot program, Saskatchewan began Phase 1 of its vaccine roll-out, which prioritizes front-line healthcare workers, long- term care residents and staff, residents over age 70, and residents over age 50 living in remote/northern Saskatchewan Allocations of the Pfizer-BioNTech vaccine for these groups began to be received on 22 December 2020 The Moderna vaccine has been allocated to the Far North Region of Saskatchewan The Saskatchewan 	 The Saskatchewan government provides weekly press briefings, COVID-19 news releases, and a number of resources on its website about COVID- 19 vaccines and distribution The Saskatchewan plan indicates that the government's communication focuses on vaccine safety, accurate immunization information, prioritization of vaccination groups, and the importance of maintaining existing public-health measures Information will be included in local and social media, direct mail, posters, and news conferences The Saskatchewan Health Authority launched a website with information on COVID-19 vaccine drive-thru and walk-in sites as well as their wait times 	 During the pilot phase of its <u>COVID-19</u> immunization plan, 1,950 doses of the Pfizer-BioNTech vaccine were administered to healthcare workers on 15 December 2020 Pilot vaccine recipients received their second dose 21 days later during Phase 1 All vaccine doses were transported to and administered at Regina General Hospital Phase 1 immunizations are taking place in long- term care homes, communities in the Far North, and vaccination sites approved by the SHA Electronic and paper copies of COVID-19 immunization records are made available for vaccinated individuals Up to 2,200 people will be involved in administering COVID- 19 vaccines during Phase 2, and approximately 675 healthcare workers will be redeployed to deliver vaccines 	 Measures have been taken to ensure that Saskatchewan's immunization administration system, Panorama, can record, store and manage COVID-19 vaccination records and enable reminders for second-dose follow-ups Vaccination records are stored electronically on MySaskHealthRecord Saskatchewan reported its first case of rare blood clotting after vaccination with the Oxford-AstraZeneca vaccine on 14 May 2021
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on 16 February 2021 that	The Saskatchewan
the Ministry of Health	government intends for
added more healthcare	vaccines to be
workers to the priority list	administered by
in Phase 1, including	physicians, nurse
individuals who will be	practitioners, and
directly involved in	pharmacists in Phase 2
delivering COVID-19	• A staff scheduling
vaccinations in Phase 2 of	system has been
the roll-out	launched to allow all
• Phase 2 began on 18	SHA employees to opt-
March 2021 and focuses	in for alerts on when
on vaccinating the general	they will be eligible to
population in 10-year age	receive the COVID-19
increments, with targeted	vaccine
vaccinations being	• A scheduling system has
administered in select	been developed that
congregate living and	provides access to an
extremely clinically	online booking tool for
vulnerable populations	vaccinations and a toll-
• The goal of the	free telephone line that
Saskatchewan	allows residents to book
government is for all	appointments with a
residents being	phone agent
vaccinated during Phase	• Saskatchewan's
2 to be able to access	immunization system,
vaccines where they live	Panorama, will be
and work	updated to set reminders
• On 13 April 2021, <u>the</u>	for second-dose follow-
government added	ups
pregnant women, young	Plans are underway to
adults ages 16 and 17 who	open 230 vaccination
are clinically extremely	clinics in 180
vulnerable, and everyone	communities throughout
over the age of 40 in the	rural, urban and
far north to the Phase 2	northern Saskatchewan
priority groups	• Saskatchewan opened its
• <u>As of 8 April 2021</u> ,	first drive-thru and walk-
individuals aged 55 and	

	· · · · · · ·
older in Saskatchewan	in immunization site in
became eligible to book	Regina on 3 April 2021
vaccination appointments	and its second on 5 April
• The eligible age for	2021
booking vaccination	• Several more sites
appointments online	opened during the
was lowered from 55 to	week of 12 April 2021
<u>52</u> province-wide on 14	• Eligible residents for
April 2021	vaccination at the Regina
• Eligibility was expanded	drive-thru vaccination
on 13 April 2021 at the	clinic are vaccinated on a
Regina drive-thru	first-come first served
vaccination clinic to	basis
residents ages 49 to 54	• In addition to mass
only in response to	immunization sites the
increasing COVID-19	province has made an
transmission risk in that	agreement with the
region	Dharmacy Association of
• $Op 12$ April 2021 the	Saskatchowap to follow
Sackatchowan government	the influenza
Saskatchewan government	immunitation model to
announced that several	administra COVID 10
fra COVID 10	administer COVID-19
Ior COVID-19	vaccines in pharmacies
vaccination	o Inis agreement
o First responders, such	establishes the fee for
as police officers and	pharmacist delivery of
firefighters, will be	COVID-19 vaccines
targeted by mobile	along with increases in
vaccination units	dispensing tees for
tollowing completion of	prescription drugs and
the targeted vaccination	influenza vaccines for
ot individuals who are	the 2021 flu season
extremely vulnerable	Select pharmacies in
o However, <u>vaccination</u>	Saskatchewan are part of
<u>of Regina police</u>	a <u>pilot program</u> to offer
officers already began	COVID-19 vaccines
<u>on 10 April 2021</u> in	where bookings for
response to a significant	appointments began as
increase in transmission	of 26 April 2021

of COVID 10 variants	o As of 3 May 2021 102
or COVID-19 variants	$\frac{1}{2} \frac{1}{2} \frac{1}$
	pharmacles in 57
o Once they begin	Saskatchewan
receiving vaccines,	communities are
pharmacies will be	approved to receive
offering vaccines to all	vaccines as part of this
pharmacy and grocery	program
store staff working in	o <u>Pharmacies</u> were
the facilities where	advised to offer
vaccines are offered	vaccines to pharmacy
• Unused vaccines from	and grocery staff
Phase 1 of the roll-out	working in facilities
have also been allocated to	where vaccines are
the remaining healthcare	being offered
workers not included in	• Extremely vulnerable
Phase 1	individuals who are now
• Following the national	eligible to be vaccinated
advice not to give the	must book their
Oxford-AstraZeneca	appointments over the
vaccine to people under	phone as the online
age 55 Saskatchewan	booking system is aged-
suspended administration	based and will not allow
of the vaccine to	those under the eligible
individuals under 55 years	age range to book
as of 30 March 2021	Saskatehowap
as of <u>50 Match 2021</u>	• Saskatchewaii
• Saskatchewan lowered the	
eligible age for use of the	2021 that its <u>mobile</u>
Oxford-AstraZeneca	vaccination units would
vaccine from 55 years to	target first responders
40 years <u>on 20 April 2021</u>	once vaccinations in
to increase access to	congregate-living settings
vaccines for its population	were completed
• However, <u>by 12 May 2021</u> ,	• First responders and
Saskatchewan stopped	front-line workers
giving out first doses of	were also prioritized
Öxford-AstraZeneca	at mass-vaccination
vaccine due to supply	sites when
issues and instead decided	Saskatchewan
to reserve remaining and	residents 40 years and

in an altimum to fam	-1.1
incoming snipments for	<u>older became eligible</u>
second doses	to receive the Oxford-
• Individuals 16 years and	AstraZeneca vaccine
older in Saskatchewan	on 20 April 2021
became eligible to book a	• Proot of employment
vaccination appointment	is required at the
on <u>18 May 2021</u>	vaccination site
Saskatchewan has added	• On 4 May 2021, the
youth 12 to 15 years to	Government of
their vaccine roll-out	Saskatchewan released a
sequencing, and this group	three-step Re-opening
became eligible to book	<u>Plan</u> for the province
vaccination appointments	based on vaccination
on <u>20 May 2021</u>	thresholds and vaccine
• Written consent is	availability
required for all youth	• The first step of the
prior to vaccination	plan is expected to
Saskatchewan requires two	commence once three
doses of vaccine per	weeks have passed
person and both first and	since 70% of the
second doses must be of	population 40 years
the same vaccine	and older have
• Once an individual	received their first
becomes eligible for	dose of COVID-19
vaccination in	vaccine, and all adults
Saskatchewan, they will	over 18 years old are
continue to be eligible	eligible
even if the province has	0 A target date was set
moved on to a different	by the Saskatchewan
phase of the roll-out	government to reach
Beginning 5 March 2021	the <u>threshold to enter</u>
all vaccines administered	step one of the plan
in Sackatchewan will be a	on 30 May 2021
first dose and second	• The SHA will begin
doses will be administered	administering the Pfizer-
within an interval of up to	BioNTech vaccine in
four months	elementary and high
	schools across the

0 This delayed second-	province in the month of
dose strategy does no	Iune
apply to long-term car	June
apply to long-term can	
and personal-care	
residents and staff wh	
have not received the	
second doses. or to an	lý
existing scheduled	
second-dose	
appointments	
• The <u>Saskatchewan</u>	
government announced	
that as of 17 May 2021,	
second dose	
administration of	
COVID-19 vaccines	
would begin in adults 85	
years and older and will	
continue in lowering age	
increments	
• Priority for second	
doses will also be give	n
to individuals diagnos	ed
with or being treated	
for cancer, and	
individuals who have	
received solid organ	
transplants	
• The province aims to ha	ve
all Saskatchewan residen	ts
fully vaccinated with two	
doses by 31 July 2021	
• As of 25 May 2021	
$\leftarrow 115 \text{ OI } \underline{25 \text{ Way } 2021},$ $665 102 deces have been$	
administered in	
administered III Saskatahower	
Saskatchewan	
0 009,950 fifst doses	
O 58,257 second doses	

Manitoba	Manitoba directly signed	• Manitoba established a	Manitoba maintains a	• Manitoba plans for six	Manitoba
	a deal to procure up to	trilateral table on vaccina	constantly updated	modular and scalable	- maintoba
	two million doses of a	planning including health	webpage dedicated to	models of vaccine	Public Health
	vaccino (that is currently	exports serier officials	outlining in detail the	delivery: a pilot site	A gongy of Canada's
	in the first phase of	from Indigonous Sorvigos	socific groups of	<u>denvery</u> . a phot site,	<u>Agency of Canada s</u>
	human trials) being	Canada and the Canadian	specific groups of	supersites, locused	Euopta Following
	developed by Drevidence	A record Econoci	to book an appointment	ninitunization teams,	<u>Events Pollowing</u>
	teveloped by Providence	Armed Forces	to book an appointment	pop-up/mobile sites,	
	Therapeutics	• In addition to the table,	to receive their first or	First Nations sites, and	Surveillance System
	Manitoba has <u>procured</u>	the province states there	second vaccination	distributed delivery	• Reports of adverse
	400 shipping containers	will be <u>smaller tora</u>	• Manitoba has released	• A 28-day campaign was	events following
	for transporting vaccines	established to advance	clinical practice	launched to <u>vaccinate all</u>	immunization are
	and 200 specialized	priority issues and ensure	guidelines for vaccine	eligible personal care	received by regional
	treezers and tridges	dialogue to navigate	<u>use in special</u>	home residents in 135	Medical Officers of
	• The province has	prioritization for First	populations and issued a	sites across Manitoba,	Health from
	procured more than	Nations on- and off-	memo to healthcare	using focused	providers and the
	80,000 syringes, which	reserve	providers regarding	immunization teams	provincial pediatric
	enable the extraction of	• A <u>Vaccine</u>	enhanced consent for	who visit locations in all	hospital-based
	six doses per vial of the	Implementation Task	special populations	regional health	Immunization
	Pfizer-BioNTech vaccine	Force and Vaccine	• The province released	authorities	Monitoring
	• The province maintains a	Medical Advisory Table	an <u>interactive vaccine</u>	• This campaign used	Program ACTive
	<u>complex data set</u> to link	have been established	<u>queue calculator</u> for	the Moderna and	(IMPACI)
	vaccine deliveries with	• The province released	residents to understand	Pfizer-BioNTech	Regional Medical
	inventory levels and	detailed eligibility criteria	their place in the	vaccines	Officers of Health
	known appointments	for Stages 1 to 4 of the	vaccine priority line	 Focused immunization 	make
	• A published <u>vaccine</u>	vaccine roll-out on 27	• The province has	teams have administered	recommendations
	delivery schedule	January 2021	released a <u>Supersite</u>	second doses to all	based on these
	indicates that 512,700	• Adults aged 18 years of	operational manual	<u>personal-care home</u>	reports and forward
	doses of the Pfizer-	age and older, as well as	• Manitoba launched the	residents in the province	them to the vaccine
	BioNTech vaccine are to	youth aged 12 to 17 years	<u>#ProtectMB</u> campaign	• As of 10 March 2021,	recipient's
	be delivered to Manitoba	of age, are <u>eligible to book</u>	to encourage vaccine	focused immunization	immunization
	between the weeks of 24	appointments to receive	uptake	teams were focused on	provider and
	May 2021 and 26 June	their first dose	o The campaign	congregate-living	Manitoba Health,
	2021	All Indigenous people	includes a dedicated	settings, with priority	Seniors and Active
		aged 12 years and older, as	website, an e-mail	given to sites with the	Living.
		well as people with certain	newsletter, and	most vulnerable	 Manitoba is
		priority health conditions.	targeted advertising	residents	maintaining a
		are eligible to book an	• The program is based	• <u>Staff working in</u>	dashboard with key
		appointment for their	on research about the	personal-care homes and	vaccine-distribution
		11			metrics available

 second dose (if the minimum time interval between doses has been met) On <u>29 March 2021, the province limited the use of the Oxford-AstraZeneca vaccine</u> to individuals aged 55 to 64 due to concerns regarding blood clots On <u>19 April 2021</u>, the decision was made to allow use amongst all individuals aged 40 and older On <u>30 April 2021</u>, the eligibility for the Oxford-AstraZeneca vaccine expanded to include people aged 30 to 39 with priority health conditions The province is modelling vaccine roll-out and distribution projections under high-supply and low-supply scenarios Under a low-supply scenarios Under a low-supply scenarios Under a low-supply scenarios Manitobans aged 12 and older are forecasted to have a second dose by 31 July 2021, while under a high-supply scenario, 70% of Manitobans aged 12 and older are forecasted to have a second dose by 31 July 2021, while under a high-supply scenario, 70% of Manitobans aged 12 and older are forecasted to have a second dose by 31 July 2021, while under a high-supply scenario, 70% of Manitobans aged 12 and older are forecasted to have a second dose by 31 July 2021, while under a high-supply scenario, 70% of Manitobans aged 12 and older are forecasted to have a second dose by 31 July 2021, while under a high-supply scenario, 70% of Manitobans aged 12 and older are forecasted to have a second dose by 31 July 2021, while under a high-supply scenario, 70% of Manitobans aged 12 and older are forecasted to have a second dose by 31 July 2021, while under a high-supply scenario, 70% of Manitobans aged 12 and older are forecasted to have a second dose by 31 July 2021, while under a high-supply scenario, 70% of Manitobans aged 12 and older are forecasted to have a second dose by 31 July 2021, while under a high-supply scenario, 70% of Manitobans aged 12 and older are forecasted to have a second dose by 31 July 2021, while under a high-supply scenario, 70% of Manitobans aged 12 and older a	 province's vaccine-intent profile The research has identified groups that are keen to get vaccinated, those who are likely to get vaccinated but are not in a rush, and those who are ambivalent/concerne d about vaccination Data-driven advertising is being used and is initially going to be targeted at those who are keen and likely to share information in their networks (this demographic skews older and female) To continually refine the campaign's strategy, the province is using EngageMB (the provincial public engagement platform), monitoring trends in vaccine uptake, and continuing to conduct research A #ProtectMB coordinating table has been established that includes Data 	 congregate-living settings are to be vaccinated at fixed vaccination sites At supersites and pop-up clinics, adults aged 18 years of age and older, as well as youth aged 12 to 17 years of age, are eligible to book appointments to receive their first dose Supersites are currently in operation in Winnipeg (where there are two supersites), Brandon, Thompson, Selkirk, Morden, Dauphin, and Steinbach, with plans to open a new site in Gimli on 29 May 2021 Supersites serve the dual purpose of administering vaccination while also serving as distribution hubs for focused immunization teams and pop-up/mobile clinics Pop-up clinics are being deployed to serve northern and rural communities The locations and operating hours of these time-limited clinics are detailed on the province's 	 Manitoba is reporting phone appointment- booking waiting times, as well as patient processing and several other operationally relevant time metrics for one supersite Manitoba is also reporting time-use metrics for Focused Immunization Teams The Public Health Information Management System is used to track individuals' public health records, including immunization records and is being used to ensure patient safety and monitor progress during the COVID- 19 vaccination campaign Manitobans who have been vaccinated can access their individual
under a high-supply scenario, 70% of Manitobans aged 12 and older are forecasted to have a second dose by 29 July 2021	• A #ProtectMB coordinating table has been established that includes Data Science, Public Health,	 operating hours of these time-limited clinics are detailed on the province's vaccination website Eligible Manitobans can <u>call a dedicated</u> 	have been vaccinated can <u>access their</u> <u>individual</u> <u>immunization</u> <u>record</u> online with their health card

	Communications	phone lies to beat	pumbor and anall
• As of $\underline{25}$ May $\underline{2021}$,			
Manitoba has	Engagement, and	vaccination	address
administered 761,132 total	Vaccine Task Force	appointments at pop-	• Family doctors also
vaccine doses	officials to guide the	up sites and use the	have access to
• This represents 60.3%	campaign and	phone lines or the	immunization
of Manitobans aged 18	determine its	online booking portal	records
and older (or 55.8% of	informational needs	 Some pop-up clinics 	
those aged 12 and	• The province has	operate on a walk-in	
older) being vaccinated	established a 'vaccine	basis while others	
• On 25 May 2021 the	shot finder' webpage	require patients to call	
province had scheduled	with a map to aid	a dedicated phone line	
17.436 doses to be	individuals in finding	to book an	
administered	pharmacies and medical	appointment	
• As of 20 May 2021 71 326	clinics participating in	• At medical clinics and	
vaccine doses had been	the vaccination	pharmacies, all	
allocated to First Nations	campaign	individuals aged 40 years	
communities	o The map	of age and older, as well	
o Most of those doese	distinguishes between	as individuals between	
(72.1%) have been	sites that are and are	30 and 39 years of age	
(72.170) have been	not currently taking	with certain priority	
administered on	appointments	conditions, are eligible to	
reserves	appointenes	book an appointment for	
• The province is		vaccination with the	
collaborating with First		Oxford-AstraZeneca	
Nations groups to use the		vaccine	
Moderna vaccine to		• A distributed model of	
address First Nations		• A distributed model of	
priorities, including		doctors offices and	
vaccination in northern		pharmacists was	
and remote communities		expected to administer	
• The roll-out of <u>vaccines</u>		25% of daily doses in the	
in First Nations		second quarter, subject	
<u>communities is</u>		to approval of suitable	
expected to begin in		vaccines	
mid-March and will		• As of 18 May 2021,	
prioritize communities		10% of doses have	
at high risk of floods,		been distributed	
fires, and other		through the	
evacuation risks		distributed-channel	
		model	

• The vaccine	• As of 19 May 2021,
Implementation Task	approximately 67% of
Force has <u>four operational</u>	vaccination
<u>planning principles</u> : use	appointments are being
the right model, at the	made through the online
right time; minimize the	booking portal, with the
drain on the healthcare	remainder being made
system: inject what you	over the phone
get: be ready to pivot	Focused Immunization
 Manitoba has adopted the 	Teams and Pop up
National Advisory	Clipics will each
<u>Committee en</u>	edminister less then 5%
	administer less man 570
minumzation guidance	of daily doses in the
and extended the spacing	second quarter and will
between first and second	respond to needs
vaccine doses to four	• A pilot project at
months	' <u>Vaxport'</u> was opened in
• An emergency order under	Thompson to provide
the Emergency Measures	immunization for
Act enables Shared Health	residents of remote
Manitoba to investigate	northern First Nations,
and confirm the eligibility	and municipal and
status of healthcare	Indigenous and
workers who have been	Northern Affairs
vaccinated	communities
• If people are found to	• The pilot project at
have provided false	Vaxport has
information to get early	concluded and it now
vaccination the order	serves as a backup
enables Shared Health	location for the
to disclose this	Thompson supersite
information to the	Eine Indiagnous lad
individual's employer	• Five <u>Indigenous-led</u>
nicivicidal s'employer,	$\frac{\text{COVID-19}}{10000000000000000000000000000000000$
professional regulatory	immunization clinics
body, of faw	have been established in
enforcement	Winnipeg, Brandon,
	Portage la Prairie, and
	Thompson to increase
	vaccine accessibility and

provide culturally safe
spaces for First Nations
(status and non-status),
Metis and Inuit peoples
• A time-limited <u>clinic in</u>
Winnipeg was opened to
provide vaccination for
First Nation health-care
workers, Knowledge
Keepers and Traditional
Healers
• The province is receiving
applications from
community pharmacists
and physicians interested
in providing COVID-19
vaccination, using
vaccines that do not
need freezing
• Several eligibility
criteria for medical
clinics and pharmacies
have been outlined,
and a Q&A targeted
at potential physician
and pharmacist
partners exists
• The province is <u>actively</u>
recruiting healthcare and
non-healthcare staff to
work in immunization
clinics and offering a
micro-credential course
for people to expand
their scope of practice to
include the administering
COVID-19 vaccine
• The province has
expanded the criteria for

				 who can work as an immunizer and designed various training options for new hires based on their level of experience As of <u>18 May 2021</u>, there are 4,007 staff working in vaccination centres In addition to new staff hired, some <u>public</u> <u>servants have been re- deployed</u> to work with the Vaccine Implementation Task Force 	
Ontario	 The province has published <u>vaccine</u> storage and handling guidance for vaccines including information regarding freezer setup, inspections, monitoring of storage equipment, vaccine transport, temperature excursion, preparation for immunization clinics, what to do when product is damaged, storage requirements for vaccines, recommendations for onward transport of vaccine beyond the initial point of delivery, guidance about insulated containers, and guidance on extracting additional doses from vaccine vials 	 The provincial government's COVID-19 Vaccine Distribution Task Force, with input from the National Advisory Committee on Immunization, recommends vaccination for all individuals in authorized age groups without contradictions but due to limited supply prioritization is initially given to certain groups The provincial vaccine distribution plan is divided into three phases Phase I prioritizes residents and workers in congregate-living settings that care for seniors; highest, very high and high-priority healthcare 	 The province has published vaccine administration guidelines and information packets for healthcare providers regarding the Pfizer-BioNTech, Moderna, and Oxford-AstraZeneca vaccines The province maintains a website dedicated to COVID-19 vaccine safety The province has published a 'What you need to know before your COVID-19 vaccine appointment' information sheet The COVID-19 Vaccine Sheet includes a section 	 General guidelines for vaccination sites and priority populations served are available but the 34 public health units of the province will determine how best to roll-out vaccination Vaccine delivery began with, and continues at, hospital-site clinics Public health-led mass- vaccination sites (including continued hospital sites) can provide vaccination with a focus on people eligible for vaccination due to their occupation (such as healthcare workers and essential workers) as well as most adults once eligible 	 The <u>Pfizer-BioNTech</u> and <u>Moderna</u> vaccine administration guidelines for healthcare providers include guidance regarding adverse events following vaccination <u>Adverse events</u> following immunization are reported to <u>Public</u> <u>Health Ontario</u> and the Public Health Agency of Canada Public Health Ontario has published a list of adverse events of special interest for <u>COVID-19</u>

May 2021 and 26 July 2021, <u>Ontario is</u> forecasted to receive 5,255,640 doses of the Pfizer-BioNTech vaccine	 Nations, Métis, and Inuit populations; adults 80 years of age and older; and adult chronic home-care recipients Phase I of the vaccination campaign has concluded Phase II prioritizes older adults (beginning with those 79 years of age and decreasing in five-year increments); adults living in COVID-19 hot spot communities; those living and working in high-risk congregate settings; caregivers in select congregate care settings; individuals with health conditions and their caregivers; and essential frontline workers who cannot work from home Phase II vaccinations began with older adults, people who live and work in high-risk congregate settings, caregivers in select congregate care settings, people who live and work in high-risk congregate settings, nidividuals with health conditions and essential caregivers, and people who cannot work from home The province has expanded phase II 	 surveillance surveillance surveillance The provide vaccination for remote communities, First Nations reserves, and adult chronic home care recipients Primary care/pharmacy/public health clinics can provide vaccination for populations prioritized due to biological factors (such as older age) and can provide vaccination to all remaining eligible Ontarians in Phase III A "<u>COVID-19 vaccine</u> clinic operations planning checklist" was published to assist in local planning The province is anticipating that by the end of May 2021 more than 2,400 pharmacies across the province will be offering either the Pfizer or Moderna vaccination appointments; they are not taking appointments by request surveillance The province has begun voluntarily collecting socio- demographic data from those being vaccinated These data include race, household income, and linguistic profile In addition, health professionals are required to report adverse events to local public-health units who will investigate and provide support Guidance has been published for managing healthcare workers with symptoms within 48 hours of receiving COVID-19 vaccination
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schedule, and currently	• The Ministry of Health
all adults and youth	has published a " <u>Pre-</u>
aged 12 years and older	screening assessment
are eligible to book an	tool for health care
appointment for a first	providers
dose	Mobile sites can deliver
• The province is targeting	• Woble sites can deriver
• The province is targeting	vaccination to
<u>not-spot communities</u>	populations who need
(defined as those with	prioritization due to
historic and ongoing high	social or geographical
rates of COVID-19, death	n, factors, such as
and severe illness) as part	congregate-living
of phase II	settings, urban
0 Provincial data as well	Indigenous populations,
as local public-health	and racialized
unit knowledge and	communities
discretion are used to	Mobile teams and pop
define 'Forward	vo divide ere bring
Sortation Areas' that at	e deplemente en
considered hot sports	<u>deployed</u> to vaccinate
• Within hot sports	individuals in hot-spot
vaginations are to	communities, beginning
basic with the aldest	in Peel and Toronto
begin with the oldest	• The mobile teams and
adults, but specific	pop-up clinics will
neighbourhoods or sub	(for now) not be using
populations may also b	e the provincial booking
used to prioritize initial	system
doses	• Mobile vaccine units
o Low-barrier methods to	o for small to medium-
verify age and residenc	e sized businesses in hot
in a hot-spot	spot areas began
community are to be	rolling out on 7 May
used	2021
o Public-health units are	
to leverage community	• The province is working
based organizations an	with public-health units,
local healthcare	business groups, and
	large employers to <u>set up</u>
organizations to reach	employer-operated
residents, build vaccine	vaccination clinics for

confidence and address	hot-spot communities at
misinformation, and	greatest risk
identify unique needs	• These clinics are
and barriers (for	meant to be set up,
example, linguistic	operated and funded
barriers) to accessing	by employers, and to
vaccination	supplement publicly
o Public-health units are	run vaccination clinics
to ensure that	• These clinics are
vaccination clinics in	meant to vaccinate
hot-spot communities	employees as well as
are readily accessible	members of local
(for example by locating	communities
clinics in popular	o Employers operating
community centres or	these clinics must
large workplaces where	meet certain
community members	conditions and have
may work)	the support of local
• On 6 April 2021 Optario	public-health units
appounced it would be	and hospitals
increasing vaccine	\circ As of 5 May 2021.
allocations to hot spot	several employer-led
anocations to not-spot	workplace vaccination
boolth unite in the	clinics have been
nearly units in the	completed are being
	started or are being
elevated rates of virus	planned
hospitalizations and deaths	• Public-health units and
o The increased allocation	family health teams are
delivered more vaccines	developing strategies to
via all the established	<u>reach homebound</u>
delivery channels	patients for vaccination
• A <u>news release from 29</u>	• <u>Phase II will see vaccine</u>
<u>April 2021</u> shows that	<u>administration</u> occur at
during the weeks of 3	municipally run
May 2021 and 10 May	vaccination sites,
2021 the province was	hospitals, mobile
planning to allocate	vaccination sites,
	pharmacies, clinics,

50% of all doses to	primary-care settings,
hotspots	and community locations
• The same news release	Toronto Public Health
states that as of the	launched a ' <u>proof of</u>
week of 17 May 2021	concept' immunization
the province would be	clinic to test and adjust
returning to allocating	non-hospital vaccination
vaccine doses on a per	plans ahead of mass
capita basis (based on	vaccination
the remaining eligible	• Expanded healthcare
population in each	professionals (including
region)	purce practitioners
• As of 4 May 2021, adults	registered purses
aged 18 years of age and	registered nurses,
older have been eligible	nurses pharmagists
for vaccination in hot-spot	nurses, phannacists,
communities	internet and phermany
• In Dhase III, the province	techniciane) are chile to
• In Phase III, the province	technicians) are able to
will move into a steady	register and apply to
state to vaccinate all	participate in vaccination
remaining eligible	efforts via <u>Ontario s</u>
Ontarians who wish to be	Matching Portal
vaccinated	• The University of
• Ontario has accepted and	Toronto Department of
will implement the	Family and Community
National Advisory Council	Medicine and the
on Immunization guidance	Ontario College of
to extend the vaccination	Family Physicians
dose interval to up to four	developed a <u>self-learning</u>
months, with some limited	series to build capacity
exceptions	amongst primary-care
• As of 3 April 2021,	providers to support
individuals 55 years and	COVID-19 vaccination
older became eligible to	• The province is
book vaccinations for the	operating an <u>online</u>
Oxford-AstraZeneca	booking system and
vaccine at the nearly 700	provincial customer
pharmacies and primary-	service desk to support
	vaccination appointment

care settings participating		bookings at mass-	
in the roll-out	1	immunization sites	
• On <u>21 May 2021</u> the	:	across all local public-	
province announced it will]	health units in Ontario	
move forward with second		• Pharmacies are	
doses of the Oxford-		responsible for	
AstraZeneca vaccine		establishing and	
\circ The province is		operating their own	
enabling people to		systems for	
receive their second		vaccination-	
dose with a minimum		appointment booking	
of a 10-week interval		and management	
between doses and		• Individuals booking	
informed consent		through the provincial	
• The province published		portal can book both	
o The province published		their first and second	
that outlines the		dose appointments at	
<u>inat outlines the</u>		the same time	
dosses for individuals	,	The province has	
<u>doses</u> for individuals	•	The province has	
who have already		directed public health	
received one dose of		units and vaccination	
the Oxford-		clinics to implement	
AstraZeneca vaccine	1	processes to <u>distribute</u>	
Ontario's <u>Vaccine Clinical</u>		end-ot-day leftover	
<u>Advisory Group</u>		doses (due to no-shows	
recommended on 26		or cancellations) to	
March 2021 that the]	priority populations	
following populations be			
exempted from the			
extended second dose			
interval of four months:			
transplant recipients and			
individuals with malignant			
hematologic disorders and			
non-hematologic			
malignant solid tumours			
receiving active treatment			
(excluding individuals			
receiving solely hormonal			

therapy or radiation		
therapy)		
<u>Operation Remote</u>		
Immunity, which is led by		
Ornge, aims to vaccinate		
adults in 31 fly-in First		
Nations communities and		
Moosonee in Northern		
Ontario		
• As of <u>8 March 2021</u> , all		
first doses as part of		
Operation Remote		
Immunity had been		
administered (12,660		
doses) and 2,664		
second doses had been		
administered		
• The program aimed to		
finish these		
vaccinations by the end		
of April 2021		
• The principles underlying		
the province's Ethical		
framework for COVID-19		
vaccine distribution		
include minimizing harms		
and maximizing benefits;		
equity; fairness;		
transparency; legitimacy;		
and public trust		
 Several organizations 		
involved in primary care in		
Ontario have published a		
document titled		
"Partnering with primary		
care for local COVID-19		
vaccine roll-out in		
Ontario: A practical		
guide"		

		 As of 25 May 2021, Ontario has administered 8,251,642 total doses and 544,288 people have been fully vaccinated The province is administering an average of 86,927 doses on a daily basis 			
Quebec	 The Ministry of Health and Social Services is responsible for the centralized distribution of vaccines As of <u>25 May 2021</u>, Quebec has received 5,829,449 doses of vaccines from Health Canada 	 According to the Quebec Immunization Committee, five values underpin the choices and objectives of the COVID-19 vaccination campaign in the context of limited vaccine supply: beneficence, equity, justice, reciprocity, and non-maleficence The prioritization of groups for vaccination is based on the following four factors: age, presence of risk factors, profession, and living situation Ten groups have been preliminarily identified to prioritize vaccine allocation The first priority group includes vulnerable people in long-term care and intermediate resources and family- type resources homes The second priority group includes health- and social-care workers 	 The provincial government maintains a webpage with information about COVID-19 vaccine safety, development, and role-out plans for Quebec The Ministry of Health and Social Services published vaccination campaign guidelines for healthcare workers to update workers on the priority-based allocation of vaccines, their responsibilities and roles during the vaccination campaign, and resources available to them The Ministry of Health maintains a website dedicated to demystifying beliefs regarding the risks of vaccination The Ministry of Health and Social Services has published a common 	 COVID-19 vaccination distribution is being handled by the <u>Quebec</u> <u>Immunization Program</u> The <u>Public Health</u> <u>Ethics Committee has</u> <u>published a bulletin</u> stating that mandatory vaccination of healthcare workers is not justifiable The Ministry of Health and Social Services has also <u>confirmed that</u> vaccination will not be <u>mandatory</u> New groups of healthcare professional have been authorized to administer COVID-19 vaccines during the health emergency period if they have received appropriate training from the ministry These groups include <u>midwives, respiratory</u> therapists, and <u>pharmacists</u> 	 The Quebec Vaccination Registry is an electronic databases that keeps track of all persons receiving vaccines in Quebec and all vaccines received by Quebec residents who may be out of the province The Quebec Immunization Committee has recommended real- time and continuous monitoring of vaccine efficacy be conducted to make quick changes to plans, if needed The Quebec Nosocomial Infections Committee has made

 who have patient contact The third priority group includes people living in private retirement homes and others in similarly vulnerable living situations The fourth priority group includes rural and remote communities, where people often have chronic illnesses The fifth to seventh priority groups include people aged 80 years of age and over; between 70 and 79 years of age; and between 60 and 69 years of age, respectively The eighth priority group includes adults younger than 60 years of age who have a risk factor The ninth priority group includes adults younger than 60 years of age without risk factors but who work in essential services The tenth priority group includes the rest of the adult population The Quebec Immunization Committee has recommended that 	 <u>questions and answers</u> <u>regarding the COVID-</u> <u>19 vaccination</u> <u>campaign</u> document intended for workers in the health- and social- care sectors The Ministry of Health and Social Services has published an <u>"Aid in</u> <u>clear consent"</u> pamphlet with information about vaccine benefits and side-effects to complement the COVID-19 vaccination campaign The provincial government has released a <u>document</u> and <u>video</u> with guidance for the general public on how to register through the online portal The Ministry of Health and Social Services has produced and released <u>several videos about</u> <u>COVID-19 vaccine</u> <u>safety and the provincial</u> <u>vaccination campaign</u> for the general public (in English and French) 	 The Ministry of Health and Social Services' digital learning environment includes training related to the COVID-19 vaccination campaign The Institut national de santé publique du Québec has published a video series for healthcare professionals regarding COVID-19 vaccination and commonly encountered questions The Quebec Vaccine Injury Compensation Program compensates people who have experienced bodily injury due to vaccination; however, COVID-19 is not currently on the list of diseases involved (but the program details are noted as being updated) Bookings for COVID-19 vaccination are being conducted through the online portal clicsante.ca The Quebec Immunization Committee is recommending that people who have had severe reactions to other injections (that do not 	 algorithms regarding how to manage patients and healthcare workers with symptoms following COVID- 19 vaccination The Ministry of Health and Social Services published a one-page reminder regarding infection prevention and control measures for vaccinated healthcare workers Health professionals have been directed to immediately report the following adverse events to their local public health unit if there is any suspicion they may be associated with vaccination: Events requiring medical attention or hospitalization Events that place patients' lives at risk Events that lead to death

vaccination for pregnant	have common	regarding the
women should be offered.	components with the	surveillance
but there must be a	COVID-19 vaccine) do	management and
discussion with a	not need specific pre-	reporting of
healthcare professional	assessment, but should	vaccine-induced
regarding the benefits and	be monitored for 30	prothrombotic
risks of vaccination	minutes following	immune
• As of 25 May 2021, the	vaccination	thrombocytopenia
• As of <u>25 May 2021</u> , the following groups of	\circ The normal	in vaccinated
people are eligible for	observation period	patients
people are eligible for	following vaccination	• The Ministry of
vaccination.	is 15 minutes	Health and Social
and older throughout	• The Quebec	Service established a
Quebec	Immunization	directive to
Adolescents 12 to 17	Committee is	introduce quality
voers of age throughout	recommending using the	assessment audits of
Quebec	same vaccine for	assessment addits of
Quebec	patients' first and second	management and
o ricalui aldi social-	dosos	handling at
16 years and older	o If the same varging is	administration sites
throughout Quebec	o II the same vacchie is	a Those audits are
Describe aged 16 years	hot available (of	to opput at logat
o reopie aged to years	of vaccine (e.g.	to occur at least
alte older who have a	mPNA or viral	every unce
health problem that	unking of vital	
increases the risk of	vector) should be	• The government of
complications of	o Recordless of what	Quebec is beginning
COVID 10 throughout	type of second does in	to make <u>digital</u>
Ovib-19 unougnout	given it will be	proof of vaccination
Quebec	given, it will be	available through
16 years and older	third does is not	the clicsante.ca
throughout Québec	indicated	portal
a Deeple aged 16 years		o Individuals are
o reopie aged to years	• The Quebec	required to input
and older with a physical disability ap	Immunization	a valid email
physical disability, an	Committee has	address or phone
intellectual disability or	recommended that	number as well as
autistit spectrum	people with prior	their health
α asorder throughout $\alpha = 1$	contirmed COVID-19	insurance
Quebec	<u>intection</u> may only need	number to
• Decement meters		
---------------------------------	----------------------------	------------------
o Pregnant women	one vaccine dose to	receive proof of
throughout Quebec	develop sufficient	vaccination via
• Quebec <u>stopped</u>	immunity	email or text
administering the Oxford-	• They did note that	message
<u>AstraZeneca vaccine as a</u>	immunocompromised	
first dose vaccine on 13	people who have had	
May 2021, but still offers it	a confirmed COVID-	
as a second dose	19 infection and all	
• This suspension came	those whose COVID-	
after the province	19 infection occurred	
temporarily suspended	very close (temporally)	
the use of the Oxford-	with a first vaccine	
AstraZeneca vaccine	dose should receive	
among people vounger	two doses as a	
than 55 years of age due	precaution	
to ongoing	• The provincial	
investigations into cases	government has	
of blood clots following	launched a program to	
vaccination on 29	engage private	
March 2021	companies in	
The suspension comes	ostablishing vaccination	
of the suspension comes	establishing vacchiation	
Inter the <u>Quebec</u>	centres to complement	
<u>Immunization</u>	public-sector vaccination	
<u>Committee released</u>	efforts and to serve their	
guidance and	employees, families and	
recommendations	local communities	
regarding the use of the	• The province called	
Oxford-AstraZeneca	for companies to	
vaccine in the context	propose establishing	
of signals of vaccine-	vaccination sites, but	
induced immune	also let companies	
thrombotic	indicate resources	
thrombocytopenia	they would be willing	
• The Quebec	to contribute towards	
Immunization Committee	vaccination efforts	
issued <u>recommendations</u>	o More than 450	
regarding the use of the	companies responded	
Johnson & Johnson	with their interest in	
vaccine on 13 May 2021	participating in this	

o The committee	campaign and 15
recommended th	at the companies have thus
vaccine be offere	d to far been selected to
ındıvıduals aged	18 and participate as
older who preser	at a vaccination centres
contradiction for	• As of <u>3 May 2021, 23</u>
receiving an mRI	NA <u>company-led</u>
vaccine	vaccination centres
• The committee r	have been established
that the vaccine	• The Public Health
considered for w	omen Ethics Committee has
aged 60 and olde	r and published a bulletin on
men aged 30 and	older the topic of immunity
who prefer a sing	passports
dose vaccine or d	lo not
want to wait for	an analysis concludes
mRNA vaccine	that immunity
o The committee r	lotes passports are
that the vaccine	may be
suitable for peop	le aged
18 and older in	and temporary role in
exceptional	decombinement offerte
circumstances fo	a The committee
evample when lo	disting
predude the use	of an horsefits from
mPNA veging of	benefits from
nikina vaccine (immunity passports
	slightly outweigh the
Tof a second dos	disadvantages
	o The committee will
o The committee s	not issue any formal
the importance of	recommendation until
making patients a	August 2021
of the advantage	s and
risks of the vacci	ne and
ensuring provide	rs are
aware of the sign	s of
vaccine-induced	
immune thromb	otic
thrombocytopen	ia

• The Ministry of Health		
and Social Services has		
recommended a 16-week		
interval between vaccine		
doses, and there is		
currently no maximum		
interval that must be		
followed		
• The Quebec		
Immunization Committee		
has released preliminary		
guidance regarding the use		
of the Oxford-		
AstraZeneca vaccine in		
the province		
\circ The recommendations		
depend upon the		
vaccine supply scenario		
of the province, and		
three supply situations		
are outlined		
\circ In general, the		
committee does not		
recommend		
systematically offering		
the Oxford-		
AstraZeneca vaccine to		
people with a very high		
risk of sickness and		
complications (for		
example, residents of		
long-term care homes		
and		
immunocompromised		
people)		
• The Ouebec		
Immunization Committee		
recommended that close		
helpers of vulnerable		
nerpero or vanierable		

people (residents of long-		
<u>term care homes) not be</u>		
included in initial priority		
groups (unless they belong		
to these groups for		
another reason); they		
recommend including		
them alongside essential		
service workers		
• The Quebec		
Immunization Committee		
has issued guidance		
regarding the following		
domains to support the		
COVID-19 vaccination		
campaign:		
o Minimum age for		
administering mRNA		
vaccines		
 Counter-indications and 		
precautions for certain		
groups of people		
o Interchangeability of		
COVID-19 vaccines		
 Second-dose intervals 		
o Interactions between		
mRNA vaccines and		
other products		
• Vaccination of people		
with confirmed		
COVID-19 infection		
 Clinical manifestations 		
following vaccination		
• The Ministry of Health		
and Social Services		
published a directive with		
a <u>framework for</u>		
determining the allocation		
of limited vaccine doses to		

prioritized remote and	
Indigenous communities	
• On 23 April 2021, the	
Quebec Immunization	
Committee has issued the	
following	
recommendations	
regarding second doses for	
long-term care residents in	
the context of a third wave	
and suboptimal vaccine	
coverage in health	
workers:	
 Immediately consider 	
the administration of	
second doses to long-	
term care residents,	
respecting the	
minimum 28-days	
interval between doses	
• Improve vaccine	
coverage amongst	
health workers using	
effective and adaptable	
strategies	
• Monitor in quasi-real	
time the impacts of	
vaccination in Quebec	
and the international	
evidence to evaluate	
risks and benefits	
• As of <u>25 May 2021</u> ,	
5,051,681 doses have been	
administered and 55.7% of	
the population has been	
vaccinated	
• As of 25 May 2021, the	
province is averaging	

		82,074 vaccine doses			
New Brunswick	• To ensure optimal storage of the vaccine <u>new ultra-low freezer</u> <u>units</u> have been delivered to regional hospitals	 The New Brunswick Ministry of Health created the <u>COVID-19 Vaccine</u> <u>Rollout plan</u> identifying priority groups and the time frame for when each group will receive the vaccine December 2020 – March 2021 prioritizes long-term care residents and staff, healthcare workers with direct COVID-19 patient contact, adults in First Nations communities and older New Brunswick residents Spring 2021 prioritizes residents and staff of other communal settings (homeless shelters, correctional centres), other healthcare workers including pharmacists and first responders, and critical infrastructure workers (power, water and sewer) In spring or summer 2021 the vaccine will be available to the remainder of the population 	 The New Brunswick Ministry of Health website provides information for the general public on the province's vaccine roll- out plan Information sheets outlining how the Pfizer-BioNTech and Moderna vaccines protect against COVID-19 are linked on the website The website provides links for healthcare workers and the general public to Pfizer's official vaccine information site and Moderna's COVID-19 vaccination site A press release from the Government of New Brunswick provided a COVID-19 vaccination update detailing the allocation of vaccine clinics. Vaccination clinics were set-up within eight long-term care facilities, as well as clinics in Campbellton, Edmundson, 	 The website provides vaccine after-care sheets for the Pfizer-BioNTech and Moderna vaccines offering information on what to do after receiving the vaccine Immunization clinics follow the protocol set forth by the Government of Canada For greater efficiency, individuals in priority groups are being contacted directly to register for their appointment The Paramedics Association of New Brunswick gave its approval to have its members trained on giving vaccines, and paramedics would be used later in the roll-out when larger quantities of the vaccine are delivered to the province Due to the Pfizer- BioNTech vaccine delivery delays, vaccinations for some healthcare workers were postponed to ensure there were enough 	 Vaccinated individuals receive a record of immunization Chief Medical Officer of Health Dr. Jennifer Russell urged all citizens in the province to download the <u>COVID Alert App</u> to ensure its effectiveness in keeping New Brunswickers safe Enhancements have been made to the <u>MyHealthNB</u> website allowing New Brunswickers to access their COVID-19 test results faster and print an official copy of their recent test results

 The province is continuing to work with <u>long-term</u> <u>care facilities</u> to improve their vaccination rates As of 20 May 2021, 67.2% of long-term healthcare staff have received at least one dose Details on the <u>priority</u> 	Fredericton and Saint John for healthcare workers at high risk of COVID-19 exposure, including those working within regional health facilities, the Extra- Mural Program, Ambulance New	 vaccines for residents in long-term care facilities First Nations health directors and community health nurses will begin working with public health to provide the vaccine in <u>First Nation</u> <u>communities</u> A clinic in the 	
 healthcare professionals who provide direct patient care, first responders, home-support workers for seniors, individuals over the age of 70, volunteers in long-term care facilities, individuals between the ages of 40 and 69 with chronic health conditions, and workers who regularly travel across the boarder <u>Phase 3</u> will include individuals with two or more chronic health conditions, healthcare workers providing indirect patient care, school staff and high school and post- 	 on 4 February 2021, Chief Medical Officer Dr. Jennifer Russell stated, <u>"Catching</u> <u>COVID-19 is not your</u> <u>fault and no one should</u> <u>be ashamed for catching</u> <u>it"</u>, urged citizens not to minimize their symptoms and asked that everyone get tested and not hesitate if they suspect they may have contracted the virus Chief Medical Officer of Health Dr. Jennifer Russell announced that the province will <u>delay</u> <u>administering the</u> <u>second dose</u> of the vaccine for individuals who are considered to be at a lower risk 	 communities opening shortly after Individuals <u>85 years of</u> age and older not living in long-term care facilities will be notified by public health where they can get their vaccination in the coming weeks Details on how and when to register for vaccinations will be announced publicly closer to the start of phase 2 Selecting a vaccination clinic is based on specific criteria Pharmacies will be vaccinating individuals aged 70 years and older, people who travel 	

secondary students aged	• The goal is to get a	regularly across the	
16 to 24	or The goal is to get a	border and rotational	
	greater number of	workers	
• Within the month of	vullerable people	Regional Health	
March, the province	doso	Authorities will be	
expects to receive <u>10,000</u>	o This approach will	<u>Autonues</u> will be	
doses of the Oxford-	bala lower the	vacchaung individuals	
<u>AstraZeneca</u> vaccine	neip iower the	aged /0 years and	
• Until new changes are	number of	older, people with	
made to the vaccine roll-	mospitalizations and		
out plan the province is	make sure the	conditions, people	
continuing to <u>focus on</u>	nealthcare system is	aged 40 years and	
vaccinating priority groups	not overwhelmed	older with select	
<u>in Phase 1</u>	• Dr. Russell stated	chronic conditions,	
• At a press conference on 5	that although this	tirst responders,	
March 2021, chief medical	approach carries	nealth-care workers,	
officer Dr. Jennifer Russell	some unknowns, it is	health-system staff,	
stated that the province	being used as an	people who work in	
will follow the National	acceptable and	high schools	
Advisory Council on	manageable option	o <u>Oxtord-AstraZeneca</u>	
Immunization's (NACI)	• <u>Scheduling a vaccine</u>	vaccines will be	
recommendation of	<u>appointment with a</u>	available at both	
increasing the delay	<u>Regional Health</u>	locations for people	
between the first and	<u>Authority</u> is booked	55 years of age and	
second dose to 120 days	through the	older	
• With this new guidance	Government of New		
from the NACL the goal	Brunswick website		
is to provide at least the	<u>Vaccine appointments</u>		
first dose to all adult New	through a pharmacy are		
Brunswickers before the	scheduled by contacting		
end of June	the pharmacy directly		
• With these changes the	• A list of participating		
or with these thanges the	pharmacies is		
revising its coll out plan	provided on the		
in the coming weeks	Government of New		
	Brunswick website		
• At a press conference on 8	• A chart listing all eligible		
April 2021, Health	individuals as well as		
Minister Dorothy	where they can get the		
Shephard stated that the	vaccine has been		
	vaccine nas Deen		

province would	be updated on the
focusing on age	based Government of New
eligibility to max	imize the Brunswick website
efficiency of the	it A list of the
COVID-19 vac	in VIIIst of the
schedule	<u>communues nosung</u>
	<u>vaccination clinics</u> has
• The province ha	is updated been updated on the
its <u>vaccine roll-c</u>	Government of New
schedule	Brunswick website
o In March and	l April,
priority will b	e given to
individuals 70) years of
age and older	, all First
Nations 16 ye	ears of age
and older, inc	lividuals
who travel ac	ross the
border, rotati	onal
workers, heal	th-care
workers, heal	th-system
staff and indi	viduals
with complex	medical
conditions	
o Priority will a	lso be
given to indiv	viduals 40
years of age a	nd older
with three or	more
select chronic	
conditions, at	h
individuals 60) to 69
vears of age	
• The province ar	
that individuals	hetween
that individuals	ad 50 will
be eligible for m	
• On 18 May 202	l, the
province <u>update</u>	<u>d its</u>
vaccine schedule	2

				· · · · · · · · · · · · · · · · · · ·
	U individuals aged 18			
	years and older are now			
	first does from either a			
	infst dose from either a			
	pharmacy or			
	vaccination clinic			
	• The province has $3,500$			
	doses of Oxford-			
	AstraZeneca vaccine that			
	will expire on 31 May			
	2021, and is urging			
	individuals 55 years of age			
	and older who received			
	the first dose to register			
	for their second dose			
	before the end of the			
	month			
	• As of 23 May 2021,			
	422,010 doses have been			
	administered			
	\circ From that total.			
	385.997 people have			
	been vaccinated with at			
	least one dose			
Nova Scotia • Five storage sites have	• The Nova Scotia Ministry	• The Government of	• As of the week of 8	• In collaboration
been developed with	of Health developed a	Nova Scotia website	February 2021, four	with the Dalhousie
ultra-low freezers to	vaccine-distribution	provides information	healthcare worker clinics	University Faculty
store vaccines safely	strategy prioritizing groups	about the vaccine, how	were opened in Halifax.	of Medicine, the
• Three more cold	throughout three phases	its citizens are being	Truro, Kemptville and	Government of
storage sites will be	• Phase one will run from	prioritized and the	Yarmouth	Nova Scotia posted
operational by the end	Ianuary to April 2021	three-phase distribution	• During the week of 22	on Twitter a short
of January 2021 in	and will include front-	program	Eebruary 2021 three	video debunking the
Amherst, Antigonish	line healthcare workers	\circ The website links to	more clinics were	myth. "We don't
and Bridgewater	who are closely	the vaccines and	opened at St Martha's	know what's in
• To ensure the safe	involved in the	treatments for	Regional Hospital South	these vaccines"
transport of the vaccine	COVID-19 response	COVID-19 page on	Shore Regional Hospital	• As of 22 February
Dr. Robert Strang stated	residents. staff and	the Government of	and Cumberland	2021 27 521 doses
that preliminary tests				2021, 27, 521, 00505
	designated caregivers of	Canada's website	Regional Hospital to	have been
that preliminary tests				

the best possible	regidents and staff of		vaccinate healthcare	o From that total
the <u>Dest possible</u>	residential care	• The Government of	vacciliate nearthcare	\circ From that total
the mentions to confirm	facilition adult	Nova Scotia's <u>You Lube</u>		11,000 are
that it remained at a	regidential control and	<u>channel</u> provides regular	• Within the month of	
that it remained at a	residential centres and	updates on the	March 2021, <u>clinics</u> in	• As of 16 February
stable temperature	regional renabilitation	pandemic as well as	New Minas, Sydney and	2021, <u>11,059 first</u>
During the first phase of	centres, seniors living in	allocation and	Truro will open on 8	doses have been
the vaccination roll-out,	the community who are	distribution of vaccines	March 2021, clinics in	administered to
the province will be	/5 years of age or older,	• In collaboration with	Antigonish, Halifax and	healthcare workers
testing several	healthcare workers	the Dalhousie	Yarmouth will open on	and 7,643 have
distribution methods so	(doctors, paramedics)	University Faculty of	15 March 2021, and	received their
that when larger	who are in direct	Medicine, the	clinics in Amherst,	second dose
amounts of the vaccine	contact with patients	Government of Nova	Bridgewater and	 As of 16 February
are delivered in phase	• Phase two will begin in	Scotia posted on	Dartmouth will open on	2021, <u>2,268 first</u>
two, the province will	May 2021 and will	Twitter a short video	22 March 2021	doses have been
have established an	include remaining	debunking the myth,	 Future prototype clinics 	administered to
efficient delivery method	healthcare workers and	"We don't know what's	will also be established in	<u>long-term care</u>
• The objective is to	essential workers	in these vaccines"	pharmacy settings and	residents and 496
deliver approximately	• Phase three will begin	• Dr. Strang reiterated the	Mi'kmaq communities	have received their
10,000 doses per day	in summer 2021 and	provinces mantra,	0 Four <u>pharmacy</u>	second dose
• With more clinics	will include individuals	"When in doubt wear a	prototype clinics are	• Dr. Strang asked
opening across the	who were not	mask"	planned to begin in	that individuals who
province, vaccine	prioritized in phase one	• When prototype	early March in Halifax	have received the
distribution in the	or two	community clinics open.	county, Cumberland	vaccine to continue
province is based on	Premier Iain Rankin	a letter will be sent in	county, Shelburne	to follow all public
census data and	announced at a press	the mail to eligible	county and Inverness	health measures
population estimates	conference that <u>all adults</u>	individuals providing	county	
• In addition to the federal	could have at least the first	details about how they	• <u>Starting the week of 1</u>	
government's efforts to	dose by the end of June	can book their	March, the first of 13	
secure low headspace	<u>2021</u>	vaccination	vaccination clinics in	
syringes, the province is	• The Oxford-AstraZeneca	appointment	Mi'kmaq communities	
also working	vaccine will be	 Information about the 	across the province will	
independently to procure	administered to individuals	Oxford-AstraZeneca	open at Millbrook First	
the syringes	aged 63 and 64 starting 20	vaccine has been	Nations	
• The province has 10 cold	March 2021	included on the	• Mi'kmag elders will	
storage sites from which	• Vaccination appointments	Government of Nova	receive their	
eight clinics across the	for individuals in phases	Scotia website	vaccinations starting	
province receive the	two and three will be		the week of March 1 st	
vaccines on a rotational	prioritized by age to	• An update to the	All First Nations clinics	
basis	ensure timely distribution	COVID-19 vaccine	will be managed by the	
04515	chouse aniery distribution		will be managed by the	

As of 6 April 2021, 200,250 doses have bee delivered to the provinc	 Individuals <u>25 years of age</u> and older are now eligible to book a vaccination appointment Individuals who are <u>not a</u> <u>permanent resident</u> and do not have a Nova Scotia Health Card can book a vaccination appointment when their age group becomes eligible As of 21 May 2021, <u>483,549</u> doses have been administered As of 18 May 2021, <u>48% of the population</u> over 16 years of age have been vaccinated From that percentage, <u>43.3% have received</u> their first dose and <u>4.8% have received</u> their second dose booking site includes a <u>postal code look-up</u> to help users find available appointment times and which vaccine is available at specific clinics in their area On 12 April 2021, a video explaining how the COVID-19 vaccines are being distributed was posted on the government of Nova Scotia Twitter account 	 health centres located within each reserve The health-centre staff will administer the vaccination Dr. Robert Strang, Nova Scotia's Chief Medical Officer of Health stated that the province is looking into different models of community- based clinics to ensure the timely delivery of the vaccine The first prototype community clinic will take place on 22 February 2021, at the IWK Health Centre in Halifax The clinic will vaccinate Nova Scotians who are 80 years of age and older who have been randomly selected by postal code that is within an hour distance of the clinic site 1,000 doses have been set aside for the prototype clinic The first community- based clinic will open on 1 March 2021 at the IWK Health Centre in Halifax where individuals over the age
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	r	· · · · · · · · · · · · · · · · · · ·
		of 80 years not living in
		long-term care facilities
		will receive their
		vaccination
		o Premiere Stephen
		McNeil announced
		that 10 clinics across
		the province will open
		for these seniors to
		get vaccinated over
		the next several weeks
		• Letters from MSL will be
		sent in the mail to the
		alderly advising them on
		how to schodule an
		now to <u>schedule an</u>
		appointment to be
		o bookings will be
		made available one
		week prior to the start
		of a cliffic
		• Appointments can be
		booked online at
		novascotia.ca/vaccinatio
		<u>n or through a toll-free</u>
		<u>number</u> which will be
		provided in the letter
		0 Those who <u>book</u>
		<u>online</u> will receive
		email reminders of
		their appointment
		date closer to their
		scheduled vaccination
		All <u>vaccine clinics and</u>
		pharmacy appointments
		are made through the
		Government of Nova
		Scotia website
		ı

• Dr. Strang asked that
individuals who have
received the vaccine to
continue to <u>follow all</u>
public-health measures
 For individuals worried
about attending large
clinics the province is
working with pharmacies
and physician partners to
run <u>smaller clinics.</u>
• The start of these
clinics is still unknown
When low headspace
syringes are delivered to
the province, <u>special</u>
training to use the
syringes will be provided
to healthcare workers
administering the
vaccine to get the extra
vaccine from the vials
The Nova Scotia College
of Nursing put out a <u>call</u>
for retired nurses to help
administer COVID-19
vaccines
o <u>Conditional licences</u>
reinstate retired nurses
to work in COVID-19
vaccination clinics,
assessment clinics,
and assist with contact
tracing and/or client
follow-up
• The Oxford-
AstraZeneca vaccine will
be handled by the

	Pharmacy Association of
	Nova Scotia and
	Doctors Nova Scotia
	o <u>25 pharmacies and</u>
	family-physician
	clinics will be offering
	vaccinations, and their
	locations are posted
	on the Government
	of Nova Scotia
	website
	• During the week of 6
	April 2021, the first
	A frican-community
	vaccination clinic opened
	at the Emmanuel Baptist
	Church
	• In a press conference on
	6 April 2021 Chief
	Medical Officer of
	Health Dr. Robert
	Strang stated that the
	province has been
	cautions with their
	vaccine program due to
	the upstable vaccine
	supply
	o Appointments dates
	are only released once
	supply is confirmed
	Two drive three clinics
	• Two drive-tind childs
	have been set-up to
	increase the number of
	vaccinations administered deily
	a The Cret drive three
	o The <u>mrst drive-thru</u> elinis opened on 10
	Mar 2021 at the
	May 2021, at the
	Dartmouth General

Prince Edward	• Low headspace swingers	The Prince Edward Island	• Information for the	 Hospital for individuals 50 years of age and older The province has partnered with the Rural Transportation Association to offer low- cost transportation for individuals unable to get to a vaccination appointment A link to find a provider to arrange transportation can be found on the Government of Nova Scotia website 	• A talaphone
Prince Edward	• Low headspace syringes	• The Prince Edward Island	• Information for the	• <u>Public-health nurses</u> will	• A telephone
Island	will be delivered to the	Ministry of Health	general public about the	administer the vaccine to	number was made
	province the week of	developed its <u>COVID-19</u>	vaccination status,	individuals in phase one	available to the
	sixth dose can be drawn	policy by identifying and	and the vaccination roll-	 In a press conference, Marion Doubling 	answer any health-
	from the Pfizer-	prioritizing key	out are provided on the	(Executive Director for	related questions
	BioNTech vials	populations	Government of Prince	Health PEI) stated that	about COVID-19
		• A three-phase plan has	Edward Island website	vaccine clinics will open	• In a weekly press
		been put in place	o <u>Information sheets</u>	on 22 February 2021, for	conference, Dr.
		O Phase one will run between December	BioNTech. Moderna.	Islanders 80 years of age	Heather Morrison
		2020 and March 2021,	and <u>Oxford-</u>	long-term care facilities,	download the
		and will include	<u>AstraZeneca</u> vaccines	commercial truck drivers	COVID Alert App
		residents and staff of	can be downloaded	and rotational workers	from the
		long-term and	Edward Island	• <u>Clinics</u> will be located	Government of Prince Edward
		healthcare workers at	Government website	Summerside.	Island website to
		higher risk of COVID-	• Details on who is	Charlottetown and	help prevent
		19 exposure, seniors 80	<u>eligible to book an</u>	Montague	outbreaks
		years of age and older,	appointment during	• <u>Homecare nurses</u> will	• <u>Vaccination status</u> is
		residents and staff of	vaccine roll-out is	begin assisting with	updated twice
	1		. accure ron Out to	vaccinations at clinics 101	weekiy on the

1			
 other residential or shared-living facilities, and truck drivers and other rotational workers Phase two will take place between April 2021 and June 2021 and will include anyone in priority groups remaining from phase one, healthcare workers not included in phase one, seniors 70 years of age and older, and essential workers Phase three will take place in summer and fall 2021 and will include anyone in priority groups remaining from phase two and the general public After residents in long- term care were fully vaccinated, the focus of the roll-out shifted to providing second doses to individuals in <u>community</u> <u>care</u> by 26 February 2021 Starting 11 March 2021, <u>individuals aged 18 to 29</u> who work in the food and beverage industry, including food delivery service, can register to receive the Oxford- AstraZeneca vaccine 	 available on the Government of Prince Edward Island website A telephone number was made available to the general public to answer any health- related questions about <u>COVID-19</u> Links for booking appointments as well as the locations of vaccination clinics, pharmacies and local schools offering the vaccine are posted on the Government of Prince Edward Island website A video titled, <u>"Vaccine Clinic Walkthrough"</u> was posted on the Government of Prince Edward Island's YouTube channel on 14 May 2021, outlining how to prepare for, and what to expect at your vaccination appointment A public service announcement titled, <u>"When it's your turn, get vaccinated"</u> was posted on the Government of Prince Edward Island's YouTube channel on 6 April 2021 to promote 	 Islanders over the age of 80 who do not live in long-term care facilities Beginning on 4 February 2021, Islanders 80 years and older not living in long-term care facilities can book an appointment to receive their vaccination Starting 4 February 2021, commercial truck drivers and rotational workers will receive phone calls from Health PEI to set up appointments to be vaccinated Pharmacists have been legislated to administer vaccines so that they can assist with mass vaccinations in future phases Community-health nurses will begin running clinics at Lennox Island First Nation at the end of February and beginning of March 2021 Information for seniors 80 years and older to schedule their vaccination is posted on the Prince Edward Island website Seniors may call a toll- free number or use the online webform to 	Government of Prince Edward Island website

0	Appointments can be	Islanders to get their	submit their request	
	made directly through	vaccination once they	and receive a phone	
	participating	become eligible	call from public health	
	pharmacies listed on the	~	to book their	
	Government of Prince		appointment	
	Edward Island website		International rotational	
• U _I	odates have been made		workers including	
to	the vaccine roll-out		commercial airline pilots	
ph	<u>ases</u> on the		and members of the	
Ge	overnment of Prince		military will begin to be	
Ed	lward Island website		contacted by public	
0	Phase 2 will take place		health to schedule a	
	between April and June		vaccination appointment	
	2021 and will include		 Individuals in this 	
	adults 18 years of age		category will be	
	and older, front-line		contacted with age	
	essential workers		prioritizing who will	
	between the ages of 18-		be contacted first	
	59 who work in the		(oldest to youngest)	
	food service and retail		• To ensure adults <u>75</u>	
	industry, gas station		years of age and older	
	attendants, clerks,		receive their vaccine in a	
	teachers, school		timely fashion,	
	administration, early		appointment dates are	
	childhood educators,		being scheduled	
	veterinarians, public		according to an	
	transit drivers and		individual's date of birth	
	seatood and meat plant		 Appointments are 	
	employees, adults		scheduled online	
	between the ages of 18-		through the	
	59 with underlying		Government of	
	medical conditions who		Prince Edward Island	
	could be at high risk if		website	
	intected with COVID-		• The Oxford-	
	19, non-tront-line		AstraZeneca vaccine will	
	healthcare workers and		be administered at	
	non-tront-line essential		participating pharmacies	
	workers		• These pharmacies are	
			listed on the	

• <u>Phase 3</u> will take place	Government of
between summer and	Prince Edward Island
September 2021 and	website
will include all	• Starting the week of 6
individuals requiring a	April 2021, <u>12 partner</u>
second dose and youth	pharmacies began
15 years of age and	administering the
older when an	Oxford-AstraZeneca
appropriate vaccine for	vaccine to individuals 55
this age category	years of age and older
becomes available	• Individuals aged 18-29
• An update to <u>Phase 2</u> of	who qualify for the
the province's vaccine roll-	Oxford-AstraZeneca
out plan lists the week	vaccine can book their
each age group is able to	appointments directly
receive the vaccine during	through participating
the months of April and	pharmacies
May	• As of 29 March 2021 six
• Phase 3 will take place	vaccination clinics
from summer to	running six days a week
September 2021 and will	have opened across the
offer second doses to	province administering
individuals vaccinated in	the Pfizer-BioNTech
Phase 2	and Moderna vaccines
• Youth younger than 12	• To assist with the timely
<u>years of age</u> will be	booking of
eligible for a vaccine	appointments the
during this phase if one	province has outlined
is approved for this age	who is eligible to
category	schedule an appointment
• As of 19 May 2021, 78,817	each week during the
doses have been	month of April
administered	
\circ From that total 66.661	• In a press conference on
are first doses and	0 April 2021, Unier
12.156 are second doses	Public Health Officer
	Dr. Heatner Morrison
	reassured all islanders
	that wherever they

	-				
				 receive their vaccination all personnel are trained at administering the vaccine <u>Students aged 12-15</u> will have the option of receiving their vaccination either at school or at a vaccine clinic beginning the week of 4 June 2021 	
and Labrador	 The first shipment of Pfizer-BioNTech vaccines arrived on 15 December 2020 The first shipment of the Pfizer-BioNTech vaccine was sent to Eastern Health Hospital as it has an ultra-low temperature freezer to store the vaccine Ultra-low freezers will be delivered to the three other hospitals so that the vaccine can be delivered In a press conference on 9 February 2021, Chief Medical Officer Dr. Lanice Fitzgerald 	 The Newfoundiald and Labrador Ministry of Health developed a phased approach to administering the vaccine prioritizing specific populations Phase one will include healthcare workers with high exposure to COVID-19, residents of long-term care facilities as well as long- term care staff, individuals 85 years of age and older, and individuals living in remote and/or isolated Indigenous communities 	 <u>Inte COVID-19</u> <u>immunization plan</u> on the Government of Newfoundland and Labrador website provides information for the general public on the vaccines and vaccine administration and safety Information sheets outlining how the <u>Pfizer BioNtech</u>, <u>Moderna</u> and <u>Oxford-AstraZeneca</u> vaccines protect against COVID-19 are linked on the website The COVID-19 priority 	 The COVID-19 immunization will be run by <u>public-health nurses</u> Starting January 2021, vaccinations were administered in <u>long-</u> term care homes and communities along the <u>Labrador coast</u> By 8 February 2021, all residents living in long-term care facilities in St John's will have received their first dose of the vaccine Vaccinations are being administered at Inuit communities in Labrador 	 vaccination after- care information sheets for the Pfizer BioNtech and Moderna vaccines can be downloaded from the Government of Newfoundland and Labrador website Attached to each information sheet is an immunization record to be filled out after receiving the vaccination A question about the safety of the
	 announced that the province is working with the federal government to secure low headspace syringes In a news conference on 20 January 2021, Chief 	• Phase two will prioritize healthcare workers not included in phase one, residents of long-term care facilities as well as long-term care staff and essential workers	groups page was updated on the Government of Newfoundland and Labrador website outlining how the vaccine could be offered to individuals outside	 The vaccine is being offered to anyone 17 years of age and older with priority given to healthcare workers and seniors 	COVID vaccine has been added to the frequently asked questions page on the Government of Newfoundland and Labrador's COVID site.

Medical Officer Dr. Janice Fitzgerald detailed the <u>distribution of the</u> <u>vaccine</u> when it arrives to the province, stating that once the shipment arrives it is immediately distributed to regional health authority depots and then to communities where public-health nurses deliver the inoculations	 Phase three will include the general public The <u>COVID-19 priority</u> groups page was updated on the Government of Newfoundland and Labrador website outlining how the vaccine could be offered to individuals outside the phase one priority group in an effort to prevent wastage After completing immunizations in a particular area, if it is a risk to relocate the remaining doses, they will be offered to individuals in priority groups that follow phase one Vaccinations are being administered at Inuit communities in Labrador The vaccine is being offered to anyone 17 years of age and older with priority given to healthcare workers and seniors An update on the priority phases was posted on the province's COVID-19 website stating that details on who is eligible for each phase will be defined 	 the phase one priority group in an effort to prevent wastage Vaccination after-care information sheets for the Pfizer BioNTech and Moderna vaccines can be downloaded from the Government of Newfoundland and Labrador website An updated chart outlining a timeline for when priority groups are eligible to receive their COVID-19 vaccine has been posted on the Government of Newfoundland and Labrador website Links to book a vaccination appointment at one of the regional health authorities is found on the Government of Newfoundland and Labrador website The Newfoundland and Labrador website The Newfoundland and Labrador website The Newfoundland and Labrador website The Newfoundland and Labrador centre for Health Information posted on their YouTube channel a video explaining how to book a COVID-19 vaccination 	 <u>Vaccine clinics in Phase</u> will be organized by the Regional Health Authority Public Health teams To ensure a more timely approach to <u>vaccinate a</u> greater number of individuals in Phases 2 and 3, healthcare workers including physicians and pharmacists will assist with administering vaccines During this phase <u>mobile clinics</u> will launch in smaller communities and clinics could be set up within large businesses and community-based settings Individuals in Phase 1 will be <u>contacted directly</u> to schedule their appointments Individuals in Phase 2 will have the opportunity to <u>pre-register</u> in mid- March 2021, through an online registration portal on the Government of Newfoundland and Labrador website, or by 	 The website links to the Government of Canada's website providing more detail about the safety of the vaccines
	website stating that details on <u>who is eligible</u> for each phase will be defined clearly once more is known about the number	YouTube channel a video explaining <u>how to</u> <u>book a COVID-19</u> <u>vaccination</u> <u>appointment</u> online	online registration portal on the Government of Newfoundland and Labrador website, or by calling the COVID-19 vaccination toll-free number	

 of vaccines and doses that will be available in Phase 2 The province provided further detail on priority groups in phases 2 and 3 on the Government of Newfoundland and Labrador website <u>Phase 2</u> will take place from April to June 2021, and will include adults aged 60 and older, adults who identify as First Nation, Inuit or Métis, adults in marginalized populations (e.g., people experiencing homelessness), first 	• Information about the <u>COVID-19 variants</u> was posted on the Government of Newfoundland and Labrador website	 An updated chart outlining a <u>timeline</u> for when priority groups are eligible to receive their COVID-19 vaccine has been posted on the Government of Newfoundland and Labrador website <u>Vaccination clinics</u> are offering the Oxford- AstraZeneca vaccine to individuals between the ages of 55 and 64 years 	
responders, front-line healthcare workers not immunized in phase 1,			
individuals aged 16-59 with medical conditions			
risk if infected from COVID-19, individuals			
such as truck drivers and rotational workers			
who travel in and out of the province, and front-			
with direct contact with the public who cannot			
work from home 0 <u>Phase 3</u> will take place			
from July to September 2021, and will include anyone in priority			

groups 1 and 2 who	
were not vaccinated,	
and individuals aged	16-
59 who have not bee	n
vaccinated	
• On 9 March 2021 7 00	
doore of Oxford	
doses of Oxford-	
<u>AstraZeneca vaccine</u>	
arrived in the province	
• In a news conference,	
Chief Medical Officer of	f
Health Dr. Janice	
Fitzgerald stated that the	e
province will follow the	
National Advisory Cou	ncil
on Immunization's	
recommendation of	
increasing the delay	
between the first and	
second dose to four	
months	
• As of 12 April 2021,	
<u>144,700 doses have bee</u>	<u>n</u>
<u>delivered</u> to the province	e l
The province has update	ed
<u>Phase 3</u> of its vaccine r	oll-
out plan allowing	
individuals 12 years of a	ge
and older to book a	
vaccination appointmen	ut l
• The goal is to have	
children 12 – 15 vea	rs
of age fully vaccinate	d
by early in the next	
school vear	
• As of 24 May 2021	
• As of 24 May 2021, $270 = 500$	
$\frac{2/2,362}{1}$ doses have bee	
administered	

N7 1		 From that total 262,096 people have been vaccinated with at least one dose 			
	 vaccines will be distributed to the Yukon and across Canada by the Immunization National Operation Centre for COVID-19 The Government of Yukon has partnered with experts under the Joint Task Force North to plan for vaccine distribution 	 The Tukon COVID-19 Vaccine Strategy aims to vaccinate <u>75% of the adult</u> population within the first three months of 2021 The Government of Yukon will work closely with First Nation governments, NGOs, community leaders, and community health centres to reach all Yukoners The flu clinic in Whitehorse will be used as a template for COVID-19 vaccine administration Priority will be given to four key populations, including: Staff and individuals residing in group-living settings for vulnerable groups or older adults Individuals working in healthcare settings and personal-support workers Older adults not living in group settings Individuals, specifically those who are Indigenous, living in rural or remote communities 	 The Government of Yukon will provide accurate and updated information to Yukoners through news conferences and <u>Yukon.ca</u> updates A public awareness campaign will also be coordinated through radio, news and social media A public website discussing vaccine progress in the Yukon is available to residents A COVID-19 vaccine after care information package is also available on the Government of Yukon website for residents The package discusses steps to take after receiving the vaccine, what side-effects to expect after the immunization, when to return for the second dose and things to remember when signing up for immunization 	 The Government of Yukon's Department of Health and Social Services is the designated authority in delivering vaccines to Yukoners Public and primary- care nurses, community health- centre staff, Health and Social Services' Emergency Preparedness team, Community Services' Emergency Measures Organization, Yukon Hospital Corporation staff and other personnel will be central to administering the vaccine As of 27 January 2020, individuals without Yukon healthcare cards must now present another valid photo ID and one proof of residency document to receive vaccination Yukoners are also asked to bring their <u>COVID-19 vaccine</u> <u>record cards</u>, received during their first dose 	 Fanorama, the territory-wide electronic information system, will be used to monitor timing for a second dose, identify vaccine uptake and record adverse vaccine reactions Yukoners can also download the CanImmunize app to keep track of their COVID-19 vaccine and other vaccines In Yukon, all serious side-effects, such as hives, swelling, or difficulty breathing, are asked to be reported to the Whitehorse Health Centre or to a local community health centre

 Individuals are eligible to receive vaccination if they are: 12 years of age and older Are no longer infectious if they had a previous COVID-19 infection Individuals may be offered the vaccine with informed discussion if they are: 	 An information package about Moderna is also available on the government website The package discusses COVID-19, how the vaccine protects Yukoners, who is eligible to receive the vaccine, what to tell the healthcare provider 	 immunization, to their second immunization Vaccine clinics will be established at centralized locations for COVID-19 vaccine roll-out Approximately 14,000 Yukoners are aimed to be vaccinated in a six-week period Screeners and greeters will be present at all 	
 Currently pregnant or planning to be pregnant before receiving the full two Moderna doses Currently breastfeeding Have immune system problems or autoimmune conditions Individuals <u>should not</u> receive the vaccine if they are: Have symptoms of a COVID-19 infection Feel unwell from a recent COVID-19 infection Allergic to polyethylene glycol or had an allergic reaction without a known cause Had a serious allergic 	when being vaccinated, and how the vaccine is administered	 COVID-19 vaccine clinics Mobile clinics will be used to reach individuals in specific remote and rural communities across the Yukon Vaccines will be directly administered to residents in long-term care homes and to those who are homebound As of 27 January 2021, there are 14 mobile clinics scheduled to visit rural and remote communities across the Yukon for vaccine administration 	
 reaction with the previous dose of the COVID-19 vaccine Received another non-COVID-19 vaccine in the past 14 days 		• As of 31 May 2021, <u>clinics will be held in</u> <u>schools</u> across every Yukon community, and clinics located in Whitehorse will allow	

• As of 31 May 2021, youth	youth to receive their
in rural areas <u>between 12</u>	first and second Pfizer-
and 17 years of age are	BioNTech doses
eligible to receive the	• As of 19 May 2021, all
Pfizer-BioNTech vaccine	individuals above 18
o Youth in Whitehorse	years of age are able to
are eligible to receive	receive their first and
their first dose starting	second vaccine doses at
June 1 and their second	a Whitehorse-based
dose starting June 23	clinic
o Clinics will be held in	 Individuals in rural
school and at central	communities who are 18
locations in Whitehorse	vears or older, can call
• As of 27 January 2021.	local clinics to schedule a
individuals without Yukon	vaccine appointment or
healthcare cards must now	visit the Whitehorse
present another valid	clinic
photo ID and one proof	Clinics will be held in
of residency document to	school and at central
receive vaccination	locations in Whitehorse
• Residents of B.C. are also	to vaccinate youth aged
eligible to receive	12 to 17 years
vaccinations in Yukon if	• As of 12 February 2021
they typically receive	all individuals living in
healthcare in the territory	long-term care homes as
• On 10 December 2020	well as long-term care
the Minister of Health	staff have received the
announced that 50 400	full immunization
doses of the Moderna	o All home-bound
vaccine will be received by	people have also been
March 2021	fully vaccinated
\circ 75% of the population	• A public website allows
in Yukon is expected to	for residents to self-
be vaccinated during	schedule appointments
this time period	for the first and second
Yukoners are encouraged	vaccine doses
to get their second vaccine	• Vulconers are asked to
to get their second <u>vacenic</u>	• I ukoners are asked to
	wait a minimum of <u>15</u>

28 to 35. days after minutes at the vaccine receiving their first does claims after receiving their immunization 0 As of 25 May 2021, 52,020 o For individuals with a dows have been delivered o For individuals with a in the Yukon about vaccine allengy, of all delivered does a witing period of 30 have been administered o Individuals are asked doess of Moderna o Individuals are asked vaccines have been provider if they feel uning period o This includes 27,153 waiting period sate of 19 May 2021, 50,298 o This includes 27,153 waiting period second does Public health measures, second does Public health measures, o This includes 27,153 waiting period in West Yukon, 34% in central first does observer in precising hand being 70% of individuals in Sate 6 Plus 1, getting in West Yukon, 34% in requirements will be lept o Southeast Yukon and requirements will be lept in West Yukon, 34% in feeling sick, avoiding o Write forse in place for all Yukones have received their free does of Moderna o Southeast Yukon, 36% in feeling sick, avoiding Gow		
 As of 28 May 2021, 57.020 doses have been delivered to the Yukon A protoimately 91.4% of all delivered doses have been administered As of 19 May 2021, 50.098 doses of Maderna vaccings have been administered This includes 27,153 urwell during the second doses 76% of individuals in Northern Yukon, 54% in Central Yukon, 61% in South-ast Yukon and or 9% of individuals in Northern Yukon, 76% of Moderna of Moderna of Moderna of Moderna of Moderna of South-ast Yukon and of in West Yukon, 48% in Central Yukon, 76% of Moderna o	<u>28 to 35 days after</u>	minutes at the vaccine
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doss: have been delivered o For individuals with a to the Y lukon a bistory or concern about vaccine allergy, of all delivered doss: a waiting period of 30 minutes is Nako 19 May 2021, 55,0298 o Individuals are asked recommended doses of Moderna to inform a health vancines have been administered to inform a health vancines have been administered provider if they feel 0 This includes 27,153 first doses and 23,845 waiting period second doses Public health measures, such as practising the Safe 6 Pus 1, getting to in West Yukon, 54% in Central Yukon, 61% in Southeast Yukon and 78% in Whitchorse in blace for all Yukoners have sequence of individuals in Southeast Yukon and Central Yukon, 76% freeling site, avoiding errowds, following 0 69% of individuals in Northear Yukon, 76% freeling site, avoiding errowds, following Southeast Yukon and Central Yukon, 76% freeling site, avoiding errowds, following Southeast Yukon and Central Yukon, 76% in Southeast Pukon and Central Yukon and Central Yukon and Central Yukon and Central Yukon and Central Pukon, 56% in Central Pukon, 56% in Central Pukon soko are	• As of 25 May 2021, <u>57,020</u>	immunization
b b b) b	doses have been delivered	 For individuals with a
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of all delivered doses a waiting period of 30 have been administered minutes is vaccines, have been o Individuals are asked vaccines, have been provider if they feel administered provider if they feel 0 This includes 27,153 first doses and 23,845 waiting period sccond doses Public health measures, scood doses Such as practising the Northern Yukon, 83% Safe 6 Plus 1, getting in West Yukon, 54% in requirements will be kept o 69% of individuals in restrict for all Yukoners have received their first obsec of Moderna dose of Moderna includes physically dost of Moderna distancing six feet, Northern Yukon, 76% practising hand hygiene, in Water Ale% in comustics, self- isolating when net received their travelling to cond dose of converted Moderna isolating when necessary and stajing connected and stajing connected with theores travelling to have received their travelling to	o Approximately 91.4%	about vaccine allergy,
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doses of Moderna o Individuals are asked vaccines have been to inform a health administered provider if they feel o This includes 27,153 first doses and 23,845 waiting period second doses Public health measures, o 76% of individuals in Northern Yukon, 83% tested if necessary, and Central Yukon, 64% in following self-isolation Southeas YUkon and requirements will be kept n west Yukon, 64% in following self-isolation Southeas YUkon and requirements will be kept n borthern YUkon and requirements will be kept o 60% of individuals in practising hand bygiene, Northern YUkon, 76% staying at home when fceling sick, avoiding guidelines when for Moderna staying on onected Northern Yukon, 56% in staying on onected 60% in Whitchorse <th>• As of 19 May 2021, <u>50,998</u></th> <th>recommended</th>	• As of 19 May 2021, <u>50,998</u>	recommended
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Central Yukon, 61% in Southeast Yukon and 78% in Whitehorse have received their first dose of Modernafollowing self-isolation requirements will be kept in place for all Yukoners069% of individuals in Northern Yukon, 76% in West Yukon, 48% in Central Yukon, 56% in Southeast Yukon and 69% of individuals in Northern Yukon, 56% in Southeast Yukon and 69% of individuals in Central Yukon, 56% in Southeast Yukon and 69% of individuals in Northern Yukon, 56% in Southeast Yukon and 69% of in Whitehorse have received their second dose of Modernarowds, following guidelines when travelling to communities, self- isolating when necessary and staying connected with the outside world4As of 25 May 2021, Yukoners who are fully vaccinated and can provide confirmation of their vaccine status, do	in West Yukon, 54% in	tested if necessary, and
Southeast Yukon and 78% in Whitehorse have received their first dose of Modernarequirements will be kept in place for all Yukoners069% of individuals in Northern Yukon, 76% in West Yukon, 48% in Central Yukon, 56% in Southeast Yukon and 69% in Whitehorse have received their second dose of Moderna• The Safe 6 Plus 1 includes physically distancing six feet, practising hand hygiene, staying at home when feeling sick, avoiding corwds, following guidelines when travelling to communities, self- isolating when necessary and staying connected with the outside worldModernaAs of 25 May 2021, Yukoners who are fully vaccinated and can provide confirmation of their vaccine status, do	Central Yukon, 61% in	following self-isolation
78% in Whitehorse have received their first dose of Modernain place for all Yukoners069% of individuals in Northern Yukon, 76% in West Yukon, 48% in Central Yukon, 56% in Southeast Yukon and 69% in Whitehorse have received their second dose of Moderna• The Safe 6 Plus 1 includes physically distancing six feet, practising hand hygiene, staying at home when feeling sick, avoiding crowds, following guidelines when travelling to second dose of Moderna080% in Whitehorse have received their second dose of Modernafeeling sick, avoiding crowds, following guidelines when travelling to isolating when necessary and staying connected with the outside world0As of 25 May 2021, Yukoners who are fully vaccinated and can provide confirmation of their vaccine status, do	Southeast Yukon and	requirements will be kept
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in West Yukon, 48% in Central Yukon, 56% in Southeast Yukon and 69% in Whitehorse have received their second dose of Moderna	Northern Yukon, 76%	practising hand hygiene,
Central Yukon, 56% in Southeast Yukon and 69% in Whitehorse have received their second dose of Modernafeeling sick, avoiding crowds, following guidelines when travelling to communities, self- isolating when necessary and staying connected with the outside world• As of 25 May 2021, Yukoners who are fully vaccinated and can provide confirmation of their vaccine status, do	in West Yukon, 48% in	staying at home when
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69% in Whitehorse have received their second dose of Modernaguidelines when travelling to communities, self- isolating when necessary and staying connected with the outside worldAs of 25 May 2021, Yukoners who are fully vaccinated and can provide confirmation of their vaccine status, do	Southeast Yukon and	crowds, following
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second dose of Modernacommunities, self- isolating when necessary and staying connected with the outside worldAs of 25 May 2021, Yukoners who are fully vaccinated and can 	have received their	travelling to
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 and staying connected with the outside world As of 25 May 2021, Yukoners who are fully vaccinated and can provide confirmation of their vaccine status, do 	Moderna	isolating when necessary
 with the outside world As of 25 May 2021, Yukoners who are fully vaccinated and can provide confirmation of their vaccine status, <u>do</u> 		and staying connected
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vaccinated and can provide confirmation of their vaccine status, <u>do</u>		Yukoners who are fully
provide confirmation of their vaccine status, <u>do</u>		vaccinated and can
their vaccine status, <u>do</u>		provide confirmation of
		their vaccine status, <u>do</u>

Northwest Territories	 The Government of Northwest Territories will be working in joint partnership with the National Operation Centre and Joint Task Force North to plan for vaccine delivery Central points in Northwest Territories have been established to distribute the vaccine across the territory 	 A phased approach will be used to administer the vaccine and priority will be given to high-risk groups including individuals who: are seniors have chronic conditions or co-morbidities reside in remote communities have a high risk of transmitting or contracting a severe case of COVID-19 are residents of Northwest Territories but work outside the territory frequently As of 19 February 2021, first doses became available to expanded priority groups, including: People 18 years or older who have one or more specified chronic condition 	 Residents of Northwest Territories will be provided with updates to the vaccine strategy, evidence or recommendations through multiple plain- language materials An update of vaccine information and allocation in the Northwest Territories will be posted on a weekly basis Weekly updates of the vaccine are also provided on the Government of NWT's Facebook page Local health personnel will be made available to community residents to answer questions about the vaccine before 	 not have to self-isolate when entering the territory from anywhere in Canada As of 25 May 2021, Yukon bars and restaurants will return to full capacity with no physical distancing given that nearly 75% of Yukoners have received their first vaccine dose Mobile-vaccine clinics comprised of eight healthcare workers and support staff will be sent to all 33 communities across Northwest Territories to assist local health providers with vaccine administration Mobile clinics will stay in the communities as long as needed and will return for the second dose As of 13 April 2021, residents who are interested in being vaccinated are asked to contact their local health centre or public-health office A community visit may be organized if there is enough demand for vaccination in a matiguar age mutuation 	 The territory will continue to use previously established monitoring and reporting systems to keep track of vaccine delivery and administration All information is submitted to the Chief Public Health Officer of Northwest Territories before being forwarded to the Public Health Agency of Canada The Canadian Vaccine Monitoring System will be used to share and exchange information with other jurisdictions on adverse vaccine
				particular community	events

 People 18 years or older who are immunosuppressed People 18 years or older who have a BMI of 40 or higher People older than 60 years of age People 18 years or older who are mine workers, Medevac pilots, winter road support staff, Canadian Armed Forces, taxi drivers, and isolation centre staff People 18 years or older with intellectual or physical disabilities People 18 years or older who are primary caregivers with a high risk for contracting COVID-19 People 18 years of older travelling outside of NWT People 18 years or older with approval The Government of Northwest Territories aims to work alongside Indigenous governments, local healthcare providers and community leaders to create a culturally appropriate vaccine- distribution strategy, specifically for Indigenous 	 mobile-vaccine clinics arrive A qualified health professional will also connect with local leadership to provide up-to-date and reliable information, as well as to answer questions Interpreters and translators will be available to provide accessible information in Indigenous languages A website is available to residents of NWT to access information about the Moderna vaccine, the vaccination schedule, and to book appointments online Between 19 May and 22 May 2021, youth have the opportunity to submit anonymous vaccine questions to be answered by NWT's top doctor 	 All healthcare personnel across Northwest Territories must complete the Education Program for Immunization Competencies (EPIC) in order to administer the Moderna vaccine Healthcare providers are also required to participate in sessions about the historical experiences of Indigenous communities with communicable diseases, and strategies to provide culturally appropriate care Social-distancing precautions will be implemented at all clinics While proof of vaccination is not required for travel outside the territory, proof of vaccination can be provided to individuals who complete and submit a COVID-19 vaccine- record form As of 24 May 2021, Pfizer-BioNTech vaccines will be provided during school to youth As of 17 May 2021, the Covernment of DIWTF in
specifically for Indigenous people, and to design		Government of NWT is

reasing divise that most	offering frieding to	
vacchie chinics that meet	Indisensus and	
	indigenous and	
• As of 8 January 2021, <u>all</u>	community governments	
long-term care residents	to promote vaccines at	
and staff across Northwest	the local and regional	
Territories have been	levels	
vaccinated and second		
vaccine doses have been		
administered to long-term		
care residents and staff		
across the territory starting		
28 January 2021		
• As of 5 March 2021,		
additional priority groups		
have been added for		
residents in Yellowknife,		
Hay River and Inuvik,		
including:		
• Yellowknife residents		
50 years or older		
• Residents in Inuvik		
who are 18 or older		
• Residents in Hay River		
who are 18 or older		
• Residents in the		
aforementioned		
communities who are		
18 years or older and		
work in direct contact		
with the public as front-		
line workers (i.e., in		
schools, day cares.		
hotels, grocery stores,		
drug stores, banks.		
libraries, postal service.		
liquor stores, gas		
stations, convenience		
stores, customer service		

agents at airports, and	
media personnel)	
• As of 13 April 2021,	
vaccination clinics in all	
communities across NW	ſ
are providing a second	
immunization for	
individuals who have	
received their first dose,	
and first doses for any	
resident older than 18	
vears of age	
• As of 24 May 2021, all	
vouth aged 12 to 17 are	
eligible to receive the	
Pfizer vaccine	
• The Pfizer vaccine is	
exclusively reserved fo	r
youth due to limited	
supply	
Residents who have	
received their first	
Moderna dose are asked	0
wait at least four weeks	
before getting their secon	d
dose	
• As of 25 May 2021, 63,51	0
doses have been delivered	1
o 82.3% of all delivered	
doses have been	
administered	
• As of 15 May 2021,	
59% of all eligible	
individuals in NWT	
have been fully	
vaccinated and 67%	
have been partially	
vaccinated	

Nunavut	•	• Priority will be given to	• The Government of	• The Department of	• Patients <u>will be</u>
		elders 65 years or older	Nunavut has hosted	Health will carry out a	tracked after
		and individuals living in	some public sessions	mass-immunization	receiving their first
		shelters	since announcing the	program to vaccinate	dose of the vaccine
	•	75% of the total territorial	COVID-19 vaccine to	individuals living in	to ensure they are
		population is expected to	answer questions from	Nunavut	notified when they
		be vaccinated by March	the public	• Elders' facility clinics will	will be receiving the
		2021	• Residents in central	be created to vaccinate	second dose
	•	As of 15 February 2021.	Nunavut who choose to	seniors	
		other priority groups	get vaccinated will also	• In these clinics, health	
		eligible for first and	be entered to win cash	staff will go directly to	
		second doses include	prizes as an avenue to	the site to administer	
		those over 60 years,	encourage vaccination	vaccines	
		frontline healthcare	rates	 Second dose vaccine 	
		workers, first responders,	Public officials in	clinics will be available	
		medevac flight crews,	Nunavut have also been	starting February 1st and	
		group-home residents and	outspoken in press	February 8th to residents	
		staff, and individuals at the	conferences to	of select regions	
		Akausisarvik Mental	<u>discourage vaccine</u>	 Individuals must book 	
		Health Treatment Centre	<u>hesitancy</u>	an appointment with	
		and correctional facilities	• An information package	their local health centre	
	•	If individuals miss their	is additionally available	in order to be vaccinated	
		first dose and do not	on the Government of	• Individuals over the age	
		belong to the community	Nunavut website	of 18 who have missed	
		scheduled to receive	describing what	the first dose of the	
		doses, they will be <u>asked</u>	residents can expect	vaccine must travel to	
		to wait until the next	when visiting vaccine	Arviat for vaccination	
		supply of vaccines is	<u>clinics</u>	• Individuals are required	
		shipped to Nunavut	• Information about the	to present a Nunavut	
	•	• Individuals over the age of	<u>Moderna COVID-19</u>	healthcare card or other	
		18 who have <u>missed the</u>	vaccine, ingredients,	valid IDs to prove	
		first dose of the vaccine	side-effects and roll-out	residency before	
		must travel to Arviat for	plan are also available	receiving a dose	
		vaccination	on the Government of	• Reminders will be sent	
	•	• The Government of	Nunavut website	by local healthcare	
		Nunavut will <u>not be</u>		centres to patients to	
		releasing specific details		remind them of their	
		<u>about the level of</u>		second dose	

Tragination in	
<u>vaccination</u> m	 Individuals must <u>receive</u>
communities to prevent	the second dose of the
stigma	COVID-19 vaccine in
• As of 10 March 2021,	the same location as
residents 18 years and	where they received the
<u>older</u> in Nunavut became	first dose
eligible to schedule a	• Individuals are asked to
vaccination	wait 15-30 minutes after
• As of 25 May 2021, <u>45,100</u>	being vaccinated to
doses of the COVID-19	monitor side-effects or
vaccine have been	adverse reactions
delivered to Nunavut	
o Approximately 69.3%	
of all delivered doses	
have been administered	
• As of 25 May 2021, a <u>total</u>	
of 31,272 vaccine doses	
have been administered	
o 17,052 individuals have	
received at least one	
dose of a COVID-19	
vaccine, and 14,220	
individuals have been	
fully vaccinated	

Appendix 5: Documents excluded at the final stages of reviewing

Type of document	Hyperlinked title
Guidelines	Clinical investigation and management of COVID-19 vaccine induced thrombosis and thrombocytopenia
	Canadian Rheumatology Association position statement on COVID-19 vaccination
	Data collection on COVID-19 outbreaks in closed settings with a completed vaccination program: Long-term care facilities
	Information for healthcare professionals on blood clotting following COVID-19 vaccination
	National protocol for COVID-19 Vaccine AstraZeneca (ChAdOx1-S [recombinant])
	COVID-19 vaccination and blood clotting
	Echocardiography during the COVID-19 pandemic, an impact of the vaccination program: A 2021 update of the expert
	opinion of the Working Group on Echocardiography of the Polish Cardiac Society
	SEPAR recommendations for COVID-19 vaccination in patients with respiratory diseases
	COVID-19 and mandatory vaccination: Ethical considerations and caveats
	Overview of the implementation of COVID-19 vaccination strategies and vaccine deployment plans in the EU/EEA
	For immunization providers: Interim national vaccine storage, handling and transportation guidelines for ultra-low temperature
	and frozen temperature COVID-19 vaccines
	Italian association for the study of the liver position statement on SARS-CoV2 vaccination
	COVID-19 vaccination of patients with allergies and type-2 inflammation with concurrent antibody therapy (biologicals) - A
	position paper of the German Society of Allergology and Clinical Immunology (DGAKI) and the German Society for Applied
	Allergology
	COVID-19 vaccination in mastocytosis: Recommendations of the European Competence Network on Mastocytosis (ECNM)
	and American Initiative in Mast Cell Diseases (AIM)
	AstraZeneca ChAdOx1-S/nCoV-19 [recombinant], COVID-19 vaccine explainer
	Interim recommendations for use of the ChAdOx1-S [recombinant] vaccine against COVID-19 (AstraZeneca COVID-19
	vaccine AZD1222, SII Covishield, SK Bioscience)
Full systematic reviews	Factors influencing the efficacy of COVID-19 vaccines: A quantitative synthesis of phase III trials
	Mini-review discussing the reliability and efficiency of COVID-19 vaccines
	Development and implementation of a potential coronavirus disease 2019 (COVID-19) vaccine: A systematic review and meta-
	analysis of vaccine clinical trials
Rapid reviews	Safety and efficacy of vaccines during COVID-19 pandemic in patients treated with biological drugs in a dermatological setting
Protocols for reviews that are	None identified
underway	
Titles/questions for reviews	None identified
that are being planned	

Type of document	Hyperlinked title
Single studies that provide	Safety and efficacy of single-dose Ad26.COV2.S vaccine against COVID-19
additional insight	Immunogenicity and safety of a SARS-CoV-2 inactivated vaccine in healthy adults: Randomized, double-blind, and placebo-
	controlled phase 1 and phase 2 clinical trials
	Phase 1 randomized trial of a plant-derived virus-like particle vaccine for COVID-19
	Effectiveness of the Pfizer-BioNTech and Oxford-AstraZeneca vaccines on COVID-19 related symptoms, hospital
	admissions, and mortality in older adults in England: Test negative case-control study
	The effectiveness of the TWO-DOSE BNT162b2 vaccine: Analysis of real-world data
	Short-term antibody response after 1 dose of BNT162b2 vaccine in patients receiving hemodialysis
	Immunogenicity of COVID-19 mRNA vaccines in pregnant and lactating women
	Impact and effectiveness of mRNA BNT162b2 vaccine against SARS-CoV-2 infections and COVID-19 cases, hospitalizations,
	and deaths following a nationwide vaccination campaign in Israel: An observational study using national surveillance data
	Antibody response to mRNA SARS-CoV-2 vaccine among kidney transplant recipients: A prospective cohort study
	Arterial events, venous thromboembolism, thrombocytopenia, and bleeding after vaccination with Oxford-AstraZeneca
	ChAdOx1-S in Denmark and Norway: Population-based cohort study
	Association between vaccination with BNT162b2 and incidence of symptomatic and asymptomatic SARS-CoV-2 infections
	among healthcare workers
	Efficacy of NVX-CoV2373 Covid-19 vaccine against the B.1.351 variant
	Interim findings from first-dose mass COVID-19 vaccination roll-out and COVID-19 hospital admissions in Scotland: A
	national prospective cohort study
	COVID-19 vaccine coverage in healthcare workers in England and effectiveness of BNT162b2 mRNA vaccine against
	infection (SIREN): A prospective, multicentre, cohort study
	Safety and immunogenicity of the SARS-CoV-2 BNT162b1 mRNA vaccine in younger and older Chinese adults: A
	randomized, placebo-controlled, double-blind phase 1 study
	Safety and immunogenicity of SARS-CoV-2 recombinant protein vaccine formulations in healthy adults: Interim results of a
	randomized, placebo-controlled, phase 1-2, dose-ranging study
	Safety and immunogenicity of an MF59-adjuvanted spike glycoprotein-clamp vaccine for SARS-CoV-2: A randomized, double-
	blind, placebo-controlled, phase 1 trial
	Proportion of SARS-CoV-2 positive tests and vaccination in Veterans Affairs Community Living Centers
	Short-term impact of nursing home SARS-CoV-2 vaccinations on new infections, hospitalizations, and deaths
	Efficacy of ChAdOx1 nCoV-19 (AZD1222) vaccine against SARS-CoV-2 variant of concern 202012/01 (B.1.1.7): An
	exploratory analysis of a randomized controlled trial
	Data and safety monitoring of COVID-19 vaccine clinical trials
	Public health impact of delaying second dose of BNT162b2 or mRNA-1273 covid-19 vaccine: Simulation agent-based
	modelling study
	Applying machine learning to identify anti-vaccination tweets during the COVID-19 pandemic
	An observational study to identify the prevalence of thrombocytopenia and anti-PF4/polyanion antibodies in Norwegian
	healthcare workers atter COVID-19 vaccination
	<u>COVID-19 vaccination scenarios: A cost-effectiveness analysis for Turkey</u>

Type of document	Hyperlinked title
	Preliminary findings of mRNA Covid-19 vaccine safety in pregnant persons
	Side-effects of BNT162b2 mRNA COVID-19 vaccine: A randomized, cross-sectional study with detailed self-reported
	symptoms from healthcare workers
	Non-life-threatening adverse effects with COVID-19 mRNA-1273 vaccine: A randomized, cross-sectional study on healthcare
	workers with detailed self-reported symptoms
	Self-reported real-world safety and reactogenicity of COVID-19 vaccines: A vaccine recipient survey
	A targeted geospatial approach to COVID-19 vaccine delivery: Findings from the Johns Hopkins Hospital Emergency
	Department
	Cost-effectiveness of COVID-19 vaccination in low- and middle-income countries
	Expanding COVID-19 vaccine availability: Role for combined orthogonal serology testing (COST)
	Pregnancy and birth outcomes after SARS-CoV-2 vaccination in pregnancy
	Optimal allocation of limited vaccine to control an infectious disease: Simple analytical conditions
	Analysis on action tracking reports of COVID-19 informs control strategies and vaccine delivery in post-pandemic era
	Survey data of COVID-19 vaccine side-effects among hospital staff in a national referral hospital in Indonesia
	Prevalence of COVID-19 vaccine side-effects among healthcare workers in the Czech Republic
	Surveillance of COVID-19 vaccination in U.S. nursing homes, December 2020-April 2021
	COVID-19 vaccine allocation: Modelling health outcomes and equity implications of alternative strategies
	Accelerated vaccine roll-out is imperative to mitigate highly transmissible COVID-19 variants
	Clinical outcomes and cost-effectiveness of COVID-19 vaccination in South Africa
	When can we safely return to normal? A novel method for identifying safe levels of NPIs in the context of COVID-19
	vaccinations
	COVID-19 vaccine prioritization in Japan and South Korea
	Vaccination against COVID-19 and society's return to normality in England: A modelling study of impacts of different types
	of naturally acquired and vaccine-induced immunity
	Potential impact of introducing vaccines against COVID-19 under supply and uptake constraints in France: A modelling study
	A simple mathematical tool to help distribute doses of 'two-dose' COVID-19 vaccines among non-immunized and partly-
	immunized population
	Safety monitoring of the Janssen (Johnson & Johnson) COVID-19 vaccine — United States, March-April 2021
	The cost of procuring and delivering COVID-19 vaccines in low- and middle-income countries: A model of projected resource
	needs
	Objectives of vaccination strategies against COVID-19
Bhuiya A, Bain T, Wang Q, Al-Khateeb S, DeMaio P, Ahmad A, Drakos A, Rintjema J, Sharma K, Matthews M, Gauvin FP, Lavis JN, Wilson MG. Appendices for COVID-19 living evidence profile #1 (version 1.7): What is known about anticipated COVID-19 vaccine roll-out elements? Hamilton: McMaster Health Forum, 28 May 2021.

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