Supporting communication for the COVID-19 vaccination program

This glossary was developed to help community organisations, translators and interpreters, bilingual workers, and community leaders to better understand and communicate words and terminology about vaccine development and implementation.

If you would like to provide feedback or add a new word or term to the list, please contact Associate Professor Holly Seale on h.seale@unsw.edu.au or +61 (02) 9385 3129.

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Disclaimer

This glossary aims to provide plain language meanings to complex immunisation and vaccine development words and terms. The information is to be used as a reference tool only.

A	DEFINITION	SIMPLIFIED DEFINITION
Adverse event (reaction)	An unexpected, unwanted, or serious reaction to a medication or vaccine.	Any unexpected or serious effect that happens after a vaccine or medicine. Something that was not expected to happen.
Adverse event following immunisation (AEFIs)	Any untoward medical occurrence that follows immunisation. It does not necessarily have a causal relationship with the vaccine	An unexpected effect that happens after vaccination. The vaccine may have not been the reason for the problem.
Advisory Committee on Vaccines (ACV)	The ACV provides independent medical and scientific advice to the Australian Government's Minister for Health and the Therapeutic Goods Administration (TGA) on issues relating to the safety, quality and efficacy of vaccines supplied in Australia including issues relating to pre-market assessment, post-market monitoring and safe use in national immunisation programs.	A group of experts that gives medical and scientific advice. The group talks to the Australian Government's Minister for Health and the Therapeutic Goods Administration (TGA). They give advice on issues about vaccine safety and use.
Antibody	A protein found in the blood that is produced in response to foreign substances (e.g., viruses) invading the body. Antibodies protect the body from disease by binding to these organisms and destroying them.	When the body gets sick or gets a vaccine, the body will make antibodies to protect it against that disease. The body can then recognise the germs when that same disease happens again.
Antigen	A foreign substance which is detected by the immune system The presence of antigens in the body triggers an immune response, usually the production of antibodies.	An antigen is needed to make an antibody. Antigens can be bacteria, viruses, or fungi that cause infection and disease.
Adjuvant	A vaccine component distinct from the antigen that enhances the immune response to the antigen.	An adjuvant is an ingredient used in some vaccines. It helps our bodies make a stronger immune response. The adjuvant works together with other parts of the vaccine. They have been used in some vaccines for over 70 years.
Anaphylaxis	An immediate and severe allergic reaction to a substance (e.g. food or drugs). Symptoms of anaphylaxis include breathing difficulties, loss of consciousness and a drop in blood pressure. This condition can be fatal	A quick and serious allergic reaction. This could be a reaction to food or medicine. Symptoms can include breathing difficulties, loss of consciousness and a drop in blood pressure. It can

	and requires immediate medical attention.	sometimes be life threatening and needs urgent medical attention.
Association	The degree to which the occurrence of two variables or events is linked. Association describes a situation where the likelihood of one event occurring depends on the presence of another event or variable. However, an association between two variables does not necessarily imply a cause-and-effect relationship. The term association and relationship are often used interchangeably	A link between one event taking place at the same time as another event. This link does not prove that one event caused the other event.
Asymptomatic	A person that is not showing symptoms	Someone that is not sick and has no signs of an infection
Attenuated vaccine	An attenuated vaccine (or a live attenuated vaccine) is a vaccine created by reducing the virulence of a pathogen but keeping it viable (or "live"). Attenuation takes an infectious agent and alters it so that it becomes harmless or less dangerous. These vaccines contrast to those produced by "killing" the virus (inactivated vaccine).	Live vaccines use a weakened (or attenuated) form of the germ that causes a disease. These vaccines are like the natural infection that they help prevent. They create a strong and long-lasting immune response.
The Australian Technical Advisory Group on Immunisation (ATAGI)	ATAGI's role is to advise the Minister for Health on the medical administration of vaccines available in Australia.	A group of experts that helps the Government on the use of vaccines in Australia.
Australian Immunisation Register	It is a national register that records all vaccines given to all people in Australia	An electronic list that records all vaccines given to all Australians.

B	**DEFINITION**	**SIMPLIFIED DEFINITION**
Batch assessment	The Therapeutic Goods Administration (TGA) ensures there is an independent quality assessment of every batch of vaccine supplied in Australia.	A process of checking the vaccines used in Australia. The Therapeutic Goods Administration will do these checks.
Boost (Booster injection)	An additional dose of a vaccine that re-stimulates the immune after the effects of an earlier dose wear off. It is not yet clear whether booster shots of a COVID-19 vaccine will be necessary.	Extra shot of a vaccine given to either build up higher levels of immunity or to make sure the immunity lasts longer.

C	DEFINITION	SIMPLIFIED DEFINITION
The Coalition for Epidemic Preparedness Innovations (CEPI)	One of the international organisations that established the COVID-19 Vaccine Global Access (COVAX) Facility. The facility enables participating governments, including lower income countries, to access safe and effective vaccines for 20 per cent of their population.	An international organisation that will help many countries gain access to COVID-19 vaccines. It will help participating governments, including lower income countries, to access safe and effective vaccines for 20% of their population.
Cell culture	A laboratory technique that can be used to make some vaccines, where cells can be grown in a nutrient-rich liquid to either I) make virus to be inactivated for inactivated vaccines, ii) make antigen for protein subunit vaccines or iii) make viral vectors.	Using cells grown in liquid to make vaccine ingredients.
Clinical Trial	A research study in which one or more human subjects are progressively assigned to one or more interventions (which may include placebo/sham or other control) to evaluate the effects of those interventions on health-related biomedical or behavioural outcomes.	A type of research study. People either receive a new vaccine or are in a group that do not receive the vaccine (called the control group). The control group may receive a different vaccine or placebo. Participants usually do not know which group they are in. Scientists test the safety and benefits of new vaccines.
Cold chain	The system of transporting and storing vaccines within the safe temperature range. This is normally between +2°C to +8°C.	Shipping and storing vaccines at the correct temperature.
Combination vaccine	A product containing components that can be divided equally into independently available routine vaccines.	Combination vaccines take two or more vaccines that could be given individually and put them into one shot.
Convalescent plasma	Blood plasma that is obtained from an individual who has recovered from an infectious disease and contains antibodies against the infectious agent of the disease and may be administered by intravenous transfusion to prevent or treat infection in other individuals.	The liquid part of blood (known as plasma). It is collected from a person after they have had an infection. The liquid contains antibodies against the germ. Sometimes this plasma can be given to other people to prevent them getting sick or to help them get better.
Conjugate vaccine	A vaccine made by chemically linking a protein molecule with a	The joining together of two compounds (usually a protein

	tiny sugar compound. The sugar compound comes from the cell coating of the bacteria. This improves the person's immune response to the vaccine. Example: Meningococcal vaccine	and polysaccharide) to increase a vaccine's effectiveness.
Control group	A control group is an untreated research sample against which all other groups or samples in the research is compared. A control group is constructed by randomly assigning people to either the control group or to one or more "treatment" groups.	A group of people who do not receive the vaccine or drug being tested. Instead, they may get the normal intervention (drug, vaccine, or treatment), a placebo or nothing. The aim of the trial is to compare what happens in each group. The results must be different enough between the two groups to prove that the difference has not just occurred by chance. A placebo is a 'dummy' treatment, such as a sugar pill, that looks the same.
Contraindication	A condition in a person wanting to be vaccinated that increases the risk for a serious adverse reaction.	An illness (or health condition) that increases the risk for a serious adverse outcome.
COVAX	COVAX is co-led by Gavi, the Coalition for Epidemic Preparedness Innovations (CEPI) and World Health Organisation (WHO). Its aim is to accelerate the development and manufacture of COVID-19 vaccines, and to guarantee fair and equitable access for every country in the world.	An international partnership that aims to support the development and delivery of the COVID-19 vaccines fairly around the world.

D	**DEFINITION**	**SIMPLIFIED DEFINITION**
Deltoid	A muscle in the upper arm where vaccines are usually administered given.	A muscle in the upper arm where vaccine is given
Dose	A quantity of a medicine or drug taken or recommended to be taken at a particular time.	An amount of a medicine or drug taken
Dosing error	When medications are administered in the wrong amounts, at the wrong frequency or to the wrong person	When medicines are given in the wrong amount, at the wrong time or to the wrong person

E	DEFINITION	SIMPLIFIED DEFINITION
Efficacy	The performance of an intervention under ideal and controlled circumstances in a clinical trial.	How well a vaccine works during a research study
Effectiveness	The extent to which a drug achieves its intended effect in the real-world setting.	How well a vaccine works in the real world.
Epidemic	A term used when the number of new cases or a disease – in a particular population, at a particular time – substantially exceeds what would be expected.	A widespread amount or rapid increase of an infectious disease in a community at a particular time. More cases than normal.
Elimination of infection	Reduction to zero of the incidence of infection caused by a specific agent in a defined geographical area. Example Measles in Australia	Zero cases of an infection in a specified geographic area (i.e. a country). Example: Measles in Australia
Eradication	Permanent reduction to zero of the worldwide incidence of infection caused by a specific agent as a result of deliberate efforts. Example includes smallpox	Zero cases of the germ in the entire world. Example: Smallpox

H	DEFINITION	SIMPLIFIED DEFINITION
Herd immunity	This is a type of infection control that occurs naturally, or through immunisation programs, when a large enough portion of a population becomes immune to a disease to stop further spread. Immunity may be either by recovering from the disease or by being vaccinated against it. In the case of COVID-19, the possibility of herd immunity remains unclear due to the uncertainty of long term immunity to this virus.	When most people in a community have protection against an infection. High levels of protection make it more and more difficult for the germ to pass from person to person. This can successfully stop the spread of disease in the community.

I	DEFINITION	SIMPLIFIED DEFINITION
Immune system	The complex system in the body responsible for fighting disease. Its primary function is to identify foreign substances in the body (example: viruses). Then it develops a defence against them. This defence is known as the immune response. It involves production of protein molecules called antibodies	The body's system for identifying and killing germs to protect us against infection and disease. It involves making antibodies that move in the blood, recognize foreign substances like bacteria and viruses, and attach to them. It signals to the body to get rid of the foreign substances.

	to eliminate foreign organisms that invade the body.	
Immune response	The immune response is how your body recognizes and defends itself against bacteria, viruses, and substances that appear foreign and harmful.	The immune response is how your body recognizes and defends itself against bacteria, viruses, and substances that appear foreign and harmful.
Immunity	Immunity is the ability to resist illness when exposed to a disease. There are several ways to develop immunity. Active immunity is the result of being exposed to a disease, or vaccine for a disease. The exposure prompts your immune system to produce antibodies that help your body resist infection. If you re-encounter the disease your immune system's 'memory cells' will swiftly reproduce those antibodies which should protect you from that disease. Passive immunity occurs when a person receives antibodies belonging to another person (see plasma), or naturally when an infant absorbs their mother's antibodies from the placenta or via breast milk. This type of immunity does not last for a long time, because the person's own immune system was never activated and so their body did not produce its own protective antibodies.	Being able to avoid getting sick or avoid getting infected when exposed to a germ. Your body builds this immunity by either being exposed to the gems or by getting a vaccine. Your immune system has a "memory"- it can remember germs that it has seen previously.
Immunisation	The process of being made immune or resistant to an infectious disease, typically by the administration of a vaccine. It implies that you have had an immune response.	The process of developing immunity to an infection, usually by getting vaccinated.
Inactivated vaccine	A vaccine made from viruses and bacteria that have been killed through physical or chemical processes. These killed organisms cannot cause disease.	A vaccine made from a germ that has been killed. The germ is killed either by high heat or by chemicals. When this killed germ is injected into your body, it helps your immune system learn to find the germ, without the risk of getting sick.

L	**DEFINITION**	**SIMPLIFIED DEFINITION**

Lipid	Essentially a type of fat. Lipids are being used to make a protective bubble around mRNA in mRNA vaccines to prevent it from being broken down before it enters a cell.	Lipid is fat that is used to make a protective bubble around the mRNA in mRNA vaccines. mRNA is very weak and breaks down quickly in the body if it is not protected. Once the mRNA is transported into the cell, it is broken down inside the cell.

M	**DEFINITION**	**SIMPLIFIED DEFINITION**
Messenger RNA (mRNA)	An RNA produced by transcription that carries the code for a particular protein from the nuclear DNA to a ribosome in the cytoplasm and acts as a template for the formation of that protein.	A type of small molecule that your cells use as instructions to make protein. mRNA tells your cells how to put together a specific protein using the building blocks (called amino acids). You have many millions of mRNA molecules in your body at any one time- all being used to make proteins.
mRNA vaccine	Contain material from the virus that causes COVID-19 that gives our cells instructions for how to make a harmless protein that is unique to the virus. After our cells make copies of the protein, they destroy the genetic material from the vaccine. Our bodies recognize that the protein should not be there and build T-lymphocytes and B-lymphocytes that will remember how to fight the virus that causes COVID-19 if we are infected in the future.	mRNA vaccines teach our cells how to make a harmless protein—or even just a piece of a protein. This protein triggers an immune response inside our bodies. That immune response, which produces antibodies, is what protects us from getting very unwell if the real virus enters our bodies.
Morbidity	Morbidity is the state of having a specific illness or condition.	Illness that happens due to a specific infection or condition.
Mortality	The number of deaths that have occurred due to a specific illness or condition.	Deaths that happen due to a specific infection or condition.
Multi-dose vial	Multi-dose vials contain more than one dose of a medicine/vaccine in a single vial. Vial: a small container, typically cylindrical and made of glass, used especially for holding liquid medicines.	The containers (vials) hold more than one dose of a medicine or vaccine in a single vial.

N	DEFINITION	SIMPLIFIED DEFINITION
Neutralisation	One way that our immune system can protect us from infection is neutralisation, where our immune cells make a protein called an antibody that coats the virus and prevents it from getting into our cells. They also help other parts of the immune system recognise and destroy the virus.	One way that our immune system can protect us from an infection. Our immune system makes antibodies that stick all over the surface of a virus. When the virus tries to stick onto our cells, the antibodies get in the way and stop the virus from getting into our cells. They also help other parts of the immune system recognise and destroy the virus

P	DEFINITION	SIMPLIFIED DEFINITION
Pandemic	Worldwide spread of a new disease, such as a new influenza virus or the coronavirus, COVID-19.	Spread of a new disease to every country around the world.
Pathogen	An agent of disease such as a virus or bacterium.	A germ that can cause disease if you are infected, such as a virus
Peer-review	A process where independent scientists examine findings from a study and determine if the work has been performed well and the findings are supported by the data.	Independent experts examine other people's research to make sure it is appropriate and correct.
Placebo	A substance or treatment that has no effect on human beings.	A substance or treatment that has no effect on human beings.
Polysaccharide vaccine	Vaccines that are composed of long chains of sugar molecules that resemble the surface of certain types of bacteria. Polysaccharide vaccines are available for pneumococcal disease.	A vaccine containing long chains of sugar molecules, which look like the surface of some kinds of bacteria. Polysaccharide vaccines are available for pneumococcal disease.
Pre-Clinical Trial	A research study that is done prior to a Clinical Trial using cells or using animals to test whether a vaccine is promising enough to be evaluated with human volunteers.	A research study done before a clinical trial. The study tests whether a vaccine is safe to test on humans. As part of the COVID-19 trials, animal models included experiments on animals including mice and macaques.
Prime	The first time a vaccine is given	The first time a vaccine is given
Protein subunit vaccine	Vaccines that include harmless pieces of a virus instead of the entire germ. Once vaccinated, our	Include harmless pieces (proteins) of the germ instead of the entire germ. Once

	immune system recognizes that the proteins do not belong in the body and begins making T-lymphocytes and antibodies. If we are ever infected in the future, memory cells will recognize and fight the virus.	vaccinated, our bodies recognize that the protein should not be there and build T-lymphocytes and antibodies that will remember how to fight the germ if we are exposed in the future.

R	DEFINITION	SIMPLIFIED DEFINITION
Roll out	Officially launch or introduce a new product or service. Australia's COVID-19 vaccine national roll-out strategy includes the following phases: 1a, 1b, 2a, 2b, 3	The introduction of a new drug or vaccine. For the COVID-19 vaccination program this includes multiple phases: 1a, 1b, 2a, 2b, 3. Priority groups are identified by considering current public health and medical evidence on who would be most affected if they got COVID-19.
Reactogenicity	the physical manifestation of the inflammatory response that develops to vaccination, and can include injection-site pain, redness, swelling or induration at the injection site, as well as systemic symptoms, such as fever, myalgia, or headache.	A group of effects that often happen after vaccination. It can include pain, redness or swelling around where the vaccine was injected. A person might feel tired, or hot or have a headache. Importantly, these are signs that an immune response is working.
Regulatory body	A government organisation that decides which vaccines are able to be registered in a country and legally supplied to people in the country.	A government organisation that decides which vaccines can be registered in a country and legally used in the country.

S	DEFINITION	SIMPLIFIED DEFINITION
SARS-CoV-2	The official name of the virus that causes the disease known as COVID-19. It is part of a bigger family of viruses called coronaviruses.	The official name of the virus that causes the disease known as COVID-19. It belongs to family of viruses called coronaviruses.
Spike protein	A glycoprotein that protrudes from the envelope of some viruses (such as a coronavirus) and facilitates entry of the virion into a host cell by binding to a receptor on the surface of a host cell followed by fusion of the viral and host cell membranes.	Coronaviruses have sharp bumps on their surface. Those bumps are called spike proteins. They help the virus enter a person's cells.

Serology	Measurement of antibodies, and other immunological properties, in the blood serum.	Measuring the level of antibodies (immune proteins) present in the blood.
Side Effect	Undesirable reaction resulting from immunization.	Any unwanted or unexpected effects of a vaccine.

T	**DEFINITION**	**SIMPLIFIED DEFINITION**
Therapeutic Goods Administration (TGA)	The TGA is responsible for assessing vaccines and other medicines before they can be used in Australia	The Therapeutic Goods Administration (TGA) is responsible for checking vaccines and other medicines before they can be used in Australia.
Transmission	The ability of a virus to pass from one person to another.	The ability of a virus to pass from one person to another.

V	**DEFINITION**	**SIMPLIFIED DEFINITION**
Vaccine	Medicines that help prepare our immune systems to defend against infection from certain diseases. Usually, vaccines are given before the person is exposed to the disease. Each vaccine stimulates the immune system to make antibodies against a particular virus or bacteria. Some vaccines provide lifelong immunity, but others may require 'booster shots' to maintain immunity.	A type of medicine that supports our immune system to fight against certain germs and prevent disease. Usually, vaccines are given before the person encounters the germ. Each vaccine promotes the immune system to make antibodies against the germ.
Vaccine Candidate	An experimental vaccine that is still being tested.	A new vaccine that is still being tested and is not licensed.
Vaccine hesitancy	Refers to delay in acceptance or refusal of vaccines despite availability of vaccine services.	When a person is unsure about a vaccine and delays or refuses an available vaccine.
Variant (mutation)	Tiny changes in the virus that can occur to the genetic information that occur during the process of replication	Tiny changes in the genetic information inside a virus. Variants can occur when a virus replicates itself.
Vial	A small container used to hold medicine	A small container used to hold medicine
Viral vector vaccine	Contain a weakened version of a live virus—a different virus than the one that causes COVID-19—that has genetic material from the virus that causes COVID-19 inserted in it	Contain a weakened version of a different virus than the one that causes COVID-19. Inside the shell of the modified virus, there is material from the virus

	(this is called a viral vector). Once the viral vector is inside our cells, the genetic material gives cells instructions to make a protein that is unique to the virus that causes COVID-19. Using these instructions, our cells make copies of the protein. This prompts our bodies to build T-lymphocytes and B-lymphocytes that will remember how to fight that virus if we are infected in the future.	that causes COVID-19. This is called a "viral vector." Once the viral vector is inside our cells, the genetic material gives cells instructions to make a protein that is unique to the virus that causes COVID-19. Using these instructions, our cells make copies of the protein. This prompts our bodies to build T-lymphocytes and B-lymphocytes that will remember how to fight the COVID-19 virus if we are infected in the future. The viral vectors themselves are changed so they can't replicate and cause disease.
Viral shedding	Viral shedding occurs when a virus replicates inside your body and is released into the environment. At that point, it may be contagious.	When the virus made inside your body starts to be released into your surroundings. At that point, it may be spread to other people.

W	**DEFINITION**	**SIMPLIFIED DEFINITION**
Waning immunity	The loss of protective antibodies over time.	When your level of immunity gets lower and lower with time.