

COVID-19 VACCINE LITERACY

TRAIN THE TRAINT

MAY 2021

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SECTION27

People's Vaccine Campaign People's Health Movement (PHM-SA) The C19 People's Coalition Health and Popular Education Working Groups Astrid von Kotze Workers' World Media Productions (WWMP) Médecins Sans Frontières (MSF) Health Justice Initiative



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GOALS OF THIS MANUAL

Against a backdrop where myths and misinformation about vaccines against Covid-19 and immunisation programmes more generally are widespread, this manual aims to put public health messaging first. In this manual, we dispel common fictions and fears about the Covid-19 vaccine.

WHY THIS MANUAL?

A proportion of South Africans demonstrate vaccine hesitancy – in other words, uncertainty about whether to take a vaccine when they become available. The UJ-HSRC survey of 10,000 people in South Africa showed that while 52% of people would definitely take the vaccine, there is a large number of people who are unsure about taking a vaccine. 15% of participants don't know if they would take a vaccine, 6% probably wouldn't take a vaccine and 12% of people surveyed definitely would not take a vaccine. Participants' main concerns included potential side effects (25%), and Effectiveness (18%) of the vaccines. Only 7% mentioned concerns relating to conspiracies, and 4% cited religious/occult issues with the vaccine.

While these numbers show an encouraging number of people willing to take the vaccine – or those who could be persuaded if they had more information – the presence of hesitancy and misinformation is still worrying to our immunisation efforts. It is possible to encourage demand for vaccines through vaccine literacy, community training and combating people's fears, particularly showing the effectiveness of vaccines and giving accurate information about potential side effects.

Vaccine hesitancy in the country is fuelled by widespread misinformation and fear-mongering, including by state officials at various levels of government. This misinformation has been spread on social media, mainstream media and in and among communities. A lack of trust in government, as well as some opportunistic quackery, has resulted in a situation where many South Africans may refuse vaccination and therefore jeopardise our attempts to achieve 'herd' or population immunity through an immunisation effort and beat Covid-19 once and for all.

WHO MADE THIS MANUAL?

Compiled by Julia Chaskalson for SECTION27 in partnership with the Covid-19 People's Coalition Health Working Group and the People's Vaccine Alliance, this manual is intended to help activists make sense of the science surrounding vaccines against Covid-19. It is written in simple language with clear, factual examples. We hope that this manual proves helpful in communicating public health messaging about Covid-19 and vaccines against the virus in communities across South Africa. Here we aim to provide a useful resource for activists to train their communities and networks.

WHO IS IT FOR?

For public health messaging to be effective, it needs to be communicated at every level of society. We have designed this manual to assist activists who work with grassroots organisations to support other national campaigns and high level messaging about vaccine literacy. This manual is written broadly for activists and community members looking to enhance their knowledge about vaccines. More specifically, this manual is designed for activist 'trainers' who can run workshops in their communities and support vaccine literacy campaigns. Activists will be training other activists and community members to combat myths and misinformation about vaccines.

This manual is based on scientifically accurate evidence that was up-to-date in February 2021. Updated information will be added periodically as more information becomes available.

TOWARDS A PEOPLE'S VACCINE CAMPAIGN: A CALL TO ACTION*



As the COVID-19 pandemic wreaks havoc in South Africa and across the globe, millions are dying and getting infected. Inoculating (vaccinating) a significant proportion of the population is the only realistic way to defeat the pandemic, globally and locally. This will require international co-operation and social solidarity, not vaccine Apartheid, nationalism and corporate profiteering. Unprecedented unity and action of all sectors of our society are of great urgency.

Our people will need to show great vigilance and social solidarity if we are to slow the rate of infection and ensure that our health facilities do not continue to be overwhelmed. Nevertheless, it is with some relief that we welcome the news that SA has managed to acquire 1,5 million doses of one of the handful of safe and effective COVID-19 vaccines for our health care workers on the front line. But this is just a start. We need millions more.

Depending on whether we use a vaccine that requires one or two doses, anywhere between 40 to 80 million doses will be needed, along with a massive roll-out effort to achieve herd immunity. This cannot be done by the government alone. We, the people, especially the millions of us who live in the direst of circumstances, must be central to this effort. Join the People's Vaccine Campaign and become active in this life and death struggle. No-one is safe until everyone is safe!

A PEOPLE'S MOVEMENT FOR THE VACCINE

Drawing on the People's Vaccine Alliance and Free the Vaccine campaigns globally, this South African call to action arises out of a broad-based demand for urgent focus on and mobilisation around equitable vaccine access and allocation. This was endorsed by over 500 organisations and individuals to date, and pushed forward by a number of leading public health, labour formations/organisations and individuals for the formation of a Peoples' Vaccine Campaign (more details to be found at the end).

There is a danger that elites, powerful or dominant medical schemes, private healthcare providers and other corporate interests will undermine access, through growing disparities in our two-tiered health care system, and exclude the voices of workers who belong to state medical schemes, all health workers, front line workers, working-class communities and civil society.

This is why we need a people's movement to fight for equitable access, equity and vaccine justice. We must be part of the (already on-going) country's discussions to shape, participate and provide oversight of and over the national vaccination roll-out programme - the details of which are still sketchy and which require greater transparency.

In recent months alone, the lack of transparency about the plans, delays in securing access to supplies (even urgent supplies), and delays in confirming financing arrangements (as yet not shared in

*Please note, this is the abridged version, for the full statement and endorsement list, visit: https://c19peoplescoalition. org.za. Over 120 organisations from across the country have endorsed this statement.

full) highlight why the role of our people, labour (especially front-line workers), civil society, social movements, communities and people's organisations will be crucial.

Our government's poor record of public service delivery, alongside corruption, cronyism and mismanagement, and the profiteering motives of business and the pharmaceutical industry even in a pandemic and in emergency situations, requires not just our oversight, but an active role in shaping and delivering a national vaccination roll-out programme.

WHY DO WE NEED A UNITED RESPONSE TO ENSURE A SAFE AND EQUITABLE AND URGENT VACCINE ACQUISITION AND ROLLOUT PROGRAMME?

There are many threats and obstacles to the procurement, roll-out and administration of a national public vaccine programme, including:

1. SA Government's Austerity Measures in a Pandemic:

The scale of the national vaccine roll-out programme will require a long overdue injection of billions of Rands into our public health system. Vaccine supplies have to be located, accessed and bought, additional nurses and other HCWs employed, equipment and storage facilities arranged or bought, and domestic and regional capabilities harnessed. Yet, the current budget framework envisages cutting the public health allocation by R10 billion (4.4%) in real terms over the next three years. In its February 2020 budget, the National Treasury already cut R3.4 billion in real terms from Public Health compared to the 2019 budget, just when the COVID-19 pandemic emerged here.

The Mid-Term Budget also included a reduction in the public service wage budget by R274 billion over the coming three years, compared to earlier budget allocations. These constant budgetary cuts impact directly on the state's capacity to deliver proper and decent healthcare and in turn, an extensive national vaccination programme. We also need better human resourcing:

- In 2018, the Presidential Health Summit acknowledged that there were 37 000 vacancies in our public health system, but this has not been addressed.
- Thousands of qualified nurses and other health professionals who have been unemployed for several years or have no job security, are ready to serve the nation now.

2. SA's Inequality: A Story of Two Unequal Health Systems

SA is the most unequal country in the world with at least 50% of our population living in poverty with mass unemployment. This is worsening daily. Half of the country's healthcare expenditure covers only about 16% of the population and the other half, about 84% of our people, mainly the poor and black working class.

The government decided on a more equitable National Health Insurance (NHI) strategy in 1997 to overcome this critical problem. However, NHI is yet to be implemented in our country. It is now urgent that it is.

The combined capabilities, capacities, and resources of both health systems, and social solidarity are crucial for the success of a Peoples' Vaccine Campaign and it is critical that this is mobilised to operate in a collaborative and coordinated manner.

The predatory and profiteering practices of the private sector and pharmaceutical industry that notoriously seek profit over people's lives must be challenged and monitored, so too bilateral partnerships between government and the private sector (PPPs) that exclude workers and civil society input and voices.

Further rampant corruption cannot be tolerated.

3. The Agreement on Trade-Related Aspects of Intellectual Property Rights

(TRIPS) is an international legal trade agreement between all the member states of the World Trade Organization (WTO). It establishes minimum standards for the regulation by national governments of different forms of intellectual property. The WTO, through TRIPS, has largely served to maintain patent monopolies even in times of a public health crisis such as the Covid-19 pandemic.

The international division of labour and the hegemony of advanced and mature capitalist economies reduce the opportunities for developing countries to improve and expand their domestic productive capacities and capabilities. Enforcement of these trade agreements has effectively prevented the ability of countries such as South Africa from challenging the global patent regime in place at present. The transfer of vaccine know-how and technology for accelerated production in the global south is also prevented.

The SA and Indian governments formally petitioned the WTO for certain provisions of TRIPS to be temporarily waived in relation to Covid-19 technologies (diagnostics and therapeutics mainly) for the duration of the pandemic until global herd immunity is achieved. The waiver is supported by poorer countries, while rich countries and the pharmaceutical industry block and oppose it. These negotiations are on-going.

4. Vaccine Nationalism and Xenophobia:

The spread of the Covid-19 reminds us that nobody is safe until everybody is safe. Despite the reality that viral infection has no borders, many countries all over the world are addressing the pandemic on a narrow, nationalist basis instead of ensuring international cooperation and solidarity that will ensure affordable and urgent access to vaccines for everyone in need.

In particular, European countries, Canada, and the USA have pre-ordered large numbers of vaccine doses which exceed the need of their own populations. Some countries are refusing to vaccinate migrants and asylum seekers or populations under their occupation.

We cannot tolerate xenophobia and any unjustified exclusion in the rollout of vaccines in South Africa and the region among priority and vulnerable groups or communities.

Similar to what the Cuban medical brigades have accomplished in combating Ebola and Covid-19, today an internationalist approach is needed.

5. Position and Treatment of Community Healthcare Workers

For the past two decades, thousands of Community Healthcare Workers (CHW's) have been recruited to supplement capacity and support our healthcare system at grassroot level. However, they have often been exploited as contracted volunteers with very low wages and little regard for their health and safety. They, and any newly recruited healthcare and frontline workers will now be required to play an important role in the vaccine rollout. Standardised high-quality training and provision of adequate PPE should be ensured for all CHWs.

They should be guaranteed job security, have permanent public sector posts and be properly remunerated.

The majority of CHWs are women who are overburdened, with precarious and insecure employment. This pandemic provides us with the opportunity to turn 'opportunity' into decent employment and livelihoods, and build and strengthen the public health system which is at strain now.

6. Gendered Disparities

Health and care are traditionally women's work in the home, community and society and affects women more severely as parents, partners and care and health workers in society. Generally, they carry the burden of the sick, protect their health and family members. Given that many women also find themselves in the informal sector as the main means for supporting single women-headed households. Continued delay in vaccine roll-out will impact severely on their lives, especially those who are already oppressed by poverty. It will also worsen their circumstances by increasing both their exposure to the virus and the impact of caring for or taking responsibility for the family in the event of infection. The heavily gendered impact of the pandemic has been unmistakable, and we cannot lose sight of this in our response; even vaccine research and production has discriminated against women, with children and pregnant women excluded.

7. Disinformation and Vaccine Scepticism

The rise of misinformation, disinformation, science denialism, anti-vaxxer sentiments and vaccine hesitancy presents a worrying picture for us and the rest of the world. SA has the largest drop in vaccination willingness in surveys carried out by Ipsos. The most recent survey results reflect only a '53% positive willingness' rate. To achieve country and global herd immunity, we need many more people to be willing to take a safe and effective vaccine. Public trust will now have to be rebuiltin the vaccine itself - and requires an urgent, widespread communication strategy and plan.

Scepticism of government, the pharmaceutical industry and of the private health sector has laid fertile ground for anti-science opportunism and fear-mongering today. Social media, including Twitter, Facebook and WhatsApp, has been targeted both by those spreading disinformation, with organised campaigns building on previously existing fault lines in our society. Politicians have used both COVID-19 and the emergence of vaccines against the disease to score points and raise their profile. Both social and traditional media operate on a business model that rewards alarmist "click bait".

Tackling disinformation and misinformation will require a multilingual public education campaign with respectful discussion, engagement & communication that cannot be reduced to government messaging.

We are building a campaign to ensure equitable access to a vaccine for everyone who needs it in South Africa. We support the People's Vaccine Alliance, Free the Vaccine Alliance, and are part of global People's Health solidarity networks. We support the call for the vaccine to be declared a 'public good'. Without widespread vaccination, we will not be able to end this pandemic.

1. BUILD PRESSURE ON THE NATIONAL GOVERNMENT

Austerity in a time of a pandemic is self-defeating, and we challenge this policy approach. There must be increased health spending to build the capacity of the national health system, and National Health Insurance (NHI) to ensure decent and equal healthcare for all in SA.

This includes full-time public sector employment for Community Healthcare Workers (CHW's) and the appointment of additional nurses. The terms and conditions of the 2018 PSCBC collective agreement should be restored and implemented. In addition, to mitigate the socio-economic impact of Covid-19 and inequality in our country, a Basic Income Guarantee (BIG) is now necessary and urgent.

2. ADDRESS TRIPS AND INTELLECTUAL PROPERTY

South Africa must establish a policy environment that promotes local and regional manufacturing and ensures that it is responsive to its socio-economic development objectives. This should include a simple to use compulsory licensing system that encourages local research, development, and production.

We support measures that seek to ensure that the WTO, rich countries and the pharmaceutical industry do not (in this pandemic) continue to enforce structural IP, patent and pricing barriers that undermine universal access to vaccines, and thereby also limit mass immunisation and in turn, global herd immunity. Otherwise, they must account for all needless and preventable deaths in this pandemic.

We insist on price regulation, control and price transparency of ALL vaccines. NDAs with drug companies must also be lifted, they are fuelling mistrust.

Vaccines must be declared a 'public good'.

3. MOBILISE CIVIL SOCIETY TO DEMAND ADEQUATE AND MEANINGFUL REPRESENTATION

We must lobby for our inclusion in various stakeholder committees and forums, nationally and locally. We can campaign and educate communities about vaccines as well as monitor implementation to call out any form of inequity, unfairness, corruption, theft, mismanagement or even inefficiencies.

Solidarity and the protection of communities' interests and people's lives must guide us in the fight against Covid-19.

4. COMBAT THE WAVE OF ANTI-VACCINE DISINFORMATION

We learnt with HIV/AIDS that disinformation, quackery and deliberate spreading of false and misleading antiscience sentiment will cost us lives. It is urgent that we address this to save lives.

This requires national information programmes, on all platforms and accessible popular education materials, research, and better communication. Lives now depend on trust-building.

The important previous and current work by many different groups and worker formations, is a means to imagine how such a campaign of collective efforts can help to mitigate this pandemic. This campaign does not set out to duplicate existing work or to replace it, but to create a network to help coordinate and collaborate all of civil society and worker formations' involvement. It is together that our voices are the strongest.

Emerging from the initial collaborative efforts of a number of committed organisations, this is a call to action for all people's organisations to be involved: Trade Unions/worker formations, CBOs, NGOs, Religious Bodies, Research institutions, health professionals, health care workers, social movements, communities and people living in both rural and urban areas - sign on and help build a public campaign that ensures vaccines reach every clinic, every hospital, every community, every school, every workplace!

Let us join together to help grow a People's Vaccine Campaign for South Africa.

For endorsement or inquiries, please contact us at: peoplesvaccinecampaign@gmail.com

And follow us here for updates:



@CovidCoalition

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OUTLINE FOR FACE TO FACE AND ONLINE COVID-19 LITERACY AND VACCINATION ADVOCACY TTT SESSIONS

(May 2021)

С

PLEASE NOTE

- 1. These outlines are not a 'recipe' but rather a suggestion for how to work in a participatory way using a popular education approach.
- 2. This outline has been developed with maximum participant engagement in mind: information needs to be 'processed' and worked with so that it becomes useful and applicable.
- 3. Times are approximate: the larger the group, the longer the time needed.

FOR THE ONLINE SESSIONS

- The third column in the workshop outline below outlines suggested activities if the workshop is taking place on-line. In there are no suggestions, then the facilitator simply follows the Face to Face activity (outlined in the second column).
- 2. It is advisable for the facilitator to work with a co-facilitator, who can deal with participants who are experiencing connectivity problems, can keep an eye on who raises their hands, alert the main facilitator to comments in the Chat etc.
- 3. Depending on who the participants are, the facilitator will need to allocate some time at the beginning to introduce them to the functions of Zoom (or whatever platform is being used), and to negotiate ground rules of participation.

THE DESIGN OF EACH ACTIVITY IS INFORMED BY 3 QUESTIONS

- 1. WHAT? Do I need to know / is the important information? = input
- 2. SO WHAT? Does it mean? = process for making sense, working together towards understanding
- **3. NOW WHAT?** Should I do with the information? = action

MATERIALS

• Covid-19 Vaccine Literacy Train the Trainer Manual (May 2021)

DAY 1

ТІМЕ	ΑCTIVITY	FURTHER NOTES FOR ONLINE FACILITATION	
9:30	Welcome participants : and ask all to briefly introduce themselves (name and where they come from)	If large numbers, participants can introduce themselves on Chat	
	Follow the 'Basic Introductory session' on page 24.	Participants unmute. Anyone can answer	
	Refer to ' <i>glossary</i> ' (page 12) with translations	Ask Bingo-questions related to language: » 'Explain vaccine'	
	Write up questions arising from 'unpacking' on flipchart Use the questions to outline the two sessions (Day 1 and 2)	"	
		Ask participants to write into chat: foremost questions they have about vaccinations	
10:00	Brief plenary discussion on the human rights framework (p 22):	In this and further plenary sessions,	
	Ask: "Everyone is entitled to access to vaccines. True or false? What if people don't want to be vaccinated?	encourage participants to use the on-line "raise your hand" function, in order to ensure that everyone gets a	
	Ask: "Have you been vaccinated? Have you ever taken a child for vaccination? Why? What happened?"	chance to speak.	
	Point out: in last 100 years several vaccines helped to eliminate disease – eg small pox and polio		
10:10	Plenary input: COVID -19'Infection and response		
	Give a detailed explanation of the images on posters (p 79-95) » What happens when Covid-19 enters the body? (p 84) » How the body responds (p 85)	Prepare a presentation; share your screen with the images of the posters.	
	» How do vaccines work? (p 86)	Refer to /read pages 32-36) for added information.	
	Ask: are there any questions of clarification?		
	Prepare to allocate participants to groups of 3 members each	Allocate participants to groups of 3 using the 'Breakaway Rooms'	
	 Give group work instruction: Your task is to explain infection, response, vaccination in your own words, using the images on the posters 	function.	
	 » In your group, each member takes 1 poster and prepares a short presentation / explanation. 		
	» The other 2 members give feedback/ ask questions		
	You have 15 minutes to prepare, and 5 mins each for presentations		
11:00	Body break		
11:10	Plenary <i>report-backs</i> from groups		
	Ask: What happened? What were the difficulties, uncertainties?		
	Facilitate brief sharing of experiences, followed by questions / answers		

11:30	Herd Immunity	Briefly, introduce the concept of
	Conduct ' Session 4 ' in the manual (page 37) <i>Group work: practice</i> Allocate participants to groups of 3 members each. Instruction: in groups of 3 practice explaining / demonstrating / illustrating herd immunity. Be creative – use symbols/drawing /	 'herd immunity'. Show a short video: <u>https://www.youtube.com/</u> <u>watch?v=tC47JjakPSA</u> Questions / answers Allocate participants to groups of 3 Groups to practice using the image on herd immunity in '<i>Session 4</i>'
	acting to explain!	(page 37) as a teaching tool.
	You have 20 minutes.	
12:00	Brief report-backs : what happened? What questions remain?	
12:20	Evaluation: refer to list of questions participants raised at the start	
	Round robin: one word to describe the session - Close	
12:30	Close	
HOMEWORK:		

• Collect arguments put forward against vaccinations! What are some of the things people say for why they do NOT want to get vaccinated?

• Read page 60 of your manual. Make notes on the meaning of the following 5 words: patent; intellectual property; Big Pharma; TRIPS; generics

DAY 2

ТІМЕ	ΑCTIVITY	FURTHER NOTES FOR ONLINE FACILITATION
9:30	Welcome	
	Brief review of day 1: what was the most striking / surprising thing you learned?	Encourage feed-back from day 1 either verbally or through 'chat' notes
	Ask: are there any remaining questions of clarification?	
9:45	Vaccine hesitancy (page 5)Encourage participants to put the	
	Ask for volunteers to report on their 'homework': arguments against getting vaccinated.	responses in Chat, if they don't get a chance to respond verbally.
	For each one, ask participants to brainstorm: how would you respond? Collect suggestions!	
	Ask: what are the consequences of people who refuse to be vaccinated?	
10:15	Refer to page 61 of the manual: 'The TRIPS waiver proposal'	
	In plenary, ask participants to volunteer explanations of the words identified in the overnight reading. Make sure that everyone understands these technical words.	Participants can share their responses in chat.

	 » Select 2 volunteers to represent India and South Africa » Once the role play has ended, open for comments from 	Debate and responses happen in plenary.
	» Once the role play has ended, open for comments from other participants. Introduce the idea of a "TRIPS Waiver	plenary.
	Campaign" » Read out <i>Towards a People's Vaccine Campaign (page 60)</i> Discuss briefly.	
11.30	Allocate participants to groups of 3 – 4. Each group to prepare a poster, that can popularize the demand for a 'TRIPS WAIVER'. The poster can be roughly made, but must make clear why the majority of people in the world need to make this demand. Share the posters in plenary	One participant in each breakaway room undertakes to draw the poster as discussion proceeds. Then each group takes a photo of their poster and sends it to the facilitator to share on the on line platform (or alternatively on a WhatsApp group).
12:00	Frequently asked questions – revision and practice	
	Allocate participants to groups of 3.	
	Select 2-3 <i>FAQs</i> from the manual (pages 66-70) for each group. In groups, participants practice responding to the questions in their	Allocate participants to groups of 3 in breakaway rooms
	own words. (Refer to manual for answers)	
12:15	Evaluations (manual page 71)	

GLOSSARY (USEFUL WORDS EXPLAINED)

A		
	Active pharmaceutical ingredient (API)	The main substance or ingredient in a medicine that treats, prevents or diagnoses a disease.
	Adenovirus	A group of viruses first found in adenoid tissue, which aren't harmful or dangerous to human beings. Scientists sometimes use adenoviruses as a special envelope or 'vector' to introduce a vaccine into your body.
	Administer	To give/deliver a medicine into the body. A vaccine is administered by a healthcare professional through a syringe, or in some cases, drops you put in your mouth.
	Adverse effects	Moderate to severe side effects associated with taking a medicine or vaccine.
	Anaphylaxis / Anaphylactic shock	A very extreme allergic reaction to a venom, food, or medication. This can be potentially life threatening. Anaphylaxis can cause a shock to the body, and symptoms can include skin rash, nausea, vomiting, difficulty breathing and shock.
	Antibodies	Your immune system produces antibodies – proteins made in the blood – to fight off illnesses like Covid-19. If your immune system is the soldiers of the body, antibodies are the special weapons or spears they use to fight off viruses and infections. Different antibodies are needed to attack different viruses. It can take a few days for your body to develop the right type of antibody.
- I	Asymptomatic infection	An infection without symptoms; no signs of illness.
B	Bacteria	Bacteria, also called germs, are microscopic organisms not visible with the naked eye. Bacteria are everywhere, both inside and outside of your body. Bacteria can live in a variety of environments, from hot water to ice. Some bacteria are good for you, while others can make you sick.
۲l	Bureaucratic	A system of government where many important decisions are taken by state officials rather than by elected representatives. Bureaucratic systems often involve a lot of paperwork and administration.
9	Candidate vaccine	A vaccine that is being trialled or tested – one that has not been regulated or approved for use in people yet because experiments are ongoing.
	Clinical trial	A clinical trial tests the effectiveness and safety of medications, vaccines or medical devices by monitoring their effects on large groups of people. There are several phases to clinical trials, and only the last few phases involve testing medicines on human beings. Clinical trial results are checked by independent experts.
	Communicable	a disease that spreads from one person or animal to another. Some bacteria and viruses can cause communicable diseases. Other diseases – that do not spread from person to person, like diabetes or hypertension – are called 'non-communicable'.
	Comorbidity	Comorbidities are when multiple medical conditions coexist and interact with each other. In the context of COVID-19 it refers to existing chronic diseases – like cardiovascular diseases, diabetes or hypertension, to name a few – that could put people at a higher risk of developing complications if they are infected with the Corona virus.
	Congregate settings	This is an environment where a number of people reside, meet or gather in a confined/ closed setting for either a limited or extended period of time. Eg: old-age homes, care homes, workplaces, schools, prisons, etc.

Contagious	A disease is contagious when it can spread from person to person. Different diseases are more or less contagious. Measles, for example, is very contagious – one person with mumps can spread it to up to 18 other people. Other illnesses are comparatively less contagious.
Contract	To catch or develop a disease – you can contract Covid-19, for example, by breathing in the droplets of someone who is infected with the virus.
Contra-indications	Based on an individual's risk level, pre-existing medical conditions or medication taken, contra-indication refers to a specific situation where a medicine, procedure, or surgery should not be used because it may be harmful to that individual. Some medicines might be contra-indicated (not recommended) if you are on anticoagulants to prevent blood clots medications, for example.
Control group	In any medical experiment or trial, scientists compare what happens when you give an active medicine to one group to what would happen to a group if no active medicine was given to them. The group that did not receive the active medicine are called the 'control group'. They form the basis for the comparison. The control group in an experiment is used as a benchmark against which other test results are measured. The difference between the control group and the group who got the treatment tells you whether a treatment or vaccine is effective.
Covax	COVAX stands for the COVID-19 Vaccines Global Access Facility. COVAX is a <u>global</u> <u>collaboration</u> for speeding up the development, manufacture and equitable distribution of new vaccines, led by the World Health Organisation.
Covid-19	Covid-19, also known as the Corona Virus or SARS-CoV-2, is a mild to severe respiratory illness caused by a virus. This is spread mainly through close contact with infected respiratory droplets, or with objects or surfaces contaminated by the virus. Symptoms include fever, cough, and shortness of breath and may continue to pneumonia and respiratory failure.
Data	Facts, evidence and statistics.
Diagnosis / Diagnose	To identify or recognise a disease by its signs and symptoms is to diagnose a disease. If you test positive for Covid-19, you have a positive diagnosis for the virus.
DNA	deoxyribonucleic acid: the microscopic chemical which controls the structure and purpose of each cell and carries genetic information.
Dose	A quantity of a medicine, vaccine or drug taken or recommended to be taken at a particular time. Some vaccines against Covid-19 require two doses spread out a few weeks a part to help your body build immunity. Different people and infections may require different doses.
Drug resistance	The ability of bacteria to withstand a drug that once stalled them or killed them – as bacteria mutate, they become stronger against medicines that used to be able to fight them. If you don't finish a course of antibiotics, some bacteria left in your system can survive and then become stronger than that drug in future. Eg: Drug Resistant tuberculosis cannot be treated with the same antibiotics as other strains of the bacteria.
Effective	Successful in producing a desired or intended result. We say a vaccine is "effective" when it creates immunity against a virus or bacteria.
Efficacy	The ability to produce a desired or intended result. The "efficacy" of a vaccine is its ability to prevent illness and create immunity against a virus or bacteria.
Enrol	Inviting and registering volunteers to be part of a clinical trial – ordinarily it takes several months or years to find enough people who fit the right requirements to "enrol" in a vaccine trial.
Evidence	Facts or information which tell you whether an idea or belief is true or valid.
Experiment	An operation or procedure carried out by scientists under controlled conditions in order to discover or investigate something unknown; to test or establish a hypothesis.
Exposed/exposure	When you first encountered or came into contact with a disease/virus/bacteria. Healthcare workers are exposed to infectious diseases every day through their work. If you have had exposure to a contagious disease, you may contract it and become sick – depending on the length and type of exposure.

Flattening the curve	To spread out the rate of infection so as to not overwhelm our healthcare system and infrastructure. By extending the period of how many people get sick, over time, patients can get the treatment they need because hospitals and other resources will not be exhausted. By practicing protective "non-pharmaceutical" measures like social distancing, wearing masks and washing hands, we can flatten the curve and slow the speed of the spread of infection.
First wave	The first peak or surge of Covid-19 infections. The National Institute for Communicable Diseases estimates that this happened in South Africa in the week between 5-11 July 2020, where daily case numbers of Covid-19 peaked at around 13,000 new diagnoses every day. Number of positive cases and deaths increase in a "wave" of a viral outbreak.
Herd immunity	Also known as 'population immunity', herd immunity is the indirect protection from an infectious disease that happens when enough people are immune to the disease, either through vaccination or previous infection. If large numbers of people are immune, the virus cannot move from person to person and the outbreak is controlled. If enough people are immunised, there is a lower chance that the virus can spread and infect a person who is not immune or someone who is particularly vulnerable.
Immune memory	Immune or immunological memory is the ability of the immune system to quickly and specifically recognize a bad virus or bacteria that the body has previously encountered, and start an immune response to fight it.
Immune response	Is the way in which your body recognizes and defends itself against bacteria, viruses, and substances that appear foreign and harmful.
Immune system	Is a complex network of cells, tissues, organs, and proteins that defends the body against infection. The immune system keeps a record of every germ/bacteria/virus it has ever defeated so it can recognise and destroy it quickly if it enters the body again. We say the immune system has a memory.
Immunisation	Is the process where a person is made immune or resistant to an infectious disease, typically by the administration of a vaccine.
Immunity	When your immune system has a memory and the right antibodies to fight off a particular virus or infection, you have immunity against it. Immunity is the state of protection against an infectious disease. You can develop immunity from being infected with a disease and recovering from it, or by being vaccinated.
Immuno- compromised	Having a weakened immune system. People who are immunocompromised have a reduced ability to fight infections and other diseases. This may be caused by certain diseases or conditions, such as poorly managed AIDS, cancer, diabetes, malnutrition, and certain genetic disorders.
Incubate	Before you get symptoms of a particular illness, the bacteria or virus that causes it 'incubates' in your body. Before you show symptoms, the virus is growing and spreading in your cells.
Infectious	Contagious/catchy – capable of making an infection.
Inoculation	Another word for vaccination or immunisation – the process where you become immune to an infectious disease.
Interaction	Some medicines have effects on each other, or may counteract each other. This interaction may cause some side effects, or limit the effectiveness of a particular drug. We say then that the medicine may have an interaction with other treatments.
Laboratory	A place equipped for experimental study in a science or for testing and analysis a research laboratory broadly.
Mandatory	Required by a law or rule: obligatory/compulsory.
Microscopic	Something so small that you cannot see it with the naked eye – something you can only
	see through a microscope. Bacteria and viruses are microscopic, for example.

mRNA	Messenger ribonucleic acid or Messenger-RNA: these are genetic instructions that all cells have in order to make certain proteins. mRNA is very fragile and small, and as soon as it has sent the message of instructions to your cells, it disintegrates. It does not stay in your cells for very long and does not change your genetics – it only teaches your cells how to make a particular protein or material.
Mutations	Changes to the genetic structure of an organism or virus which can result in changes to how it works. All viruses mutate over time, either because of changes to the environment or because when the virus is replicating (reproducing) there may be mistakes or changes in the copying of the genetic sequence. Sometimes this makes the virus stronger, sometimes it makes it weaker. In the case of Covid-19, mutations in the genetic sequence of the virus have made it more contagious. Because this version of Covid-19 is so different, we call it a variant.
Myths	A widely held but false belief or idea. There are many myths – otherwise known as fake news or fictions – about Covid-19 and vaccines.
NDOH	National Department of Health.
Non-pharmaceutical interventions	Measures that every individual can take that do not involve medicine to prevent the spread of infections – like washing hands, wearing masks and practicing physical distancing in public spaces.
Organism	A living thing. This includes humans and animals, but also smaller life forms like bacteria, viruses. Some organisms, like humans, have thousands of cells – we call these multicellular organisms. But other organisms are made up of only one cell – we call these unicellular organisms.
Pandemic	A pandemic is an outbreak of an infectious disease that has spread across a large region, fo instance multiple continents or worldwide, affecting a large number of people.
Pathogens	A pathogen is a bacteria or virus that can cause disease.
PCR test	Polymerase chain reaction test – the most common form of testing whether you have Covid-19 or not. This test detects whether you have any genetic material that is specific to Covid-19 in your body. It can detect the virus within days of infection, even for people who have no symptoms. This test uses a swab to take a sample from your nose or throat. The test can be done in a clinic, hospital, laboratory or even in your car.
Peer review	The process where scientists who were not involved with the trial – or who are independent experts – check test results for a scientific study is called peer review. This is a way of making sure that the results of an experiment/trial/study are accurate.
Person or patient under investigation (PUI)	Someone who has been screened for Covid-19 and may have been exposed to the virus; a person who needs to be tested for Covid-19 to confirm whether or not they actually have it
Phase 1 of a clinical trial	(Also written as Phase I). The first part of a clinical trial which involves a small number of human beings to test whether a medicine or vaccine is safe and effective. Between 20 to 80 healthy people without other illnesses volunteer to be part of a scientific trial for a medicine or vaccine in Phase I. They are given the candidate vaccine in safe settings like a hospital so that just in case anything bad happens to them, doctors can help them recover.
Phase 2 of a clinical trial	(Also written as Phase II). Once early evidence from Phase I shows that the medicine is safe and effective, more people are "enrolled" into a clinical trial. We call this Phase II. In Phase II, several hundred people volunteer to be part of a scientific trial for a medicine or vaccine. This is done to determine whether the vaccine or medicine is safe and effective for even more people, including people with controlled health conditions like well-managed diabetes for example.
Phase 3 of a clinical trial	(Also written as Phase III). In Phase III of a clinical trial, thousands of people volunteer to participate in the trial. This checks that a vaccine or medicine is safe and effective for even more people, including people with different health challenges.

	Phase 4 of a clinical trial	Once a medicine is approved by experts, and starts being used across the country, the company who produces the medicine must keep track of if there are any side effects or risks with the medicine and do ongoing research about it. This is also written as Phase IV.
	Placebo	In a clinical trial to test a vaccine, some people are given the real, active vaccine and other people are given a syringe that has no active medicine in it – the control group. The control group is usually given saline, which may look like a real vaccine but is actually just water and salt. Scientists compare what happens to people who get the vaccine to people who got the inactive placebo. Participants in a trial do not know whether they have the active vaccine or the placebo. In the Covid-19 vaccine trials, people who received a placebo instead of the vaccine got Covid-19 more easily and frequently than those who got the vaccine.
	Population immunity	Also known as herd immunity', population immunity is the indirect protection from an infectious disease that happens when enough people are immune to the disease, either through vaccination or previous infection. If large numbers of people are immune, the viru cannot move from person to person and the outbreak is controlled. If enough people are immunised, there is a lower chance that the virus can spread and infect a person who is not immune or someone who is particularly vulnerable.
	PPE	Personal protective equipment (PPE), is equipment worn to minimize exposure to hazards that cause injuries and illnesses. Masks are part of PPE.
	Protein	Large molecules composed of one or more chains of amino acids – a small part of a virus o bacteria.
		Proteins are required for the structure, function, and regulation of the body's cells, tissues, and organs. Each protein has unique functions. Proteins are essential components of muscles, skin, bones and the body as a whole.
J	Public health	Public health is the science of protecting and improving the health of people and their communities. This work is achieved by promoting healthy lifestyles, researching disease and injury prevention, and detecting, preventing and responding to infectious diseases. Overall, public health is concerned with protecting the health of entire populations.
	Quarantine	A strict isolation imposed to prevent the spread of disease.
	Replicate	When a virus is spreading in your body, it is replicating – the reproduction and copying of virus across cells in your body.
	Reproductive number (R0)	Is a mathematical term that indicates how contagious an disease is. For example, if a disease has an R0 of 18, a person who has the disease will transmit it to an average of 18 other people. Those people can infect it to 18 other people too, and so the cycle continue The spread will continue if no one has been vaccinated against the disease or is already immune to it in their community.
	Rolling review	A rolling review is one of the tools that a regulatory authority like SAHPRAH uses to speed up the assessment of a promising medicine or vaccine during a public health emergency. Evidence from more than one phase of a clinical trial can be reviewed at the same time while the experiment continues.
	SAHPRA	South African Health Products Regulatory Authority
	Saline	A solution of salt in water.
	Screening	Screening is a series of questions asked to determine a person's risk of infection for a particular disease. Screening for Covid-19 includes a temperature check, questions about symptoms being experienced, travel history in recent weeks, and exposure to someone who has been confirmed to have COVID-19. If your responses do not meet certain requirements, you become a Person or patient under investigation (PUI)
	Second wave	A 'second wave' is defined as a new wave of infections lasting one or more days, starting after the 'end of the first wave'. In South Africa, this hit at around 10 December 2020 where the total new daily Covid-19 cases identified was 6079. This grew to 17,710 new cases of Covid-19 identified on 30 December 2020. Number of positive cases and deaths increase i a "wave" of a viral outbreak.

It involves limiting contact with public places, relatives, friends, colleagues, and public transport. Social distancing The practice of maintaining a greater than usual physical distance (such as 1.5 meters or more) from other people. Avoiding direct contact with people or objects in public places during the outbreak of a contagious disease in order to minimize exposure and reduce th spread of infection. Susceptible Being particularly vulnerable to an infection or health condition. A person is susceptible i they are predisposed or sensitive to a particular health challenge, or lacking the ability to resist an infection. Symptoms Physical or mental signs of an illness. The most common symptoms of COVID-19 are fever, dry cough, and tiredness. Other symptoms that are less common and may affect some patients include loss of taste or smell, aches and pains, headache, sore throat, nasal congestion, red eyes, diarrhoea, or a skin rash. Transmission Is the passing/spreading of a disease from an infected individual or group to a previously uninfected individual or group. Transmit Cause (something) to pass on from one person or place to another. Eg: COVID-19 Trial A test or experiment, usually conducted under specific conditions. Vaccine A vaccine is a type of medicine used to prevent diseases caused by viruses – also called these diseases. Viraid liseases – like measles, mumps, chickenpox, liver cancer, Cervical Cancer and now Covid-19. These diseases can spread from person to person. Vaccines help prevent the spread of these diseaseses. Vaccine hesita		
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WHO World Health Organisation.	Vulnerable	A person in need of special care, support, or protection because of age, disability, or risk of abuse or neglect.
	who	World Health Organisation.

STANDARD OPERATING PROCEDURES FOR WORKSHOPS DURING COVID-19



Wherever possible, it is safest to run online or Whatsapp workshops during this time. But where these are not possible, face-to-face workshops can happen under the latest health and safety guidelines.

THE FOLLOWING CONDITIONS NEED TO BE MET FOR FACE-TO-FACE WORKSHOPS

- ☑ Participants must understand the potential risks of travelling to and attending face-toface workshops. Participants must be informed of these risks and be willing to follow the following conditions.
- ☑ The physical space where the workshop is held must be controlled by the workshop trainer, and not dependent on a third-party. People shouldn't be permitted to walk in and out, or join the workshop, unless they were invited to be there.
- ☑ The physical environment must be sanitised before and after the workshop. Sanitise all frequently touched surfaces in the interview venue with sanitizing solution of at least 70% alcohol and sanitise the chair back and side and table surface (if applicable).
- ☑ The physical environment must be well-ventilated. Open doors and at least two windows but keep a limit on how many people are in the space.
- ${\ensuremath{\boxtimes}}$ The space must not be filled to more than 50% capacity.
- ☑ Physical distancing of at least 1.5m between all participants must be maintained during the workshop. If necessary, place tape on the floor to indicate where the participants should sit and where the trainer will sit.
- ☑ All participants, including the trainer, must wear face masks covering your mouth and nose to the workshop.

- A register capturing the personal details and physical temperature of all participants, including the trainer, must be filled in prior to the workshop to allow for contact tracing if needed.
- ☑ All participants, including the trainer, must be screened for Covid-19 upon entering the workshop space. If any symptoms are identified, that participant must not be allowed to join the space.
 - » Record temperature using infra-red thermometer
 - » Screening questions
 - Do you have a high temperature?
 - Do you have a cough?
 - Do you have a sore throat?
 - Do you have difficulty breathing (shortness of breath)
 - Can you taste food and drinks normally?
 - Can you smell normally?
 - Have you had close contact with someone suspected to have COVID-19 or has been diagnosed positive with COVID-19?
 - » Record in register
 - Temperature reading
 - - $\sqrt{}$: for all answers NO
 - X : for >1 answer YES
 - If the answer to all the questions is "No", the session will end and the participant can enter the workshop. The information should be recorded on the register i.e. record temperature and $\sqrt{}$ for all answers NO
 - NB. If the temperature taken is 38'C or higher or any 1 of the questions are answered "yes" the learner will become a "person under investigation" (PUI) and must be referred for triage and possible testing (record temperature and X for >1 answers YES).
 - » All participants who have been screened successfully must wash their hands with soap and water or sanitise upon entering the workshop.
 - » If either participant or trainer cough or sneeze, they must do so into their elbow, even if they are wearing a mask.
 - » Trainers must be provided cloth masks and portable bottles of sanitiser for all workshops. Where running water is available at workshop venues, soap and disposable paper towels to clean hands as an additional measure should be provided. The trainer will also have sanitizing solution and clean cloths for the cleaning of surfaces. Any cloths used for cleaning of surfaces should be placed in a plastic bag for disposal afterward. The trainer should sanitise their hands after completing any wiping down of surfaces.



Keep up to date with the latest regulations and alert level here: www.gov.za/covid-19/ about/alert-level-3during-coronaviruscovid-19-lockdown#

VACCINE LITERACY SURVEY

|--|

Date:_____

Place:_____

Gender:_____

Age:_____

Your feedback is very important to us. It will help us know whether the workshop has achieved its objectives, been useful to you and whether we can improve it in any way. Please take a few minutes to tell us how you have found it.

SECTION A: BEFORE THE WORKSHOP:

1

Before we begin, what do you think about the following statements?
 Please tick ONE column that applies to you for each statement (using a 3 point rating scale where: agree = full understanding/yes; neutral = partial understanding/maybe; and disagree = no understanding/not at all)

	AT THE BEGINNING OF THE WORKSHOP		
STATEMENT	Agree	Neutral	Disagree
a. I know how the 'immune system' works.			
b. I understand how vaccines work.			
c. I understand what 'herd or population immunity' is.			
d. I am worried that the vaccines against Covid-19 are not safe.			
e. I feel confident to teach friends, family, and others about vaccines & Covid-19.			

2. Do you have any questions about vaccines against Covid-19? What types of questions do people have in your community/family?

3. What are your goals today? What would you like to learn or achieve?

SECTION B: AFTER THE WORKSHOP

1. After the workshop, what do you think about the following statements?

Please tick ONE column that applies to you for each statement (*using a 3 point rating scale where: agree = full understanding/yes; neutral = partial understanding/maybe; and disagree = no understanding/not at all*)

	AT THE END OF THE WORKSHOP		
STATEMENT	Agree	Neutral	Disagree
a. I know what the 'immune system' is and how it works.			
b. I understand how vaccines work.			
c. I understand what 'herd or population immunity' is.			
d. I am worried that the vaccines against Covid-19 are not safe.			
e. I feel confident to teach friends, family, and others about vaccines & Covid-19.			

2. Do you feel like your questions about vaccines against Covid-19 were answered? Are there any questions that you still have?

- 3. Which session(s) did you find the most useful? Why?
- 4. Which session(s) did you find the LEAST useful? Why? What could be improved?
- 5. Is there any other/additional information that should be included in the manual and workshops?

6. Do you feel like your goals were achieved today? Please circle the answer that applies to you.

YES PARTIALLY NO

HUMAN RIGHTS FRAMEWORK FOR RIGHT TO ACCESS HEALTHCARE AND VACCINES

The right to access health care services is enshrined in several important laws and policies in South Africa, including – but not limited to – section 27 of the Constitution, the National Health Act and the Medicines and Related Substances Act.

Section 27 of the Constitution, for example, provides:

Health care, food, water, and social security

(1) Everyone has the right to have access to— (a) health care services, including reproductive health care; (b) sufficient food and water; and (c) social security, including, if they are unable to support themselves and their dependents, appropriate social assistance. (2) The state must take reasonable legislative and other measures, within its available resources, to achieve the progressive realisation of each of these rights; and (3) No one may be refused emergency medical treatment.

The Constitution states outright that government is obliged to make sure that every person in South Africa can access quality healthcare services and must take reasonable measures, using its available resources, to achieve the progressive realisation of the right to access healthcare. In other words, that government must use the money and other resources it has to make sure that access to healthcare improves over time.

The right to access healthcare is supported by other rights including the rights to life, equality and dignity. The right to access quality healthcare is also enshrined in a number of international legally binding commitments that South Africa is a signatory to, like the International Covenant of Economic, Social and Cultural Rights, UN Convention on the rights of the Child and others.

G

Vaccines and other medical treatments form part of the right to access healthcare. The government can only buy and give you medicines that have been proven to be safe and effective, and has a duty to make sure that medicines are tested and evaluated to make sure they are not harmful to you and actually treat or prevent illness. To do this job, the government established the South African Health Products Regulatory Authority (SAHPRA).

WHAT DOES THIS MEAN FOR INDIVIDUALS AND COMMUNITIES?

- A vaccine against Covid-19 is my human right. A vaccine against Covid-19 is incorporated within the rights to access healthcare, life, equality and dignity.
- Everyone in South Africa is entitled to a vaccine. The government must make sure the plan for vaccines upholds the values of the South African constitution, including non-discrimination and equality, dignity, fairness and justice. In other words, whether you are rich or poor, whether you live in an urban or rural area, whether you are employed or not, you have the same right to a vaccine and the government has the same obligations to you.
- The government has a duty to prioritise the healthcare needs of vulnerable communities in the population.
- Government has a duty to make sure that my rights are being fulfilled.
- No one can force you to take a vaccine against your will. Vaccines are, however, your right and are the best way to keep you and your loved ones safe and healthy.

Access to vaccines is a human right that everyone in South Africa is entitled to according to our Constitution. Everyone will be entitled to get the vaccine for free. High profile people in society and ordinary people receive the same vaccine.

Session 1

BASIC INTRODUCTORY POPULAR EDUCATION SESSION ON VACCINE LITERACY

PURPOSE

Prepare and run a session for community members, that is relevant, participatory (engaging!) and useful, get questions about vaccines and begin to demystify some of the big questions.

TIME

40 minutes

MATERIALS

- Bingo game sheet one for each participant
- Pens

PROCESS

- 1. Distribute 'Bingo sheets' and explain the process. Emphasize the rule that says 'no one may point out where to put her/his name.' This is a game for finding out what knowledge and skills are in the room.
 - » Explain that we will all be 'winners' by meeting each other and finding out the knowledge in the room.
- 2. Begin by demonstrating the process; go up to a participant and ask one of the questions. If their answer is 'no' ask another question until they say 'yes'. Write their name into the space.
 - » Point out that each person's name should only be next to one question.
 - » Explain that participants do not have to 'prove' they know the answer, at this stage!
- 3. Start the game. Monitor the process: ensure all participants interact with each other.
- 4. Stop the process either, when one person shouts 'Bingo' or when you think the purpose of mingling has been achieved.
- 5. Ask participants to take a seat and 'unpack' the game. Ask questions such as the following, and record answers that reflect questions or uncertainties:
 - » Which of the questions/ descriptions were easy?
 - » You may have struggled to find names for some of the descriptions. Which ones?
 - » BIG stands for 'Basic Income Grant' how is this related to Covid-19?
 - » How many Human Rights can we name, together?
 - » Who can explain 'pathogen'? What is the word we usually use? (germs)
 - » Who believes that 'women have been affected more than men by the Corona Crisis'? Why is that so?
 - » How do we' keep safe from infection'?
- 6. Thank all participants for playing 'Bingo'. Initiate a quick introduction game where each participants states her/his name and organization.

NOTE

- Use the notes written up for:
- noting what knowledge is in the room and who possible resource people might be; and
 the evaluation at the end of the session: have you answered all the questions?

VACCINE BINGO

- The object of this introductory game is to speak to as many of the co-participants as possible. There is no prize for the person who finishes first!
- Please move around and ask co-participants whether they fit one of the descriptions given below. If not, ask another question until you find one that fits.
- Write their name into the space provided and move on. (One name per square)
- You may not tell others where to place your name this is about searching for information!

Bingo game sheet: copy and hand out to participants

Can explain 'Equitable Access'	Knows what 'intellectual property rights' are	
Likes to sing in the shower	Believes that all people should be given vaccinations against Covid-19	
Has been infected with the corona virus and recovered	Runs (or walks) to keep fit	
Thinks that women have been affected more than men by the Corona Crisis	Knows what BIG stands for	
Can suggest how to keep safe from infection	Knows where to get accurate information about Covid-19	
Can explain why we all need to be vaccinated	Knows what an 'immune response' is	
Can name at least 2 pathogens	Has 2 or more brothers / sisters	
Knows what 'PPE' is	Can name the symptoms of Covid-19 infections	
Can name at least 3 human rights	Knows which vaccine is being distributed in SA.	

■ SCIENCE OF IMMUNITY – WHAT IS THE IMMUNE SYSTEM?



The **immune system** is a key part of the body's way of protecting itself.

The immune system contains special cells that fight off infections before they make you sick — like the body's soldiers.

These soldier cells need to be able to do two things – recognise the enemy (viruses or bacteria) before they can spread, and they must also know how to defeat the enemy.

To make you sick, diseases use the cells in your body to spread. When your cells see an outside virus or bug or infection – also known as a pathogen – your cells recognise it quickly. They alert the immune system and trigger an immune response. This is like ringing the alarm to call the army because your cells are under attack.

Your immune system is very good at recognising the enemy, but it can take a little bit of time to develop the right ways to defeat them. Cells in your immune system have to learn to produce chemicals called antibodies that attack the enemy virus or bacteria, and eventually defeat them.

Antibodies are like spears or weapons that your soldier cells use to fight an infection. Each virus needs a specific type of weapon to destroy it and your body is very good at learning how to make these special antibody weapons. This process can take a few days.

When you get sick with a cold or flu, you might get a temperature or fever. This often happens when your body is making antibodies against a virus. A high temperature is the immune system's way of using antibodies to make your body an uncomfortable place for the infection to live.

The immune system remembers the infection so that next time you come into contact with it, you can fight it off easily and quickly. We say that your immune system has a **memory.**

In some people, the immune system is weakened – like the elderly, children, or people living with chronic illnesses. Those of us with weakened immune systems need extra help fighting off illnesses. Vaccines help with this. Vaccines help all people – young or old, weak or strong – to prepare and strengthen their immune system to be better at fighting off illnesses.

SCIENCE OF VIRUSES AND COVID-19

Viruses are like germs and some can make you sick. You cannot see viruses because they are too small. The common cold or flu is caused by a virus.

Viruses can get into your cells and make you sick.

Covid-19 is a virus. It is also called the Corona Virus or SARS-CoV-2. When it enters your cells, it can give you flu-like symptoms, but it is more catchy and more serious.

Covid-19 spreads through droplets from a person who has been infected with the virus. These tiny droplets can spread when someone coughs, sneezes, talks, shouts, sings or touches their face/nose/mouth and then puts droplets from there onto another surface. The best way to prevent the spread of Covid-19 is to do the following:

- Wear a face masks made of three layers of fabric that covers your mouth and nose,
- wash your hands regularly with soap and water for 20 seconds at a time, particularly after touching surfaces or being near other people
- keep a social distance of at least 1.5meters apart from people.

- Stay home where possible, and avoid crowded areas
- If you have to leave home, try to stick to areas that are well **ventilated** places with lots of fresh air, or places that aren't too crowded or closed.

These are the best ways to keep you and your loved ones safe.

Covid-19 is very contagious (infectious, catchy) – One person with Covid-19 spreads the disease to two more people on average. Those two people can spread it to two more people each, and so the cycle continues. In areas where lots of people live close together, it may be difficult to stop **transmission** (spread) of the illness.

You can spread the disease without knowing you have it – not all people who get Covid-19 show symptoms. We call this **asymptomatic infection**. Most people who have Covid-19 will have a mild case of the illness, and in some cases people will get very sick and struggle to breathe.

By 24 March 2021, over 1.5 million people in South Africa have had Covid-19 and 52,372 people have passed away because of the virus. Governments around the world are beginning to give people vaccines against Covid-19 – vaccines are one of the best public health measures we can use to save lives and prevent people from getting badly sick.

Session 2 WHAT IS VACCINATION?

PURPOSE

- Surface and assess existing knowledge about vaccination (including misinformation)
- Introduce the idea of 'vaccinating' as a precaution against severe illness
- Explain what 'vaccination' is about

TIME

90 minutes

NOTE

Begin your workshops with energizing games, trust building exercises, and making and committing to groundrules for all. This is important so that all participants can feel confident to participate.

PROCESS

- 1. Ask participants to turn to the person sitting next to them and talk about vaccination:
 - » What is it?
 - » What is the purpose?
 - » How does it work?
- 2. Plenary: ask each pair to give you 1 or 2 responses from their discussion; and write them up on flip chart, without comments!

This will give you an idea how much and what participants know, and who among them may be a useful reference person who you can rely on for assistance, such as translation / clarification.

3. Ask: what is the Xhosa /Afrikaans/ Zulu (any of the African languages) word for 'vaccination'?

Note: the Government Covid-19 site offers translations of the strategy! Eg. https://sacoronavirus.co.za/2021/01/27/sa-covid-19-vaccine-strategy-isixhosa-translation/

4. Ask: who has been vaccinated before? How do they know they have been vaccinated?

Encourage a few responses, without commenting. Include childhood vaccinations and tetanus injections, and other vaccinations such as against Yellow fever required by some countries. Establish a broad map of diseases for which we have vaccines. Point out that there is still no AIDS vaccine – however, there is treatment.

5. Ask participants to inspect their own or their neighbour's (left) upper arms for a scar!

Point out that we all (?) have this scar from the BCG vaccination we were given as babies. This vaccination is meant to protect us from TB (tuberculosis). The scar is evidence of the vaccination.

6. What is a 'vaccine'?

Refer participants to the 'glossary' in their vaccine literacy manual (Section A: Glossary).

Ask a volunteer to read out the definition:

- » "Vaccines are a type of medicine used to prevent diseases caused by viruses (viral diseases). These diseases can spread from person to person. The vaccine helps to prevent the spread."
- » Encourage discussion and questions of clarification.
- » Point out that vaccines may include inactive/deactivated disease cells but they do not contain microchips, tracking devices, or poisonous chemicals. They are not harmful!

- 7. Refer people to "section H: why we use vaccines" What is the purpose of vaccination?
 - » Ask participants for responses.

SUMMARY/RECAP: WHY WE USE VACCINES

- Vaccination is a simple, safe, and effective way of protecting people against harmful diseases, before they come into contact with them.
- Vaccination uses your body's natural defences to build resistance to specific infections and makes your immune system stronger. This means that you will not get badly sick, even if you catch the disease. Vaccines reduce the severity of diseases.
- Vaccination prevents pandemics: outbreaks of diseases like Covid-19, that spread.
- Most vaccines are given by an injection, but some are given orally (by mouth) or sprayed into the nose.

8. How does vaccination work?

Give a brief input:

ANTIBODIES

- When we become infected, our bodies rely on the immune system to fight the foreign organism, or germs (this is also called the 'pathogen' a bacteria, virus, fungus, parasites)
- White blood cells activate and begin making proteins called 'antibodies.' These antibodies locate the pathogen and mobilise to fight back.
- Even after they've done their work, these antibodies don't disappear. Your immune system has a memory. They remain in the bloodstream, always on the lookout for the return of the same invaders. If these germs reappear, whether it's a few weeks or many years later, the antibodies remember the foreign germ and are ready to protect. They can often prevent the infection altogether or stop the infection even before the first symptoms appear.

9. What is the immune system?

THE IMMUNE SYSTEM

- The immune system is a complex network of cells, proteins, tissues and organs that defends the body against infection. It includes the antibodies that are like watchdogs ready for the attack!
- The white blood cells are the key players! They are made in the bone marrow. They move through blood and tissue throughout your body looking for foreign invaders, pathogens. When they find them, they launch an immune attack.
- White blood cells include lymphocytes (such as B-cells, T-cells and natural killer cells)

10. Repeat the questions about vaccines, vaccination and the immune system.

- » Ask participants to dialogue with the person next to them, and respond to the questions in their own words.
- » Collectively, summarise the key points of the session and clarify any remaining issues. Read the "Life After Vaccination" section on page 44.

Session 3

EXPLAINING VACCINATIONS

PURPOSE

- Become familiar with and able to use terms /words associated with vaccinations.
- Practice explaining concepts and processes to do with vaccinations.

TIME

60 minutes

MATERIALS

Train the Trainers Manual: identify key terms in the glossary, that are central to understanding the immune system and vaccinations one1 term for each pair)

PROCESS

- 1. Introduce the activity by pointing out how language is imbued with power: people use words to bamboozle others, to show off, to confuse and to silence. They also use language to explain and describe, communicate and empathise.
 - » Point out that this exercise helps people to understand key terms and practice explaining them to others.
- 2. Ask participants to get into pairs.
 - » Ask participants to open page 4 of the manual, and allocate each pair one of the key terms identified
- 3. Give the following instruction:
 - » Please read the explanation of your term. Translate the meaning of the term into at least one other (local) language. Note that there may not be a term exactly the same find a way to explain it in your own words.
 - » Together, render the explanation into your own words so that you can explain it so someone else. Prepare to present your explanation!

- 4. After 5-10 minutes, ask participants to return to plenary and take turns to present their explanations. Encourage other participants to respond: do they understand what is meant? What questions do they have?
- 5. Pick out some other key terms, and, collectively, find ways to translate and explain them. Practice doing explanations in the languages spoken by participants.
- 6. Initiate a discussion on 'helpful things to do' when translating and explaining: what are some of the strategies participants used to make sense of strange words and render foreign concepts into African languages? What helps them to explain?
- 7. Ask participants to turn to page 51 of the manual: "Frequently asked questions".
- 8. Ask participants to form new pairs. Distribute key questions to pairs (one each).
 - » Repeat the process of reading, translating, explaining in your own words, in pairs.
 - » Ask pairs to help each other to rehearse the responses/ answers to the questions. Request them to close the manuals and prepare for presentations.
- 9. One by one, ask one of the "frequently asked questions" encourage all participants with finding an accessible clear response and explanation.
- 10. Sum up by pointing out helpful things participants did in the task: what makes a clear, accessible answer? What can they do to support others in building understanding?
- 11. Sum up by going around the circle: what new terms did participants learn? How do they feel about 'teaching' those concepts and terms?

, WHAT IS A VACCINE?

A **vaccine** is a type of medicine used to prevent diseases caused by viruses or bacteria – also called viral diseases – like measles, mumps, chickenpox, liver cancer, Cervical Cancer and now Covid-19.

These diseases can spread from person to person. Vaccines prevent the spread of these diseases.

A vaccine can be in the form of drops you swallow or an injection into muscles in your body.

Some vaccines, like the Mumps vaccine, are just one injection or **dose**. But other vaccines have more than one dose – for example the vaccine against HPV which is given to all girls in grade 4 has 2 doses spread out over six months. Some vaccines require more than one dose to make sure that it protects you for a longer time.

A vaccine works by helping the body recognise new infections or viruses that it has not seen before, and teaching the body how to fight them. Vaccines trigger an **immune response** to teach your body how to fight off a virus without actually making you sick.

Vaccines contain one or more active pharmaceutical ingredients (API) and other helpful chemicals which help your body develop an immune response.

Vaccines <u>do not</u> contain microchips, tracking devices, or poisonous chemicals. Vaccines are not harmful.

K WHY WE USE VACCINES



Vaccines prevent people from getting illnesses that can kill them or leave them with life-long illnesses, disabilities or sideeffects. Vaccines save 5 lives every minute. The smallpox vaccine alone saves up to 5 million lives every day around the world.

No vaccine – or medicine – is ever 100% effective, but vaccines are the best way to help prevent outbreaks of diseases that can spread from person to person. Vaccines are part of what we can do to prevent **pandemics**.

Either your body will use the immunity it learnt from the vaccine to prevent the infection entirely so you never get symptoms, or you will partially prevent the infection and not get badly sick. Getting vaccinated means that if you do get sick, you won't get seriously ill – vaccines reduce the severity of illnesses.

In South Africa, all children are vaccinated – or inoculated or immunised – against several preventable diseases like mumps, polio, measles, tuberculosis, meningitis, and cervical cancer.

Although many vaccinations are given to children, many adults get vaccines too – for yellow fever, for example, influenza, or Hepatitis B.

We have prevented many deaths of children and adults because they have been vaccinated against life-threatening diseases. Vaccines against 10 major illnesses saved over 37 million people's lives between 2000 and 2019.

► HOW VACCINES WORK

AND A CONSTRUCT

If your body is exposed to an infection it does not recognise, your body may need help understanding how to fight it. This is where vaccines come in.

Vaccines are designed to mimic (or copy) a virus and teach your body how to defeat it. There are different ways to make vaccines, but they all work similarly in your body.

Many vaccines are made by taking a tiny microscopic part off of a virus and then introducing it safely to the body through a vaccine. This tiny part or fragment of the virus cannot make you sick, because it is too weak and small. It could be a tiny spike that lives on the top of a virus, for example, and not the whole virus. When the tiny spike is put into the body through a vaccine, it trains your body how to fight the full virus and prevent infection. Your cells see this tiny fragment of an outside virus and ring the alarm – calling the soldiers to come fight it off. Your soldier cells take some time to figure out what the spike is, and how to get rid of it.

The tiny fragment of a virus in a vaccine teaches your cell's soldiers how to make special **antibodies** against the virus. These antibodies are small proteins that latch on to the particular virus, or the fragment of a virus, so that your soldier cells can kill it. Sometimes, scientists make vaccines by writing instructions through tiny genetic material called mRNA for your soldier cells. These instructions teach the cells how to make the specific antibody that is needed to fight off a particular virus. The cells can then store these instructions until they come into contact with the virus again. These mRNA instructions don't change your genes or even stay in the body for longer than a few days – but they do teach your soldier cells how to launch the best attack against a virus.

If you are vaccinated against a virus or bacteria, the vaccine builds your"**immunity** against that virus or bacteria because your soldier cells have the right antibody weapons needed to fight it off. Your immune system will have an **immune memory** of that virus or bacteria, and will recognise it more easily in future. No vaccines (or any type of medicine) are ever 100% effective in all people, but they are a very safe and powerful tool to keep us safe. If you are exposed to that virus in future, your soldier cells recognise the virus and remember how to fight it. Your immune system then fights the infection off using the antibodies they made when they encountered the vaccine.

By having antibodies and cells that remember the virus, your body will respond quickly to attack the virus when you come into contact with it, and the virus cannot spread in your cells – meaning that you will not get badly sick.

Scientists test vaccines very carefully. Vaccines are only bought by government and given to you when they are proven to be safe.

Although the evidence from vaccines against Covid-19 shows that the vaccines provide immunity against the virus, scientists are not sure if you can still **transmit** (spread) the virus once you have been vaccinated. Getting vaccinated means that you will not get sick, or that if you do, your symptoms will not be so bad. Because we know that Covid-19 spreads through droplets, if you are not coughing or showing symptoms of being sick, you might not be able to spread the disease. But we are not 100% certain of this yet.

If you get exposed to Covid-19 after getting vaccinated, it is likely that you will not get sick, BUT you

may still be able to spread the virus to other people who have not yet been vaccinated (although you might not get infected, you might be able to infect other people with Covid-19 if you are exposed to it).

For this reason, it is very important to remain careful and keep social distancing, wearing masks and washing your hands even after you get vaccinated – to make sure that you are keeping the people around you safe too.

RECAP: HOW VACCINES WORK

A vaccine is often made by taking a tiny part of a virus or bacteria. This tiny fragment is too small and weak to make you sick. The vaccine puts this tiny fragment of the bacteria or virus into your body. Your immune system - with its special soldier cells – looks at this foreign tiny piece of a virus and figures out how best to destroy it. They build a special antibody weapon against it. Then if ever you come into contact with the real full virus or bacteria, your soldier cells remember it – they know exactly which antibody weapon to use and how to defeat it. Your immune system then goes to fetch its special antibody weapon and kill it before it can spread to all your cells, and make you sick.

Μ

WHY WE NEED TO BE VACCINATED

Vaccinations are the most effective way in making sure that enough of our population is immune to Covid-19 and other viruses to prevent them from spreading and making people sick. Vaccines are the best chance we have to prevent thousands more people from dying, and the country going into lockdown more times.

You may have heard that after having Covid-19 that you are immune to the virus. While this is probably true, we are not sure how long this natural immunity lasts for. Some people have gotten Covid-19 twice, showing that the immunity did not last forever. Our second wave of Covid-19 also shows that immunity levels in our society were not very high, or that immunity did not last long enough to protect everyone from a second wave.

Vaccines usually create longer immunity against infections, and protect you for longer.

Getting vaccinated is the best way to make sure that you, your loved ones and your community are safe and healthy.

Getting vaccinated is the first step to getting back to normal. Getting vaccinated will prevent thousands of people from getting sick or dying from Covid-19. Although viruses mutate – or change – over time, and we might need to get 'booster' vaccinations in future, getting vaccinated now will take pressure off the healthcare system and help the economy recover.

Although the evidence from vaccines against Covid-19 shows that the vaccines provide immunity against the virus, scientists are not sure if you can still **transmit** (spread) the virus once you have been vaccinated.

But because getting vaccinated will mean that you are less likely to get sick badly or show symptoms, it is also expected that you will be less likely to be able to spread the disease (if you aren't coughing, infected droplets can't spread the disease to other people, for example). But we don't know this for certain yet.

For this reason, it is very important to remain careful and keep social distancing, wearing masks and washing your hands even after you get vaccinated – to make sure that you are keeping the people around you safe too.

Session 4

EXPLAINING HERD IMMUNITY

PURPOSE

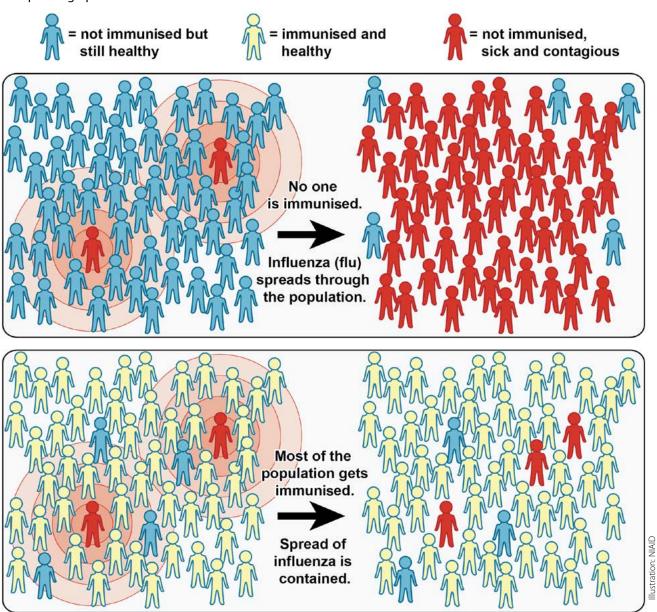
Demonstrate understanding of and ability to explain herd immunity



30 minutes

MATERIALS

- 2 strings of red stickers and 2 strings of yellow stickers.
- 2 copies of 'written instructions' for Covid-19 actors.
- Copies of graphic below.



PROCESS

- 1. Introduce the session by pointing out that the main purpose of vaccination is 'population immunity' that is, at least 67% of people in SA need to be vaccinated in order to prevent another wave and spread of Covid-19.
- 2. Ask: How does that work? What is 'herd' or 'population' immunity? Encourage a few responses without comment.
- 3. Ask for 2 volunteers to come forward and act as 'Corona Virus'. Give each a roll /string of stickers and the following (written) instruction.

(Alternatively, you can ask all participants to close their eyes, and you pick 2 'volunteers' and give them the instruction and set of stickers. When they have read the instruction you ask participants to open their eyes.

INSTRUCTION:

You are the infectious Corona Virus! You spread the Covid-19 disease amongst all participants. When I give the signal, 'infect' as many people as you can by putting a sticker on them! Give each of them 2 more stickers to join the infection spread!

- 4. Ask all participants to move around in the space pretending they are at a social event. Do not give any other commands observe what happens. After 30-60 seconds (depending on how fast the Virus is spread!) you stop the game.
- 5. Ask all participants to examine themselves for stickers. (If you want, you could ask all those with stickers to begin coughing into their elbows and sink down to the floor.)
- 6. Ask: what happened? What did you see? (All those with stickers were infected)
- 7. Announce 'the vaccination campaign!' Ask for 2 volunteers to act as health workers, doing vaccinations. Request all participants to stand in a long line. While they line up, tap on the shoulders of 2-3 and instruct them to be 'anti-vaxxers'. Instruct the health workers to begin vaccinating, by sticking a yellow sticker on the upper arms of participants. Ask anti-vaxxers to leave the line – either making a noise, protesting, or quietly. Meanwhile, the 2 Corona Virus actors try to place stickers on participants – those with a yellow sticker cannot be infected and peel it off.
- 8. Stop the game ask all those with a red and without a yellow sticker to sink down to the floor. Ask: what happened? What do you see? (Very few infected people!)
- 9. Divide participants into smaller groups of 5-6; give each group the illustration in 'materials' and the following instruction:
 - » Discuss the images and in your own words, explain what they mean.
 - » Collectively work on an accessible explanation of how herd immunity works and prepare to present it
 - » Allocate approx. 20 minutes to this
- 10. Set up for a plenary session. Invite each group to present their explanation.
 - » Clarify whenever necessary.
 - » Note useful images, phrases, metaphors.
- 11. Ask each group to briefly confer with each other, in response to the following question:
 - » Imagine you are confronted with people who do not want to get vaccinated. What will you say/ How will you convince them to go for vaccination?
- 12. Have a round-robin of arguments / statements in favour of vaccination!
 - » Time permitting, you could ask participants to work in pairs: one takes on the role of an anti-vaxxer, the other explain / finds arguments to convince her/him to reconsider!
- 13. Conclude by summing up:

A high level of immunity provided by wide vaccine coverage is the best chance we have to reduce the number of new infections; to reduce symptoms, hospitalisation, and deaths among those infected; and to ensure that health services can be freed up to serve people with other health conditions.

Ν

WHAT IS HERD/ POPULATION IMMUNITY?



A virus can only spread if there are people in the population who are not immune to it. You can become immune by getting vaccinated – this helps you and people around you!

If large numbers of people are immune, the virus cannot move from person to person and the outbreak is controlled. If enough people are immunised, there is a lower chance that the virus can spread and infect a person who is not immune or someone who is particularly vulnerable.

We call this herd or population immunity – there are enough people in a population who have the antibodies against a virus so that further spread is no longer possible. Scientists calculate herd immunity based on how contagious a specific virus is – in other words, if one person gets the infection, how many people can they probably spread it to. Vaccination is one way to create enough immunity within a population or community to mean that the virus cannot spread that quickly.

If enough people are immune to a virus, even people who haven't been vaccinated – like babies or people with conditions that prevent them from being vaccinated – are safe.

Scientists have said that 67% of people in South Africa – or more than 40 million people – need to be immune to achieve population immunity to Covid-19 here. The more of us that are protected against Covid-19, the quicker the sickness will go away.

If only a few of us have the vaccine, then the sickness will be with us for a long time. Meaning more people will lose jobs, our children's education will suffer, and many more people will get sick and die.

Session 5

VACCINE TRIALS (AND SAFETY)

PURPOSE

Explore and demonstrate the thorough process of vaccine trials to create confidence in their safety

TIME

1-2 hours

MATERIALS

Sets of trial cards

PROCESS

1. Begin with a short game

Ask a range of questions (based on false information, myths, fake news!) and invite participants to respond with a 'true' or 'false'!

- » HIV does not cause AIDS. President Thabo Mbeki said so. True or false?
- » If you eat beetroot, garlic and olive oil, you can cure AIDS. Minister of Health Manto Tshabalala-Msimang said so. True or false?
- » You can avoid catching COVID-19 by avoiding Chinese or Italian people. True or false?
- » People who cough probably have COVID-19. True or false?
- » There is a cure for COVID-19 but the Government is keeping it secret. True or false?
- » The COVID-19 vaccine will change your DNA. True or false?
- » The Covid-29 vaccine contains a tracking device. True or false?
- » If you have already had COVID-19 you do not need a vaccination. True or false?
- 2. Encourage a brief discussion about 'fake news'.

Ask: where do myths / fake news such as these come from? Who spreads them and who benefits from them? (Point out the danger of powerful prominent people spreading fake news) 3. This session looks at the process of making vaccines and asks: how do we know they are safe? Do a brief input on the background to vaccines from "Section L: How do we know Vaccines are Safe", such as the following:

HISTORY OF VACCINATION

Vaccines have been used by people for over 200 years. Our history of vaccines and immunization begins with the story of Edward Jenner, a country doctor living in Berkeley, England, who in 1796 performed the world's first vaccination. He took a tiny scraping of a cowpox from a milkmaid suffering from smallpox, and inoculated a small boy with it – and he did not develop the disease.

(You may want to tell the story of the smallpox vaccine in more detail?!)

Since then, every time we develop a successful vaccine we learn more about how to make them work better, and how we can make our immune systems stronger to fight off new viruses.

HOW DO VACCINES WORK?

Vaccines are designed to mimic (or copy) a virus and teach your body how to defeat it. There are different ways to make vaccines, but they all work in your body in a similar way.

Many vaccines are made by taking a tiny microscopic part of a virus and then introducing it safely to the body through a vaccine. This tiny part or fragment of the virus cannot make you sick, because it is too weak and small. It could be a tiny spike that lives on the top of a virus, for example, and not the whole virus.

When the tiny spike is put into the body through a vaccine, it trains your body how to fight the full virus and prevent infection.

The tiny fragment of a virus in a vaccine teaches your cells how to make special **antibodies** against the virus. These antibodies are small proteins that latch on to the particular virus, or the fragment of a virus, so that your cells can kill it.

Sometimes, scientists make vaccines by writing instructions through tiny genetic material called mRNA for your soldier cells. These instructions teach the cells how to make the specific antibody that is needed to fight off a particular virus. The cells can then store these instructions until they come into contact with the virus again. These mRNA instructions don't change your genes or even stay in the body for longer than a few days – but they do teach your soldier cells how to launch the best attack against a virus. So even if you get infected you will not become gravely ill.

4. This exercise asks you to construct the process of a vaccine trial.

- » Divide participants into smaller working groups, and give each working group a set of 'trial' action strips. (See Materials) Point out how looking at the many actions and check-points demonstrates how scientists ensure that the vaccine they make is safe!
- » Group instruction: Put the action strips into a sequence so they make up a timeline of a vaccine trial!
- 5. When all groups have completed the task, call them together. In plenary, compare and check the different stages and actions of a trial.

Encourage questions of clarification and add further information, as necessary. Look at Section L.1 about "How come the Covid-19 vaccine was developed so quickly? How do we know that it is safe?" This section focuses on why Covid-19 vaccine trials were a bit quicker than usual, but no safety steps were compromised.

- 6. Ask participants to turn to their neighbour and work in pairs. Task: take turns to practice telling the other why and how vaccines undergo careful trials and are safe.
- 7. If questions arise, follow up with input on the various vaccines available for Covid-19.

Scientists design an experiment. They look at a virus using microscopes and other machines to learn more about how it gets into human cells and makes people sick. They come up with ideas – often based on other vaccines that have been safe and effective in the past	The company or scientists who have tested the vaccine let other independent scientists double check that their results are accurate. This is called "peer review".
They develop a type of vaccine to test their ideas on some animals and watch to see whether the vaccine actually triggers an immune response in the animal. The Astra-Zeneca/Oxford vaccine was first tested on monkeys, for example. If it does trigger an immune response and is effective at preventing the animal from getting sick, scientists can start testing the vaccine on people.	Independent scientists agree that the vaccine is safe and effective based on the data from the phases of the clinical trial. The scientists write to a Regulatory Authority of a particular country with the results of their trial and ask for approval to make and sell their vaccine to governments and people.
There are three phases of 'clinical' studies which involve humans.	In South Africa, this authority is called the South African Health Products Regulatory Authority (SAHPRA). Every single medicine that is sold in South Africa is checked by SAHPRA to make sure that it is high quality, it is safe and it is effective. SAHPRA has a good reputation around the world for only approving medicines that are safe and effective for use in our country.
Only a few people are given the vaccine – between 20 and 80 people. Sometimes scientists will test two versions of a vaccine and only go ahead with the one which has the fewest side effects and seems to be the most effective. Only if it turns out to be safe and effective, more people are 'enrolled' or invited to be part of the vaccine trial.	SAHPRA does its own "peer reviews" and makes sure that there are plans in place to deal with any risks or issues with the medicines if they get approved and then sold.
A few hundred people are invited to join the trial. Scientists document whether the vaccine is preventing participants from getting sick and also make sure that most people aren't getting bad side-effects after taking the vaccine.	SAHPRA will also test every batch of vaccines that come into the country at the National Control Laboratory at the University of the Free State in Bloemfontein – this makes sure that every crate of vaccines that arrives in South Africa meets quality control measures and is safe and effective.
In vaccine trials, some participants are given the vaccine, and other people are given something called a placebo – a syringe that has no active medicine in it. It's usually saline, which is water and salt. Scientists compare what happens to people who get the vaccine to people who got the inactive placebo. Participants in a trial do not know whether they have the active vaccine or the placebo. In the Covid-19 vaccine trials, people who received a placebo instead of the vaccine got Covid-19 more easily and frequently than those who got the vaccine.	Vaccines are made to save lives – not to control, track, bewitch or possess people. South Africa has excellent doctors, nurses and scientists – many of whom have contributed to the development of vaccines. They would not give people vaccines which are not safe.

• HOW DO WE KNOW VACCINES ARE SAFE?

Vaccines have been used by people for over 200 years. Every time we develop a successful vaccine we learn more about how to make them work better, and how we can make our immune systems stronger to fight off new viruses.

Scientists and doctors test vaccines in several stages to make sure that they are safe and effective at immunising individuals. This is called a **'trial'** and usually takes several years.

First, scientists design an experiment. They look at a virus using microscopes and other machines to learn more about how it gets into human cells and makes people sick. They come up with ideas – often based on other vaccines that have been safe and effective in the past – about how to beat the virus.

They develop a type of vaccine to test their ideas on some animals and watch to see whether the vaccine actually triggers an immune response in the animal. The Astra-Zeneca/Oxford vaccine was first tested on monkeys, for example.

If it does trigger an immune response and is effective at preventing the animal from getting sick, scientists can start testing the vaccine on people. There are three phases of 'clinical' studies which involve humans. In Phase 1, only a few people are given the vaccine – between 20 and 80 people. Sometimes in Phase 1, scientists will test two versions of a vaccine and only go ahead with the one which has the fewest side effects and seems to be the most effective. Only if it turns out to be safe and effective, more people are 'enrolled' or invited to be part of the vaccine trial.

In Phase 2, a few hundred people are invited to join the trial. By the end of Phase III, there will have been thousands of people who had the vaccine tested on them. All the while, scientists are documenting whether the vaccine is preventing participants from getting sick and also making sure that most people aren't getting bad side-effects after taking the vaccine.

In vaccine trials, some participants are given the vaccine, and other people are given something called a placebo – a syringe that has no active medicine in it. It's usually saline, which is water and salt. Scientists compare what happens to people who get the vaccine to people who got the inactive placebo. Participants in a trial do not know whether they have the active vaccine or the placebo. In the Covid-19 vaccine trials, people who received a placebo instead of the vaccine got Covid-19 more easily and frequently than those who got the vaccine.

At the end of Phase III, the company or scientists who have tested the vaccine let other independent scientists double check that their results are accurate. This is called "peer review". If independent scientists also agree that the vaccine is safe and effective based on the data from the phases of the clinical trial, the scientists will write to a Regulatory Authority of a particular country with the results of their trial and ask for approval to make and sell their vaccine to governments and people.

In South Africa, the regulatory authority for medicines is called the South African Health Products Regulatory Authority (SAHPRA). Every single medicine that is sold in South Africa is checked by SAHPRA to make sure that it is high quality, it is safe and it is effective. SAHPRA has a good reputation around the world for only approving medicines that are safe and effective for use in our country.

SAHPRA looks at the data from trials going all the way back to the evidence from animal testing, and the various steps of the process. SAHPRA does its own "peer reviews" and makes sure that there are plans in place to deal with any risks or issues with the medicines if they get approved and then sold. SAHPRA will also test every batch of vaccines that come into the country at the National Control Laboratory at the University of the Free State in Bloemfontein – this makes sure that every crate of vaccines that arrives in South Africa meets quality control measures and is safe and effective.

Only once SAHPRA is happy that the trial results are accurate, and that all the information about the medicine shows that it is effective, safe and that it is made and transported reliably will SAHPRA approve the medicine. Then the government can get doses of the vaccine for its people.

Some companies have finished testing their vaccines and have had their testing results checked by independent experts in a process called "peer review". AstraZeneca, Pfizer and Moderna are all companies who have announced that their vaccines prevent Covid-19 and have had their claims peer-reviewed.

There are other vaccines that have not yet been peer reviewed, including Johnson & Johnson, the Sputnik V vaccine from the Gamaleya Research Center in Russia, and CoronaVac, from a private Chinese company Sinovac.

Vaccines are made to save lives – not to control, track, bewitch or possess people. South Africa has excellent doctors, nurses and scientists – many of whom have contributed to the development of vaccines. They would not give people vaccines which are not safe.

HOW COME THE COVID-19 VACCINE WAS DEVELOPED SO QUICKLY? HOW DO WE KNOW THAT IT IS SAFE?

Remember that scientists have been making vaccines for close to two hundred years now, and we can use all that history of knowledge to make sure that the vaccine for Covid-19 is safe, effective and rolled out quickly. New types of vaccines adapted from the development of other vaccines were made very rapidly after Covid-19 was first identified.

Covid-19 is similar to other viruses like SARS, MERS and other corona viruses, and scientists have been investigating these viruses and making vaccines against them for several years already.

A lot of delays in making vaccines or new medicines are because the paperwork takes a long time, because scientists can't find enough participants for their trials or if they don't have enough money.

This time with Covid-19, there have been lots of investments made into the trials to make sure they can move quickly. Billions of dollars have been invested into the trials. Bureaucratic requirements have been speeded up, and thousands of people volunteered very quickly to be part of the trials – a process that usually takes months or years. Plus there was lots of money and collaboration between experts and scientists from across the world to make sure that the trials could move forward.

Scientists doing the trials of vaccines have sent their test results to regulators as they go along, instead of providing one big document of evidence at the end of a trial. This means that experts and regulators can check to see if vaccines are high quality, safe and effective at every stage of the process. This is called a rolling review. Regulators from around the world have been working together and sharing their information together to speed up the process.

Usually regulators will only allow companies to start making their vaccines once everything has been approved. But in this case, companies could start making doses of vaccines while the results were still being evaluated.

No short cuts have been taken. Every one of the usual steps to check that a medicine is safe has been followed, except this time more people have been working together – with more support from governments, more money and more public support – to beat Corona Virus together. Safety, quality and effectiveness have not been compromised.

DIFFERENT VACCINES AND TRIALS EXPLAINED

Several vaccines are effective against Covid-19. The vaccines all use different methods, but they work similarly in your body and build immunity against Covid-19.

JOHNSON AND JOHNSON (J&J)

Johnson and Johnson have manufactured a vaccine against Covid-19. It is sometimes called JNJ-78436735 or Ad26.COV2.S. This vaccine is just one injection. Scientists call this a "single-dose" vaccine.

7,000 people volunteered to be part of the trial for the Johnson and Johnson vaccine in South Africa. Their trial coincided with our "second-wave" and gives us useful evidence about how the vaccine works against the 501Y.V2 variant of Covid-19 which is more common in South Africa. Results from their trial shows that while the JnJ vaccine is not going to prevent mild symptoms, it provides 57% protection against moderate-severe disease, 85% protection against severe disease and 100% protection against death. The trial ended in February 2021 and countries around the world are now approving this vaccine for use as the evidence showed that it was safe and effective.

Protection from the J&J vaccine begins about 10 - 14 days after vaccination, and full protection rises about a month after the vaccination.

While the vaccine is being licensed and approved by the South African Health Products Regulatory Authority, vaccines are being given to healthcare workers as part of a research programme "implementation trial" to get the vaccines to healthcare workers quicker. It is important to understand that the fact that it is not yet licenced does not mean that it is not safe or effective – licensing can take a long time, and we need vaccines urgently. These vaccines are safe and effective.

South Africa has secured half a million doses of these vaccines to vaccinate health-care workers. The first

80,000 of these arrived on 16 Feb 2021, and by 17 Feb 2021 healthcare workers at selected hospitals and clinics around the country were being immunised. More vaccines are being delivered every 2 weeks.

How does the Johnson & Johnson vaccine work?

This vaccine uses a type of virus that is harmless to humans called an **adenovirus** to get into your cells and teach them how to fight off Covid-19. This adenovirus cannot replicate or spread inside your cells but it can enter them. It contains a little bit of DNA which has special instructions to teach your body how to fight Covid-19.

Imagine a postman with a letter in an envelope for you.

- The postman (vaccine) delivers the envelope (an adenovirus) into your cells.
- Your cells open the envelope and read the letter inside (DNA).
- The letter inside (DNA) teaches you how to fight Covid-19 so that when you ever encounter the virus again in future, your soldier cells remember it and can use the right antibodies to get rid of it quickly.

Scientists have been experimenting with this type of vaccine for decades. The vaccine against Ebola uses this mechanism.

The Oxford/AstraZeneca vaccine works similarly and also uses an adenovirus to send instructions to your immune system about how to defeat Covid-19.

Because these vaccines use DNA and not mRNA, they can be refrigerated at normal temperatures like 2 – 8 degrees centigrade. This makes it cheaper to produce and transport. The vaccine is halaal.



WHY WAS THE GOVERNMENT WORRIED ABOUT J&J VACCINE CAUSING BLOOD CLOTS IN APRIL 2021?

Vaccines, like all medicines, have side effects. For example, when doctors give patients antibiotics like penicillin, they may have some side-effects like nausea, diarrhea, or headache. However, not everyone will experience these side-effects, and most side effects are not life threatening. The same is true for COVID-19 vaccines: common side-effects include headache, nausea, and fever. Most of the time, the side-effects are not life threatening.

In South Africa, medical researchers and the South African Health Products Regulatory Authority (SAHPRA) are responsible for ensuring that only safe and effective medicines are used to treat patients. When SAHPRA or researchers receive new information suggesting a medicine has side-effects that can seriously damage a patient's health, use of that medicine must be stopped until the new evidence can be examined.

This is what happened with the J&J vaccine. Researchers in the United States (US) found evidence that J&J vaccines might have caused life-threatening blood clots in 6 women, out of a total pool of almost 7 million Americans vaccinated. This information led the South African Minister of Health to pause the use of the J&J vaccine in South Africa. Minister Mhkize did this to give SAHPRA time to evaluate this new information from the US.

This decision is part of an ongoing process of checking that medicines are safe and effective. It is an important part of protecting public health, and it is a process that applies to all medicines used in South Africa – not only COVID-19 vaccines. At the moment, the evidence suggests that the risk of the vaccine causing blood clots is very small, and that the benefits of vaccination are still greater than the risk of developing blood clots after being vaccinated. In fact, the best evidence we have now suggests that the risk of getting blood clots when you are sick with COVID-19 is higher than the risk of getting blood clots due to the vaccination (https:// www.bmj.com/content/373/bmj.n1005). This is why the government decided to go ahead with the rollout of the J&J vaccine.

KEY MESSAGES:

- All medicines have side effects
- Benefits of vaccines outweigh risks
- Medicine safety is something that is evaluated with all medicines, not only for COVID-19 medicines



South Africa vaccinates its first 4 healthcare workers with the Johnson & Johnson onedose #COVID19sa vaccine: Nurse Azoliswa Gidi-Dyosi, Dr. Sa'ad Lahri, Cleaner Mavuyo Mpambani and Admin Clerk Cwengisa Dadirai (Photo credit: National health department)

OXFORD/ASTRAZENECA

The University of Oxford partnered with a British-Swedish pharmaceutical company to make a Corona Virus vaccine. It requires two injections given 28 days apart. Over 2,000 South Africans willingly participated in the trial for this vaccine.

It is also called ChAdOx1 nCoV-19 or AZD1222, or Covishield.

Results from the clinical trial showed that this vaccine was 62 to 90% effective at preventing you from getting the original strain of Covid-19. Of 5,807 people who received the Oxford vaccine, 30 became infected with COVID-19. But people who got the placebo in the trial were much more likely to get Covid-19.

This vaccine uses a type of virus that is harmless to humans called an **adenovirus** to get into your cells and teach them how to fight off Covid-19. This adenovirus cannot replicate or spread inside your cells but it can enter them. It contains a little bit of DNA which has special instructions to teach your body how to fight Covid-19. For a description of how this vaccine works, see the section above on the J&J vaccine.

This vaccine can survive at regular refrigeration temperatures – between 2 and 8 degrees Centigrade.

This vaccine is being made by a company in India called the Serum Institute. 1 million doses of the vaccine arrived in South Africa on 1 February 2021.

Following test results which showed that this vaccine did not prevent mild or moderate cases of Covid-19 from the 501Y.V2 variant identified in South Africa, which is much more common here, rollout of this vaccine has been stopped in South Africa.

PFIZER/BIONTECH

The Pfizer/BioNTech vaccine requires two injections given 21 days apart. This vaccine is also called BNT162b2, tozinameran or Comirnaty.

The clinical trial for this vaccine shows that it has a 95% **efficacy** rate at preventing Covid-19. This means that it is very effective at preventing you from getting Covid-19. Approximately 800 South Africans willingly participated in Phase 3 of the trial for the vaccine. Of the 21,720 people who received the Pfizer/BioNTech vaccine in the clinical trial, only 8 tested positive for Covid-19. People who got the placebo in the trial were much more likely to get Covid-19.

The Pfizer/BioNTech is an mRNA vaccine. This means that it takes tiny instructions into your body to teach your cells how to recognise and fight the Covid-19 virus. mRNA vaccines do not change who you are, or your genes. Taking an mRNA vaccine will not change your hair colour, for example, which is genetic. The mRNA that is in the vaccine helps your body to build an immune memory against Covid-19 without actually making you sick.

Imagine the vaccine is like an SMS. You receive an SMS with a photo of Corona Virus, and some very clear instructions about how to defeat it (mRNA). The SMS does not actually give you Corona Virus – just a photo of it. You remember this photo and the message very well, so that in future if ever you see Corona Virus again, you can defeat it quickly.

mRNA is very small and fragile and survives best at very cold temperatures. This vaccine needs to be stored and transported at minus 70 degrees Centigrade. Because this is so cold, it can make this vaccine quite expensive for governments to buy. We need special freezers and packaging for the vaccines.

NOVAVAX

Novavax is another company that has developed a vaccine against Covid-19. Their vaccine is sometimes called NVX-CoV2373.

We don't have much information about this vaccine yet because the peer-reviewed results of their trial have not yet been made available. In a press release, the scientists working on the trial said that this vaccine was 60% effective at preventing the new strain of Covid-19 that has been found in South Africa.

Close to 4,400 South Africans enrolled to participate in the trial for the Novavax vaccine. They lived in Gauteng, the Western Cape, KZN and Free State.

https://www.wits.ac.za/covid19/covid19-news/latest/ novavax-covid-19-vaccine-the-first-to-demonstrateclinical-efficacy-against-south-african-variant-.html



Prof Lydia Cairncross, a member of the People's Health Movement and a Professor of Surgery at University of Cape Town, receives the J&J vaccine on 17 February 2021.

MODERNA

Moderna, an American company, has also made an mRNA vaccine against Covid-19. It is sometimes called mRNA-1273.

It is 94.1% effective in preventing Covid-19. Over 30,000 people participated in their clinical trial. Of the 15,210 people who did not get the placebo, but who got the active Moderna Vaccine, only 11 tested positive for Covid-19. People who got the placebo in the trial were much more likely to get Covid-19.

This vaccine works similarly to the Pfizer vaccine. It gives your cells special instructions for how to recognise and kill Covid-19.

The Moderna vaccine must be kept at about -20°C, but can last in a refrigerator that is between 2°C and 8°C for up to 30 days.

This vaccine is effective against new variants of the Covid-19 virus. But currently this vaccine is not available to Africa.

Although the evidence from vaccines against Covid-19 shows that the vaccines provide immunity against the virus, scientists are not sure if you can still **transmit** (spread) the virus once you have been vaccinated. If you get exposed to Covid-19 after getting vaccinated, it is likely that you will not get sick but you might still be able to spread the virus to other people who have not yet been vaccinated. For this reason, it is very important to remain careful and keep social distancing, wearing masks and washing your hands even after you get vaccinated - to make sure that you are keeping the people around you safe too.

Session 6

THE ROLLOUT OF VACCINES IN SOUTH AFRICA

PURPOSE

- Ensure understanding that vaccines are a human right
- Share information on the roll-out: where, when and how

TIME

1 Hour

MATERIALS

- Sets of cards with population groups
- Sample information posters
- Flip chart
- Kokis and crayons

PROCESS

- 1. Ask participants to form small groups of 3 and read out the following from "Human Rights Framework" in Section D:
 - » Access to vaccines is a human right that everyone in South Africa is entitled to according to our Constitution. All adults will be entitled to get the vaccine for free. High profile people in society and ordinary people receive the same vaccine.
 - » Ask groups to discuss: what does it mean if ALL people have the same right to a vaccine?
- 2. In plenary, discuss responses
 - » What are the social implications?
 - » What are Economic implications?
 - » What are environmental implications?
 - » What are political implications of this right to vaccination?

Ask: What are the health implications if NOT ALL people were to get free access to vaccines?

Re-assert, that population immunity and hence the safety of ALL of the people in SA depends on free, accessible vaccination for all.

3. Ask participants to form groups of 6 (ie. 2 groups of 3 join) and distribute flip chart and pens.

Point out that vaccinations will happen in 3 phases. Ask groups to draw a chart on their flip chart and label it thus:

Phase 1	
Phase 2	
Phase 3	

Distribute cards with population groups (see materials) and request each group to allocate population groups to the phase in which they will be eligible to receive vaccinations. (There are some 'trick' groups that should stimulate discussion about their eligibility and thus require them to recall the human right!)

- 4. Compare results in each case ask: why this group? Ensure participants can argue why some groups have priority over others.
- 5. Give a brief input on WHERE vaccinations will happen, based on Section N: The SA Vaccine Rollout Plan:

WHERE	VACCIN	ΔΤΙΟΝ	WILL	τακε σ	
WHERE	VACCIN	ALIONS	VVILL	IANEF	LACE

- Health facilities like clinics and hospitals (for healthcare workers)
- Vaccination centres at approved pharmacies

NGOs

- Old age homes, care centres, prisons
- Some factories / workplaces

6. Explain WHO will give vaccinations:

• GP practices

- » Only trained healthcare professionals! (If someone comes up to you and offers a vaccination do Not accept this!)
- » Vaccinations will be given to you for free in the public sector because a vaccine is part of your right to access healthcare and medicines.
- 7. Point out that in the meantime it is very important to keep social distance, wearing masks and washing hands even after you have gotten vaccinated. And because we don't know if the vaccine prevents transmission (spread) of the virus, it is very important to keep being careful keep social distance, wearing masks and washing your hands.

HEALTHCARE WORKERS	TEACHERS	MUNICIPAL WORKERS		
SECURITY PEOPLE	RETAIL AND FOOD WORKERS	FARMERS		
PERSONS OVER 60	PERSONS WITH COMORBIDITIES	PEOPLE IN CARE HOMES		
PEOPLE IN PRISONS	PEOPLE IN OLD AGE HOMES	POLITICIANS		
CHILDREN	CHILDREN PERSONS OLDER THAN 18			

Copy and cut into individual cards:

Q THE SOUTH AFRICAN VACCINE ROLLOUT PLAN

There won't be enough vaccines for everyone at first. Government is prioritising healthcare workers, people with chronic health conditions & the elderly to get the first doses. Once priority groups are immunised, the rest of the population will be eligible for the vaccines. High profile people in society and ordinary people will receive the same vaccines.

The vaccination programme is aiming to reduce illness and death from Covid-19, to stop the spread of Covid-19 and to protect the health system as a whole.

Access to vaccines is a human right that everyone in South Africa – including migrants – is entitled to according to our Constitution.

The government is the only buyer of vaccines in South Africa and will distribute vaccines to provincial governments and the private sector. The National Department of Health is running the rollout of vaccines.

By 24 March 2021, 207 808 healthcare workers in South Africa had been vaccinated with the Johnson and Johnson vaccine through the Sisonke Implementation Trial. If healthcare workers get sick, no one will be able to take care of us in hospitals. We need to protect healthcare workers in case there is a 'third' wave of Covid-19. The first Johnson and Johnson vaccine doses for healthcare workers arrived in South Africa on 16 Feb 2021 and rollout began on 17 February 2021.

20 million doses of the Pfizer/BioNTech vaccine have been ordered for people in South Africa, but we're not sure when these will arrive yet - probably in May 2021. South Africa is getting 12 million vaccine doses from the WHO-backed Covax facility and has ordered a further 9 million doses of the Johnson and Johnson vaccine.

Government is prioritising healthcare workers, people who live in congregate settings like old age homes and prisons, people with chronic health conditions and the elderly to get the first doses. People in confined settings are vulnerable to outbreaks because there may not be much space and it may be overcrowded.

Once these priority groups are immunised, the rest of the population will be eligible for the vaccines.

Our vaccination programme is going to happen in three phases:

- 1. Phase 1 will focus on vaccinating 1.25million frontline healthcare workers.
- 2. Phase 2 will vaccinate 2.5 million essential workers (police, teachers, municipal workers, security people, farmers, retail and food workers), persons in confined places (like old age homes, care institutions and prisons), persons over 60 years old (the elderly) and persons over 18 years with co-morbidities like TB, HIV or diabetes.
- 3. Phase 3 will focus on persons older than 18 years, targeting 22.5 million people in the population.

Government is going to set up a national register for Covid-19 vaccinations to keep track of how many people have been vaccinated. Healthcare workers can already start registering online at this link: <u>https://vaccine.enroll.health.gov.za/#/</u>

The general public will have to pre-register for a vaccine and then show up to an appointment to get your vaccine doses. You will receive a vaccination card proving you have been vaccinated. Not much information has been provided about this yet. The President has announced that any adult in South Africa can be vaccinated. You do not have to be a South African citizen or permanent resident to qualify for vaccination.

Vaccinations will happen at officially approved sites. Healthcare workers will be vaccinated at health facilities like clinics and hospitals. Vaccination centres will be set up at approved pharmacies, GP practices, and NGOs. Outreach teams from the department of Health will take vaccines to confined settings like old aged homes, care centres and prisons. Some workplaces like factories or mines will be approved for vaccination drives.

Vaccines will only be administered by trained healthcare professionals. If someone comes up to you at a taxi rank or a shopping centre and someone offers you a vaccine, this may not be a real vaccine and you should be careful.

Remember that regular adults and people across South Africa will only get vaccinated later in the year once healthcare workers and particularly vulnerable populations such as the elderly and people with chronic health conditions have been immunised. This means it is very important to keep social distance, wearing masks and washing hands even after you have gotten vaccinated. And because we don't know if the vaccine prevents transmission (spread) of the virus, it is very important to keep being careful – keep social distance, wearing masks and washing your hands.

R WHAT TO EXPECT SAFTER GETTING VACCINATED

AFTER THE INJECTION

Every single medicine has some side effects. No medicine is 100% safe. Like every other medicine, there may be some slight side effects after getting vaccinated against Covid-19. Part of what scientists do in clinical trials is to keep track of what types of side effects may occur, and how often they happen. The real question is: Do the benefits outweigh the risks? So far a huge amount of evidence shows that the answer is yes.

Side effects vary from person to person, and many people will not get any side effects at all. After getting the injection, you might get a bit of swelling around where a healthcare professional injected you. You might have a slight sore arm, or feel a bit tired, and some people get headaches or fevers and chills for a short while after the vaccine. More dangerous side effects are very rare. Any side effects that you do get are usually a sign that the vaccine has triggered an immune response in your body – this means that your soldier cells are busily trying to build the right antibody weapons to destroy the tiny weak fragment of the virus that the vaccine introduced to your body. These side effects should not last for longer than two days, and your body usually limits the side effects soon.

Food or seasonal allergies are not the same as vaccine allergies, so if you are allergic to food or grass or animals, this will not mean that the vaccine is any risk to you. If you have had a bad allergic reaction to a vaccine in the past, you should speak to a doctor before considering getting vaccinated.

There is no evidence that vaccines are directly responsible for deaths or serious illnesses of individuals.

You will receive a vaccination card proving you have

been vaccinated. Keep this to know when to get your second dose.

If you are getting a vaccine that requires two doses, like the AstraZeneca or Pfizer vaccines, it is very important that you get both injections because the second dose boosts your body's ability to fight the virus!

BETWEEN DOSES

Remember that most of the Covid-19 vaccines have two doses. The second dose is meant to be given to you three or four weeks after the first injection. For the time in between the two doses, you do not have full immunity against Covid-19 yet – evidence from the trials shows that you only get immunity seven days after the second injection.

During the time between doses of the vaccine, you must continue with the same health measures to make sure that you and your loved ones are kept safe: maintain a physical distance of 1.5meters between yourself and other people, avoid crowded places, always wear a mask in public and wash your hands regularly for 20 seconds at a time, with soap and water or sanitiser.

You do not have to quarantine or self isolate after your first dose of a vaccine because remember the vaccine will not give you Covid-19 or make you actually sick. If you develop Covid-19 symptoms after being vaccinated, it is probably because you caught the infection before you got the injection, but the virus was still 'incubating' or growing in your body. Isolate, and follow health and safety guidelines.

It is very important that you get both injections!

LIFE AFTER VACCINATION

No vaccine is always 100% effective at preventing a disease. This is true for all medicines – in some people, very rarely, some medicines might not work properly. So depending on an individual's immune system, there is always a small chance that their body will not create immunity from a vaccine. In most healthy people, vaccines do create immunity and are the best chance we have at keeping ourselves and our loved ones safe. But vaccines aren't a "magic cure" and in case it does not create immunity, or if the immunity does not last for very long, it is important that we remain careful not only to take care of ourselves, but to protect people in our communities.

It will also take several months for everyone in the population to get vaccinated because the vaccines are being rolled-out in phases. Until everyone is vaccinated and we achieve 'population immunity', we need to be careful.

Although the Covid-19 vaccines that South Africa is going to get are very effective at preventing you from getting the disease, we do not know for certain if getting the vaccine means that you cannot unintentionally spread the disease. Scientists are investigating whether you can still spread or 'transmit' the virus after being vaccinated, and we hope to know more about this over the next few months. But because we know that you can have Covid-19 without showing any symptoms, and that you can spread the infection even if you don't know you are sick, for now it is important that even after getting vaccinated that you remain careful.

This all means that you still need to wear a mask, maintain social distance, wash hands regularly and avoid crowded and closed places. It will unfortunately take a very long time before life goes back to normal and we can stop maintaining these health and safety measures.

Vaccines will take some pressure off the health system because fewer people will get badly sick or die. Vaccines will protect vulnerable people in our communities. Because all viruses mutate or change over time, it is important to remember that you may need to get another vaccination again in the future – this will prolong your immunity/protection against the virus. We might need to get regular vaccinations like the flu vaccination, or a "booster shot" like what is required for some childhood vaccinations.

Vaccinations are safe and effective. But they are not a magic cure. Eventually we will all be safe from the Corona Virus, but we need to work together until that time.

S EQUITABLE ACCESS

Now that health workers are being vaccinated, we are waiting for the next phases of vaccinations. As we said before: vaccination is a human right – everyone who wants to has the right to get vaccinated! All our health depends on it!

WHY IS IT TAKING SO LONG TO MAKE OR GET ACCESS TO VACCINES?

To answer this question, it is first necessary to explain patents and the TRIPS agreement.

What is 'Intellectual Property' and what are 'patents'?

Intellectual property refers to the notion that a person or company can own an idea or a design that they have invented. Just as physical property is protected by rights, for example, this is my house so I have the right to live in it, intellectual property is also protected by rights. These rights are referred to as patents.

Patents are part of copyright law that protects intellectual property. If someone comes up with a new invention, they can protect that invention by getting a patent on it, which prevents other people from copying their idea or replicating it. The patent owner then has exclusive rights to produce, manufacture, market and sell that product. For example, if someone comes up with a new car engine, then that design can be patented so that no other company can copy that design. Thousands of things have been patented, from the first click pen, to complex boat designs, to toilet flushing mechanisms.

Patents do expire. After a certain period of time, usually determined by the country the patent is registered in, the patent expires and then the design may be copied as it is no longer legally protected by a patent. It is after this period that other brands may then use the same design under their brand although it was not their idea to begin with.

TRIPS

Today patents also apply to medicines. This gives one company exclusive rights to manufacture and sell that drug. Only after a certain period of time may other



INTELLECTUAL PROPERTY (IP)

- When you apply your mind (your intellect) to develop something new or original.
- Registering your IP is meant to give you an incentive to create new ideas, products, processes.

PATENT

- A government gives an inventor the exclusive right to stop others from making, using or selling something they have invented.
- For a set period (in South Africa this is 20 years)
- For a product or process that provides a new way of doing something, or offers a new technical solution to a problem
- A patent is one form of IP (others are copyright, designs, trademarks, etc.)

companies also produce that medicine, and that is when we see generics enter the market.

In the past this was not always the case because many countries thought issuing patents on medicines gave private individuals or corporations too much control over a resource that governments need to protect public health.

In 1995 the World Trade Organisation drafted an Agreement on Trade-Related Aspects of Intellectual Property known as the TRIPS agreement. This agreement creates binding international obligations among member states regarding intellectual property rights and copyright protection. It includes intellectual property protection for medicines.

WHAT IS THE IMPACT OF PATENTS AND THE TRIPS AGREEMENT?

When a new drug comes out and is under patented protection, only one company has the right to produce and sell that drug. This creates a market monopoly. The company has no competition for this drug and often the price of new, patented medication is high. Only once the patent lapses, and generics can be produced and introduced to the market is there competition and then prices drop.

When a company has a patent over a medication, they have complete control of how many vaccines or drugs are made and how they are distributed. This affects equitable access to medicines. There is a conflict between the right to access to medicines and intellectual property protection afforded to medicines, especially in circumstances where it is a public health emergency.

Currently, the vaccines for COVID-19 are patented. This prevents companies that do not have patents from producing the vaccines. That means, for example, that South Africa cannot make its own vaccine as the information regarding the vaccine is under protection and the World Trade Organisation ensures that patents are enforced until they lapse.

So effectively until the patent on one of the vaccines lapse, we cannot access information on how to make the vaccine and cannot produce our own.

This affects access to vaccines. A locally produced vaccine would certainly ensure faster, more equitable access, but because of the TRIPS Agreement and the patents on the vaccines, this is not possible.

In 2001, due to growing concern over unequal access to antiretroviral drugs that could help address the HIV/ AIDS crisis, the World Trade Organisation endorsed the Doha Declaration. The Doha Declaration addresses the issue of patents that restrict access to medicines essential to public health. Drugs necessary for the treatment of HIV, tuberculosis, and malaria were all included for consideration under the Doha Declaration.

In addition to the Doha Declaration, the TRIPS agreement has some flexibilities that could, at least in theory, provide access to essential medicines. Compulsory licensing allows a state to bypass a patent, allowing for local production, in order to address a health emergency. The Doha Declaration makes provision for such licensing so that each member state has the right to grant a license for the use of a patented invention without consent of the patent-holder, if it is in the interest of public health. This flexibility has however been unsuccessfully tested in the past by South Africa in seeking to produce anti-retroviral drugs. The political complications that arose in the international arena resulted in South Africa not pursing this.

WE NEED DOMESTIC PATENT REFORM NOW!

TRIPS contains flexibilities that countries can use to bypass patent holders' rights. If a country, like South Africa, wants to use these flexibilities its parliament must pass laws that explain how South Africa will do this.

South Africa first tried to pass such laws in November 1997, when the Mandela government tried to amend the Medicines Act. These amendments would have helped the government to import patented medicines that sell at cheaper prices outside South Africa. It would also have helped the government to get pharmaceutical companies to manufacture generic versions of patented medicines. However, 37 pharmaceutical companies sued the government for trying to pass these laws. Since then, government has been very careful about passing laws that challenge the rights of patent-holders, even when such laws would be legal under TRIPS.

However, if South Africa does not pass domestic laws enabling greater use of TRIPS flexibilities it will struggle to give everyone access to the essential medicines. Many of the medicines needed to manage TB, HIV/AIDS, cancer, hepatitis, diabetes, asthma, and COVID-19 are patented. Therefore, they tend to be very expensive. If government used TRIPS flexibilities to bypass patents it could buy or manufacture these medicines at cheaper prices and make them available in the public sector. That is why we need to fix domestic patent laws now!

In 2009 the Department of Trade and Industry (DTI) started the process of fixing the South African patent laws so that we can use TRIPS flexibilities. To monitor and support these efforts TAC, S27 and MSF started the "Fix the Patent Laws" (FTPL) campaign in 2010. In 2013 the DTI first released a draft IP policy for public comment, and in 2018 Cabinet approved this new IP policy after getting public comments on it. However, the DTI has still not translated this policy into law. It has not yet submitted a Bill in parliament that will make it more difficult to obtain patents on health products, or easier to use TRIPS flexibilities.

WHAT MECHANISMS GLOBALLY HAVE BEEN DEVELOPED TO ENSURE EQUITABLE ACCESS TO THE VACCINE?

1. COVAX

- » This mechanism allows countries to pre-pay to buy a vaccine;
- » Countries can also donate to COVAX so that other countries can get the vaccine for free;
- » Under COVAX, Low Income Countries get free vaccine;
- » Middle Income Countries purchase at market prices;

BUT

- » Money pumped into COVAX does not change IP protection;
- » Big Pharma still maintains patents and profits and limited production;
- » There are not enough doses for everyone COVAX only aims to vaccinate 20% of each country's population, as big pharma doesn't want to sell to COVAX only;
- » Countries pre-pay but cannot choose which vaccine they will get;
- » Countries pre-pay but do not always know when they will get the vaccines, or that they will have the infrastructure to store them safely;
- » Covax struggles to secure enough vaccine stock, because many high-income countries purchase vaccines directly from drug companies. When they do so, this reduces the stock of vaccines that can be supplied to Covax (e.g. 80% Pfizer vaccine already reserved by northern High Income Countries);
- » Covax is a public-private partnership. The World Health Organisation and its Member States do not have any final say over how it is governed. Therefore, decision-making within Covax is not subject to direct oversight by WHO Member States.

2. C-TAP - COVID 19 TECHNOLOGY ACCESS POOL

The COVID Technology Access Pool (C-TAP) was launched in March 2020 as a global pool for voluntarily sharing COVID-19 health technology related knowledge, intellectual property and data.

- » It is an attempt to share intellectual property amongst pharmaceutical companies to enhance research and production of Covid-19 medicines and technologies.
- » To date, not one Pharma company has donated its intellectual property to the pool
- » C-TAP is supported by 34 Low/Mid Income countries who depend on pharmaceutical companies in the global north for access to Covid-19 medicines. It is not supported by the UK, USA, which are home to the companies that produce Covid-19 vaccines.
- » Pfizer, one of the companies who has produced a Covid-19 vaccine, has said this initiative is "nonsense" and "dangerous".

3. TRIPS WAIVER

This is an official request to the WTO to waive all patents and IP rights related to Covid-19 related medicines, vaccines and technologies. The waiver will be limited:

- » Only applied during the epidemic
- » Until vaccines can comprehensively cover the global population; or
- » Until a majority of people globally are immune to Covid-19
- » Applied only to COVID-19 related tech
- » It is not mandatory for countries to use the exceptions in the waiver. This means that countries who don't want to use the waiver don't have to. So for example each country can decide if they want to encourage local production of vaccines to speed up the vaccinations or if they want to buy it from big pharma.

WHY IS A PATENT BAD FOR YOUR HEALTH?

- When drug companies hold patents they have a monopoly on the medicine or vaccine.
- No other company can make the same medicine or vaccine without their permission even if there is a health emergency.
- Because they have a monopoly, they can and will keep the prices high.
- When there is no patent, there can be competition and the prices come down. Also more companies can make the medicine so there is no shortage.

The World Trade Organisation (WTO) maintains patent monopolies, controlling information about how to make the vaccine. This prevents South Africa and others from being able to make and distribute affordable vaccines.

A RESPONSE FROM CIVIL SOCIETY

As the COVID-19 pandemic wreaks havoc in South Africa and across the globe, millions are dying and getting infected. Inoculating (vaccinating) a significant proportion of the population is the only realistic way to defeat the pandemic, globally and locally. For this we need international co-operation and social solidarity, unity and action of all sectors of our society.

We welcome the news that South Africa has managed to acquire doses of a safe and effective COVID-19 vaccine for our health care workers on the front line. But this is just a start. We need millions more for all the people in the country, the region and the continent. Technology transfer and local manufacturing will make this possible. But to enable this, we need to ensure intellectual property rights for Covid-19 technologies are waived by the WTO.

The government cannot do a vaccination campaign alone. We, the people, especially the millions of us who live in the direst of circumstances, must be central to this effort. Join the People's Vaccine Campaign and become active in this life and death struggle. No-one is safe until everyone is safe!



WHY PATENTS ARE BAD FOR YOUR HEALTH – THE STORY OF TOBEKA

Tobeka Daki, a single mother started treatment for breast cancer in 2013.

She had a type of cancer that was very aggressive but could be treated with a medicine called trastuzumab. The World Health Organisation recommends this medicine for her type of cancer, and in the US and in Europe it is 'normal' care.

Tobeka tried to get access to the medicine.

In Africa, this medicine costs US\$35,000 per year for one patient. Because the drug was so expensive and hard for public health systems to get, her request was denied.

Tobeka never got the drug she needed. Her cancer returned in 2015.

She died the following year.

WHY THE PVC: TOWARDS A PEOPLE'S VACCINE CAMPAIGN



The COVID vaccine is a public good, and all people must have equitable access! We call on you to support the following:

1. Build pressure on the National government

- We need increased health spending to build the capacity of the national health system, and National Health Insurance (NHI) to ensure decent and equal healthcare for all in SA.
- We need full-time public sector employment for Community Healthcare Workers (CHW's) and the appointment of additional nurses.
- We need The terms and conditions of the 2018 PSCBC collective agreement restored and implemented.
- We need a Basic Income Guarantee (BIG) to address the socio-economic impact of Covid-19.

This is not the time for austerity!

2. Address TRIPS and Intellectual Property

Vaccines are a public good – not a private intellectual property.

- South Africa must establish a policy environment that promotes local and regional manufacturing
- South Africa must develop a simple to use compulsory licensing system that encourages local research, development, and production.
- We must pressurise the WTO, rich countries and the pharmaceutical industry do not continue to enforce structural IP, patent and pricing barriers that

undermine universal access to vaccines

• We insist on price regulation, control and price transparency of ALL vaccines.

3. Mobilise civil society to demand adequate and meaningful representation

- Members of civil society must be included in various stakeholder committees and forums, nationally and locally.
- We can campaign and educate communities about vaccines as well as monitor implementation to call out any form of inequity, unfairness, corruption, theft, mismanagement or even inefficiencies.

Our fight against COVID-19 must be guided by solidarity and the protection of communities.

4. Combat the wave of antivaccine disinformation

- Disinformation, quackery and deliberate spreading of false and misleading anti-science sentiment will cost us lives.
- We have to build trust in scientific information and have clear and accessible communication about all aspects of the vaccine campaign.

We can only end this pandemic with widespread vaccination!

Let us join together to help grow a People's Vaccine Campaign for South Africa.

What are the threats to our vaccination campaign?

- SA Government's Austerity Measures in a Pandemic
- SA's Inequality: A Story of Two Unequal Health Systems
- The Agreement on Trade-Related Aspects of Intellectual Property Rights
- Vaccine Nationalism and Xenophobia:
- Position and Treatment of Community Healthcare Workers
- Gendered Disparities
- Disinformation and Vaccine Skepticism

Session 7

THE TRIPS WAIVER PROPOSAL ON COVID-19 TECHNOLOGIES

PURPOSE

- Develop understanding of important terms and concepts pertaining to IPRs /TRIPS
- Deepen insight into the link between private interest and public good
- Explore and practice arguing for the TRIPS waiver of COVID-19 technologies

TIME

2-3 hours

MATERIALS

- Flipchart and pens
- Flipchart with questions for discussion (pre-prepared)
- Copies of the Manual for reference

PROCESS

1. Introduction

- » Give a brief overview of the session so that participants will know what to expect.
- » Point out that the purpose of this session is to prepare all for the waiver campaign: if we are clear about what arguments to put forward we can be stronger in our struggle.
- » Ask participants to get into pairs of small groups of 3 and discuss the questions displayed on flipchart:
- Why do we need as many people as possible to be vaccinated?
- What are the obstacles to mass vaccinations?
- What are the implications of not achieving 'herd immunity'?
- » After a few minutes request feedback from small group discussions, in plenary. Ensure that the following points are expressed clearly:
 - We need at least 68% of the population to be vaccinated to achieve 'herd immunity', or 'population immunity'.
 - One of the obstacles is the insufficient supply of available vaccines. The reason for this is that vaccines are patented; this means someone has a license that prevents others from making, using or selling the vaccine.

- » Briefly check on understanding of important terms, such as
- Intellectual property right (IPR)
- Patent (copyright; trademark)
- » Ask: What is the purpose of 'brand' names such as Coca Cola, Nike, Shoprite? Have a brief discussion about the link between a brandname and a product.
- » Ask: What vaccines against Covid-19 are there? Which ones do we have in S.A.?

2. Discussion on Patents

» Introduce 2 small case scenarios to illustrate ethical issues regarding IPRs related to health: Read out the brief scenarios, or make up your own stories.

Case scenario 1:

For years, Thoko, a scientist, has worked on finding a remedy for obesity. Finally, after much experimenting and testing she has developed a biscuit-like food that tastes sweet and looks very appealing but does not lead to weight increase. People can eat it as much as they want but will not get fat. Because she has spent so much time, imagination, experimentation and money on this invention she has patented it – so she will earn a bit from anyone who wants to produce and sell the product.

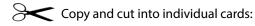
Case scenario 2:

Every year, an estimated 800 000 children under 5 die each year from pneumonia. Scientists have been hard at work trying to develop a vaccine that creates immunity from pneumonia. Dr. Mpilo has finally tested a break-through vaccine that works – and his institute has registered a patent on it, so that no one else can manufacture it without their permission.

- » Request participants to move into groups of 3 or 4.
- » Task: Discuss and compare the 2 scenarios.
- » What are some of the advantages and disadvantages of patents?
- » In plenary, ask participants to report back briefly:
- How are Intellectual property rights different from other property rights?
- How are IPRs with regards to health issues different from other IPRs regarding commodities?
- What are some of the ethical issues about patents?
- Who benefits from patents?
- » Drawing on your notes, and using the Private interest vs Public good example (p.5-6) give a brief definition of / input on other institutions:
- GAVI
- COVAX
- WIPO

3. TRIPS

» Explain TRIPS. (Give an input. You may draw on and display the cards as a reminder)



Card 1: The TRIPS agreement

TRIPS = TRADE-RELATED ASPECTS OF INTELLECTUAL PROPERTY RIGHTS

(Copyrights, trademarks, patents)

• An international legal agreement between nearly all the countries in the world.

• The agreement serves to strengthen, protect, and enforce intellectual property rights (IPRs).

• These are the rights given to persons for creations of their mind.

• TRIPS also applies to health related items: medicines, equipment, testing. For this, TRIPS has been criticized because inventor's private rights are in conflict with the public good.

Card 2: The Doha Declaration

THE DOHA DECLARATION

• Signed by all 164 WTO member states.

• Aims to promote a balanced implementation of the TRIPS provisions in order to protect public health and encourage universal access to healthcare.

• States that patent and IPR protections can be relaxed when states face a national emergency and the patent prevents them from accessing the technologies they need to manage the crisis.

THE WORLD TRADE ORGANISATION (WTO)

• The WTO was established in 1995 to regulate and facilitate trade between nations.

• Made up of 164 member countries.

• Follows on the footsteps of GATT (General Agreement on Tariffs and Trade) set up to boost economic recovery after WW2 when most African / Asian countries were still under colonial rule.

• Promotes free trade by lowering tariffs – often to the detriment of developing countries.

• WTO favours multinational corporations: (Example: licensing of HIV/AIDS medications!) they use TRIPS agreements to pursue private gain at the expense of the public good.

» Encourage responses from participants: what questions and/or comments arise?

4. Role play on the waiver application

- Select 2 volunteers to represent the TWO
- Select 2 volunteers to represent India and South Africa
- Select 1 media reporter
- » Ask the 4 volunteers to perform the scenario: (manual p.11)- India and S. Africa request the WTO to waiver some of the conditions of the TRIPS agreement with regards to Covid-19 equipment.
- » Ask the media representative to report on the outcome of the meeting (p.12)
- » Thank volunteers for playing the roles and request all participants to engage in a plenary discussion about what they saw.
- Do you think wealthier countries benefit from the new COVID-19 technologies while other, poorer countries loose out? How so?
- » Read from a letter sent to President Biden by Pharmaceutical companies claiming that "eliminating TRIPS protections would undermine the global response to the pandemic, including ongoing effort to tackle new variants, create confusion that could potentially undermine public confidence in vaccine safety, and create a barrier to information sharing....elimination protections would not speed up production."
- » Ask participants to respond!
- » Explain that the new director general of the WTO suggested an alternative to the waiver: voluntary initiatives to improve access to vaccines through specific licensing agreements.
- » Ask participants to respond to this suggestion.
- » Summarise counterarguments against this, including
 - Many pharmaceutical companies may not enter into voluntary agreements
 - Past precedents show that patent rights are a growing barrier to the manufacture of Covid-9 technologies
 - The cost of manufacture is not disclosed; hence it is impossible to check promises that vaccines will be sold at no /low profit
 - Access to vaccines remains unequal (even if a country participated in the vaccine trials, as S.A. did)
 - Many countries lack the capacity and know-how to produce generic versions of COVID-19 medicines or vaccines even if there was to be a waiver of the IPRs
- » Remind participants that the whole world is affected and it is in the interests of all to share data and technologies if we want to overcome the Covid crisis.

Take a short comfort / refreshment break

5. Responses and Action

- » Divide participants into groups of 5 or 6; give each group flipchart and pens the following instruction:
- What is to be done? Jot down 4-5 suggestions for achieving the human right to healthcare and vaccination!
- Allocate approx. 15 minutes to this, then facilitate a report-back.
- Discuss the pros and cons of each suggestion.
- End by asking each group to draft one 'slogan' or demand, which they could put on a poster! Display the posters on the walls or take them for a symbolic walk around the room....

6. Review and evaluation (time permitting)

Role play around interests

- a. Ask participants to get into 4 groups :
- b. Representatives from S.A. and India waiver campaign
- c. Representatives from pharmaceuticals and anti-waiver corporations
- d. Representatives advocating for licensing agreements
- e. A panel of experts sitting in judgement
- » Give the following background information:
 - India and South Africa have argued that relaxing the patents would allow more countries to produce or import generic versions of coronavirus vaccines. This means they would not have to wait for months or years for enough vaccines to immunize their populations.
 - Pharmaceuticals disagree saying this might jeopardise the availability of some ingredients, and quality assurance.
 - Licensing agreements have been suggested as an alternative offering limited rights to manufacture vaccines.
- » Your task:
- Each group is tasked with developing arguments in favour of their standpoint and interests. (do draw on the notes for this!)
- Meanwhile, the panel of experts will develop a list of criteria according to which they will judge each groups' arguments and then decide which group is the 'winner' in ;'ticking the most boxes'.
- Process: one by one, the 3 groups present their arguments in the end, the panel will respond and make a decision.

6. Thank all participants for playing, and conclude with summary statements (or another symbolic poster walk!)

(May 21)

FREQUENTLY ASKED QUESTIONS

Does getting the Covid-19 vaccine give me the virus? Will it make me sick?

Getting vaccinated against Covid-19 – or any other infection – does not give you the disease. The vaccine teaches your immune system how to respond to the virus or infection, and how to fight it off quickly. No vaccines against Covid-19 contain a live version of the virus and cannot give you Covid-19. Some vaccines use a tiny, weak part of the virus to teach your body how to build immunity against it, but remember – vaccines never give you the actual, whole virus. A lot of the vaccines against Covid-19 inject instructions to your body to teach them how to make the right antibodies to fight the infection off.

Getting vaccinated against Covid-19 does not give you the Corona Virus. If you feel a little unwell after the vaccine, this is usually a sign that your immune system is learning how to fight the virus. This means that if your cells encounter the real virus in future you will be prepared to get rid of it.

How long does the vaccine last? Will I need to get vaccinated again after a year like for the flu shot?

Because vaccines against Covid-19 have been developed in the past few months, we do not have evidence about how long they will protect us for. There is a chance that you will need to receive a 'booster' vaccination after a year because we don't know how long the vaccine against Covid-19 gives you immunity for. When more evidence becomes available, doctors and scientists will inform us about whether you will need to get vaccinated again after receiving two doses.

Are there any side effects to getting the vaccine?

Some people will get some slight side effects shortly after getting vaccinated but these aren't serious – most people won't get side-effects at all. Some side effects might be that your arm might be a bit sore where the injection went in, or you might feel a bit tired or feverish. Remember that if you do get side effects, this does not mean you are getting Covid-19 – this is usually a sign that the vaccine is beginning to teach your body how to fight off Corona Virus. The technical term for this is reactogenicity. Most of these side effects will go away within a few days. You can treat these basic symptoms with paracetamol and rest at home.

More serious side effects are rare. If you have a history of severe side effects to vaccines, like anaphylaxis, speak to a healthcare professional about the vaccine.

Millions of doses of vaccines against Covid-19 have been given to people around the world, and cases of severe side effects or allergic reactions to the vaccine are incredibly uncommon.

Can you be forced to have the vaccine?

Getting vaccinated is the best way you can protect yourself and loved ones against Covid-19. No one can force you to get a vaccine in South Africa. Although you have a right to a vaccine, you cannot be punished for not getting a vaccine and it is not mandatory. You will not be forced to take the vaccine in order to travel, work or go to school. You will not be given the vaccine in secret. Only you can make the decision to get vaccinated. Getting vaccinated, however, is the best way we can keep ourselves and communities safe and healthy. Vaccines are safe and effective.

i. Drawn from: https://docs.google.com/document/d/16YIExyS06mXhbEkQJpCGRPIOxlehdvsZymburAamzxY/edit

What is in a vaccine?

Vaccines contain one or more active pharmaceutical ingredients (API) and other helpful chemicals which help your body develop an immune response. If you look at the list of ingredients in a vaccine it might look complex and confusing, and you might not recognise any of the names on it. That's fair, but you shouldn't be worried. Vaccines do not contain microchips, tracking devices, or poisonous chemicals. Vaccines are not harmful. But most of us don't know what's inside all sorts of medicines, but we know that in order for them to be sold in South Africa, they have to be tested, checked and approved by experts we can trust.

Can children get the vaccine?

Children were not included in the scientific trials for vaccines against Covid-19, so we do not know yet whether there are specific ways the vaccine impacts on them. So far we haven't heard about any serious safety concerns for children being vaccinated, but most of the vaccines have only been approved for people over the age of 18 (because only adults were allowed to participate in clinical trials). Pfizer's vaccine has been approved for use for people over the age of 16 in America.

But we do know that children seem to get moderate or severe cases of Covid-19 less often, and might not need a vaccine as urgently as other groups of people. While vaccines are being rolled out to priority groups of people who are vulnerable, scientists are testing the vaccines' effects on children. So far, no tests have been done on very young children, infants or toddlers.

Can you get the Covid-19 vaccine if you are pregnant or breastfeeding?

None of the vaccines currently available have been tested on pregnant women, so we do not have evidence about whether the vaccine affects pregnant women differently. Scientists are currently testing the vaccine's effects on pregnant animals and more information should be available soon. A few people have accidentally gotten pregnant while participating in the vaccine trials, and data from these cases will be helpful to understanding how the vaccine impacts pregnant women and babies.

Current evidence says that Covid-19 if a pregnant woman gets Covid-19 it is unlikely to affect the baby. But Covid-19 can make pregnant women quite sick. Especially if you have a comorbidity like hypertension or diabetes, having Covid-19 while pregnant can be dangerous for you. Pregnant women are more likely to need to go to hospital for Covid-19 than other people. Most vaccines against other diseases are allowed during pregnancy because the benefits of the vaccine are better than the potential risks – other vaccines are safe and effective for pregnant women. But right now we just don't know how the Covid-19 vaccines impact pregnant women and their babies. Although other vaccines have been proven to be safe and effective, some experts suggest that avoiding exposure to Covid-19 by staying at home, wearing masks, sanitising hands and maintaining a social distance is a good idea for pregnant women if it is possible. If this isn't possible – like for pregnant women who are working as frontline workers – you should speak to your doctor about the risks of getting or not getting a vaccine.

Although no breastfeeding women were enrolled in the clinical trials for vaccines against Covid-19, current evidence shows that there are no known risks to women who get a vaccine against Covid-19 while breastfeeding.

Speak to a doctor or healthcare professional you trust about whether you should receive a vaccine if you are pregnant or breastfeeding. The doctor or healthcare worker will assess your level of risk and help you make an informed personal decision.

If you have had Covid-19 before, do you still need the vaccine?

Even if you have had Covid-19 you still need to get vaccinated because the vaccine will offer you longer immunity against the virus and prevent you from getting sick again. You will need the same doses of the vaccine as everyone else to provide longer immunity, and the vaccine cannot make you sick again.

However, if you are currently sick with Covid-19 and have acute (or bad) symptoms, it is advised that you should not get vaccinated until you feel better.

Because we know that having had Covid-19 gives you some short term immunity against the virus, experts from the World Health Organisation say that you should get vaccinated about 6 months after being infected because there won't be enough doses for everyone at first and therefore if you have some immunity already, other people might need to get vaccinated more.

But 6 months after being infected, when you are fully recovered, you should still get a vaccine to make sure that you don't get sick again and to keep loved ones in your community safe.

How can we trust that the government will do what is best for the entire population? Why should I trust anything government says when so far they have not shown any care for me?

Government has lots of highly-qualified scientists, experts and doctors from South Africa and around the world giving them advice about how to protect us. Many experts who aren't from the government have checked that the vaccines are safe and effective.

Government has constitutional obligations to make sure that everyone in South Africa has access to healthcare services and medicines like vaccines.

Pharmaceutical companies are driven by profit, how do we ensure that they are acting in the interest of sick people first? How do we know this isn't just a way for pharma to make money?

Ultimately, pharmaceutical companies do want to make money and they would never be allowed to sell a vaccine that doesn't work or isn't safe. Some companies like AstraZeneca have promised to sell their vaccines 'at cost' meaning that they don't intend to make a profit from them. How vaccines are priced, however, is not very transparent or clear so there is a need for pharmaceuticals to be honest about their processes and not inflate prices.

Does getting the vaccine guarantee that you won't get Covid-19 and won't pass it on?

Although the evidence from vaccines against Covid-19 shows that the vaccines provide immunity against the virus, scientists are not sure if you can still transmit (spread) the virus once you have been vaccinated. Getting vaccinated means that you will not get sick, or that if you do, your symptoms will not be so bad. Because we know that Covid-19 spreads through droplets, if you are not coughing or showing symptoms of being sick, you might not be able to spread the disease. But we are not 100% certain of this yet. This means that after getting vaccinated you must still be careful and keep social distance, washing hands and wearing a mask to protect the people around you – including those who are vulnerable or might not be able to get vaccinated.

If I get vaccinated against Covid-19, will I test positive for the virus?

If you get tested for Covid-19 after being vaccinated, the vaccine will not show up on the standard PCR test. You will usually test negative for Covid-19 after being vaccinated. If you test positive for Covid-19 after getting vaccinated, it is not because of the vaccine but it might be because you were exposed to the virus before and it was incubating (or growing) in your body before giving you symptoms, so you didn't know you had it. The vaccine cannot give you Covid-19.

When scientists say there is a 90% efficacy/effectiveness of a vaccine, what does that mean? Should we be worried that it's not 100%?

No vaccine ever gives 100% of people full immunity against a virus – just like no medicine is always effective in all people. But the vaccines that are currently being approved in South Africa have high effectiveness rates, which means that they will protect enough people to slow the spread of the virus and eventually get it under control.

Will the vaccine work on the new variant?

All viruses mutate over time. Right now we don't have much evidence about whether vaccines will work effectively against this new variant that has been found in South Africa.

AstraZeneca/Oxford have said that their vaccine is not effective at preventing mild or moderate cases of the new variant of Covid-19 identified in South Africa. At 12 February 2021, the rollout of AstraZeneca/Oxford vaccines for South African healthcare workers has been suspended.

Moderna says that their vaccines are still effective against the new variant, just slightly less effective. Their evidence suggests that the antibodies triggered by the vaccine can recognise and fight the new variants. More studies are needed to make sure this is true of all the vaccines against Covid-19. But vaccines can be modified to be effective against new variants. The flu vaccine is adapted every year to make sure it remains effective.

Other vaccines take years to develop, how can this one be so quick and still be safe? What evidence is there for efficacy and safety?

Remember that scientists have been making vaccines for close to two hundred years now, and we can use all that history of knowledge to make sure that the vaccine for Covid-19 is safe, effective and rolled out quickly. New types of vaccines adapted from the development of other vaccines were made very rapidly after Covid-19 was first identified.

Covid-19 is similar to viruses like SARS, MERS and other corona viruses (which were first discovered by scientists in the 1960s), and scientists have been investigating these viruses and making vaccines against them for decades years already.

A lot of delays in making vaccines or new medicines are because the paperwork takes a long time, because scientists can't find enough participants for their trials or if they don't have enough money. This time with Covid-19, there have been lots of investments made into the trials to make sure they can move quickly. Billions of dollars have been invested into the trials. Bureaucratic requirements have been speeded up, and thousands of people volunteered very quickly to be part of the trials – a process that usually takes months or years. Covid-19 has impacted millions of people so there was public pressure to get a vaccine against it. Plus there was lots of money and collaboration between experts and scientists from across the world to make sure that the trials could move forward.

Scientists doing the trials of vaccines have sent their test results to regulators as they go along, instead of providing one big document of evidence at the end of a trial, so that experts at regulators can check to see if vaccines are high quality, safe and effective at every stage of the process. This is called a "rolling review". Regulators from around the world have been working together and sharing their information together to speed up the process.

Usually regulators will only allow companies to start making their vaccines once everything has been approved. But in this case, companies could start making doses of vaccines while the results were still being evaluated.

No short cuts have been taken. Every one of the usual steps to check that a medicine is safe has been followed, except this time more people have been working together – with more support from governments, more money and more public support – to beat Corona Virus together. Safety, quality and effectiveness have not been compromised. The development process for the COVID-19 vaccine drew on a lot of earlier work. SARS-CoV-2, the virus that causes COVID-19, is a corona virus, called that because of its "crown" of spikes. The first corona virus (called 229E) was found in the 1960s and until 2002/2003 it was thought that these viruses did nothing worse than cause a common cold. Then we had the SARS epidemic, caused by a virus called SARS-CoV (Severe Acute Respiratory Syndrome corona virus - note this is SARS-CoV, not SARS-CoV-2). About 8000 people were infected and about 800 died from SARS. Then in 2012 MERS (Middle Eastern Respiratory Syndrome) appeared, caused by MERS-CoV. Researchers like Dr Kizzmekia Corbett at US NIH were working on vaccines for MERS before 2020 and they re-used some of their work to develop a COVID-19 vaccine (see this Twitter thread)

Will the vaccine interfere with other meds I'm on for chronic conditions?

The best way to check whether vaccines interact with medicines for chronic medications is to read the package insert that comes with a vaccine. This will have a section called "interactions" which explains how the vaccine may interact with other medicines. It also has a section called "contra-indications" – which outlines when the vaccine may not be advisable to take if you have specific medical conditions.

So far, vaccine makers say that there are no serious interactions with other medicines. The vaccine is safe for people with diabetes, stable HIV, cancer or well-managed tuberculosis. If you are living with HIV and are on treatment, know your viral load and are undetectable, vaccines are very safe. We don't have enough information yet about how the vaccines impact people living with poorly managed HIV – in other words, people who don't know their viral load or aren't on regular treatment. People with stable comorbidities who are taking treatment regularly can still take the vaccine.

The only precautions that have been listed for Covid-19 vaccines are if you have had a severe allergic reaction to any component of the vaccine in the past, if you have a history of immediate severe allergic reaction to vaccines or injectable therapy or if you are being treated with anticoagulants. Doctors, nurses and other healthcare workers are being trained by the Department of Health with these guidelines and will be able to tell you whether it is safe for you to get a vaccine according to your unique medical history.

Food or seasonal allergies are not the same as vaccine allergies, so if you are allergic to food or grass or animals, this will not mean that the vaccine is any risk to you. If you have had a bad allergic reaction to a vaccine in the past, you should speak to a doctor before considering getting vaccinated.

Will elderly people, people with disabilities and others who can't get to clinics be able to be vaccinated at home?

Outreach teams will be sent to priority groups like the elderly or those with comorbidities, but we don't have details about how this will work yet.

Is a single dose of the J&J vaccine as effective as a double dose of the others?

We don't yet have enough evidence about the Johnson and Johnson vaccine to tell whether it is more or less effective than other vaccines. Because it is just one injection, it may be cheaper and easier to rollout – particularly in African countries where the storage and transport requirements needed for vaccines like the Pfizer or Moderna vaccines are challenging but not impossible to overcome.

More information about the J&J vaccine will be available soon.

Is the vaccine not just a way to depopulate Africans?

No – the vaccine will save many Africans, and prevent thousands more from getting badly sick, just like every other group in the world. Many African scientists and experts have been involved in the development of vaccines, and thousands of people from South Africa and around the continent have participated in the scientific trials of vaccines. Vaccines are not developed to hurt or threaten people – they are a safe and effective way to prevent people getting sick.

If the vaccine is so good, why does the government still want us to social distance, wash hands etc after we're vaccinated?

No vaccine is ever 100% effective, just like with all medicines – there is no magic cure or silver bullet for a disease like the Corona Virus. Vaccines are the best way we can prevent thousands of people from getting badly sick or dying, and the best way to get a pandemic like this under control so that our lives can begin to go back to normal. But because we don't know if the vaccine prevents transmission of Covid-19 even though it will protect you from getting infected, we need to remain careful about social distancing, washing hands and wearing masks so that we don't accidentally spread the disease to other vulnerable people.

Why use an mRNA-based vaccine? Will it change your genes?

DNA are the building blocks that make you who you are. The vaccine will not change your DNA or who you are. An m-RNA vaccine gives your cells instructions about how to make the right antibodies to fight off the virus. The vaccine teaches your body how to recognise the virus and learn how to fight it. The M-RNA instructions do not stay in your cells for long periods and do not change your genes/DNA at all.

Who can administer these vaccines? Pharmacists? Doctors? Traditional healers?

Healthcare professionals including doctors, nurses and pharmacists are being trained about how to administer these vaccines and will only do so in approved vaccination drive centres.

Session 8

COVID-19 VACCINATION LITERACY TRAINING: EVALUATION

PURPOSE

- Check understanding of vaccination messages
- Provide opportunity for participants to practice communication about vaccines
- Offer additional information on vaccination messages

TIME

• 20-30 minutes

MATERIALS

• PHM posters

PROCESS A

- 1. Ask: when you get home, tonight, what will you tell other household members about the vaccination literacy session, today? How will you explain the meaning and importance of Covid-19 vaccinations?
 - Point out that this activity supports participants in practicing 'teaching back' what they have learned.
- 2. Ask participants to get into small groups of 4-5.
- 3. Refer to the list of topics established at the beginning of the session: questions arising from the 'Bingo' game. (eg. 'immune system'; 'vaccination'; herd immunity; infection)
 - Go through the list of topics / terms and request participants to 'tick off' all the topics covered in the session. Point out that the curriculum established collectively has been covered.
- 4. Identify 4 or more topics / terms (depending on the number of groups you have), and allocate one topic to each group. Give the following instruction:
 - a. You have 10minutes to collectively work on an explanation of the term / topic. Ensure you all have the same understanding of what it means.
 - b. Using your own words (you may want to use your home language), develop a way of explaining the term / topic to others. Can you explain it with an example or a comparison?
 - c. Prepare to present your explanation to the rest of the group.
- 5. Monitor the process and assist where necessary. Offer information materials, if needed, but insist participants use their own words for the presentation.
- 6. One by one, groups present their explanations. Encourage other participants to ask questions, so that groups can practice responding and developing understanding.
- 7. Correct mis-understandings or add additional information, if necessary.
- 8. Use this process to monitor and evaluate if the session has led to deepening insights and provide further links to information, if needed.
- 9. Conclude the session with an appraisal of learning achieved, and encouragement for further readings and information gathering. If necessary, include some tips and ideas of how to illustrate explanations to make them clearer.

Note to facilitators

The kind of responses and level of engagement will give you a lot of information about what participants have understood about the right to vaccines!

PROCESS B – 'SPECTRUM' EXERCISE

Do this exercise at the beginning of the workshop, after doing name games or ice breakers, and then again at the end of the workshop to understand whether the group has understood vaccine literacy.

- 1. This exercise requires people to walk or move up and down. Make sure there is enough space to allow people to do this without breaking social distancing.
- 2. Put a piece of paper on one side of the room or space that says "AGREE" or "YES". Mark the opposite side of the room as "DISAGREE" or "NO". In the middle, put a piece of paper down that says "I DON'T KNOW / NEUTRAL".
- 3. Explain to participants that you are going to read out a statement, and depending on how they feel about the statement, they must move to the side of the room that represents their feelings. So if they really agree with the statement, they must go to the "agree" side of the room. If they don't mind, or don't know, they can stay in the middle. They can position themselves anywhere along a line or 'spectrum' in between agree and disagree. After people have decided where they are standing, ask a few people from each side of the spectrum to explain why they are standing there. After each statement, you can tell people to move around and get ready for the next statement.
- 4. As a practice round, do one or two statements like:
 - a. "I support Orlando Pirates football club"
 - b. "I love eating Marmite"
 - c. "I speak more than one language".
 - d. "I want Covid-19 to be over so that our lives can go back to normal"

(if people strongly agree or disagree, ask them why they're standing where they are standing! Ask people in the middle why they are standing there. Try and choose statements that might bring out strong opinions in people!)

- 5. Get people's attention and tell them you are going to start asking some questions about vaccines. Remind people that you are not here to judge and we are all here to learn. Read out the following statements, one by one, and tell people to show whether they agree or disagree:
 - a. "I have been vaccinated" (trick question! Almost everyone in South Africa has been vaccinated. Ask people to check out their vaccination scars on their arms).
 - b. "I have questions about vaccines against Covid-19"
 - c. "I know what the 'immune system' is and how it works"
 - d. "I understand how vaccines work"
 - e. "I understand what 'herd or population immunity' is"
 - f. "I am worried that the vaccines against Covid-19 are not safe"
 - g. "It's not fair that people in rich countries can get vaccinated before people in Africa"
 - h. "I feel confident to teach friends, family, community members about vaccines and Covid-19"

(you can add additional statements here based on your knowledge of the group) (as a facilitator, make a note of how many people agree/disagree/or are neutral with the statements you are reading out. You can write it down in the table below, and take photographs to show where people are on the spectrum).

- 6. Do this exercise again at the end of the workshop. Note down in the table below how many people people agree, disagree or are neutral about the statements to understand whether they have learned from the workshop.
- 7. Ask people whether they are still confused about any concepts, and try and clarify them as a group.
- 8. Ask people for feedback (oral or written) about what can be improved about the workshop or the manual.

Dato.	
Date.	

Number of people participating in workshop: _____

		HE BEGINNII HE WORKSH		AT THE EN	ID OF THE W	ORKSHOP
STATEMENT	Agree	Neutral	Disagree	Agree	Neutral	Disagree
"I have questions about vaccines against Covid-19"						
"I know what the 'immune system' is and how it works"						
"I understand how vaccines work"						
"l understand what 'herd or population immunity' is"						
"I am worried that the vaccines against Covid-19 are not safe"						
"It's not fair that people in rich countries can get vaccinated before people in Africa"						
"I feel confident to teach friends, family, community members about vaccines and Covid-19"						

NOTE: WHAT TO DO WHEN THERE ARE DIFFICULT QUESTIONS?

Participants may ask a range of questions that you lack the confidence or feel unable to answer.

For example, someone may ask about the latest developments in the roll-out of vaccinations. Or, someone may assert 'fake news' with regards to vaccinations and challenge you.

Or, someone may ask about anti-vaccination attitudes and how to respond to them.

What do you do? Here are a number of suggestions:

- Return the question to participants: ask them what they think? What they have read or heard?
- Respond by saying: let's look it up! Suggest that you all check one of the websites listed at the end of the manual, or another website with reliable information. Work together, collectively, to find the answer!
- Ask participants to get into small discussion groups and, together, develop a response. In plenary, discuss different responses and decide how to make a decision.
- Simply say: I do not know. How should we find the answer, together?

RESOURCES

WHO TO CALL

If you have questions or problems accessing a vaccine, there are people who might be able to help.

NUMBER	WHATSAPP	EMAIL		
National Department of Health				
COVID-19 Public Toll Free Hotline 0800 029 999 Health complaints can be addressed to: Eastern Cape – 0800 032 364 Free State – 0800 535 554 Gauteng – 0800 203 886 KwaZulu-Natal – 033 395 2009 Limpopo – 0800 919 191 Mpumalanga – 0800 204 098 Northern Cape – 018 387 5778 Western Cape – 021 483 5624	Send HI to 0600 123 456 on WhatsApp, or share this link: https:// wa.me/27600123456?text=Hi	Lwazimanzi@gmail.com		
Presidency				
Toll-free Presidential Hotline : 17737	072 623 3462	nonceba@dpme@gov.za		
SECTION27 (for any questions about vaccines or assistance with health and education rights violations)				
+27 60 754 0751 +27 67 419 6841 011 356 4100	+27 60 754 0751 +27 67 419 6841	news@section27.org.za adviceoffice@section27.org.za advice@section27.org.za		
Lawyers for Human Rights (for assistance for migrants accessing healthcare and vaccines)				
National Office and Law Clinic in Pretoria 012 320 2943 or 0646474719	0646474719	hlengiwe@lhr.org.za sharone@lhr.org.za		
Johannesburg: 011 339 1960 or 0660768845	0660768845			
Musina: 015 534 2203 or 0767667782	0767667782			
Durban: 031 301 0531 or 078 315 1269	078 315 1269			
What's Crap on Whatsapp				
AfricaCheck: What's Crap on Whatsapp: https://www.whatscrap.africa/	+27 82 709 3527			
Real411				
Report fake news	067 966 4015	www.real411.org		

WHERE TO GET ACCURATE INFORMATION: FURTHER RESOURCES

- South African Government page on Corona Virus, including fact sheets, infographics, regulations, FAQs contacts and more: <u>https://www.gov.za/Corona virus</u>
- SA Corona Virus website, which includes resources, news, updates, vaccine information, video messages, FAQs, contact details and more: <u>https://</u> <u>sacoronavirus.co.za/</u>
- South African Government Vaccine rollout information, available here: <u>https://sacoronavirus.</u> <u>co.za/2021/01/27/sa-covid-19-vaccine-strategy-</u> <u>rollout/</u>
- <u>https://www.gov.za/sites/default/files/gcis</u> <u>speech/20210112_SA%20COVID-19%20Vaccine%20</u> <u>Strategy%20Talking%20Points.pdf</u>
- South African Government "All you need to know about COVID-19 and Vaccines – a Complete guide" <u>https://sacoronavirus.co.za/2021/01/13/all-you-need-to-know-about-covid-19-and-vaccines-pdf-guide/</u>
- National Institute for Communicable Diseases. Visit <u>www.nicd.ac.za</u> or <u>https://www.nicd.ac.za/</u> wp-content/uploads/2021/01/An-update-on-COVID-19-outbreak-in-South-Africa_The-first-and-secondwave.pdf.
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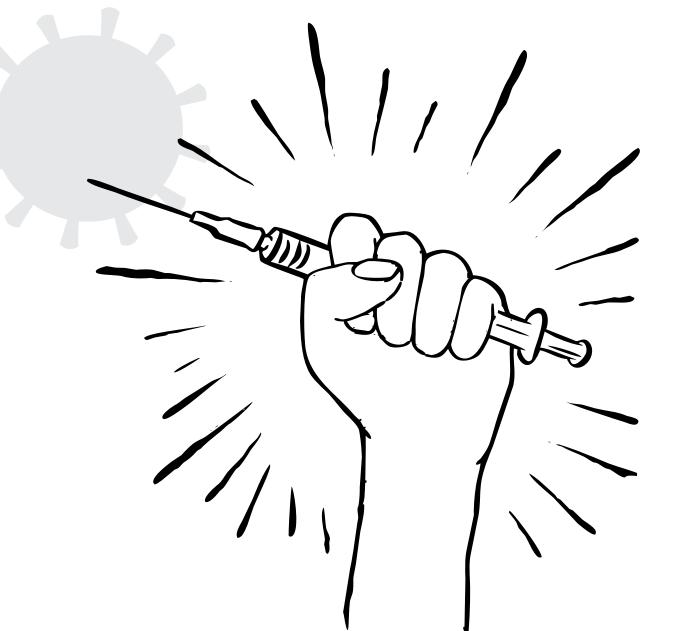
- Full survey available here: <u>https://www.uj.ac.za/</u> newandevents/PublishingImages/Pages/UJ-HSRCsurvey-shows-that-two-thirds-of-adults-are-willingto-take-the-Covid-19-vaccine/2021-01-25%20
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UNDERSTANDING COVID-19 VACCINES: POSTER SET

In the following pages you will find 18 posters explaining vaccines.

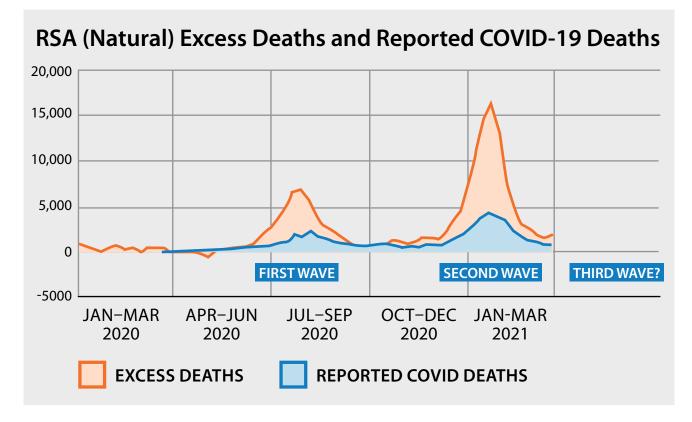


UNDERSTANDING COVID-19 VACCINES COMMUNITY AND ACTIVIST TRAINING ON COVID-19 VACCINES



WHY DO WE NEED A VACCINE AGAINST COVID-19

	C-19 CASES	DEATHS
WORLD	> 110 MILLION	> 2.5 MILLION
SOUTH AFRICA	> 1. 5 MILLION	> 50 000 (possibly closer to 140 000 with excess deaths)



DATA SOURCES

- https://www.worldometers.info/coronavirus/country/south.africa/
- SAMRC Weekly Death Report 2021



WHAT CAN WE DO/HAVE WE DONE TO STOP COVID-19?

PREVENTION

COUNTRY

- Lockdowns Levels I to V
- Social and economic impact
- Only work short term

INDIVIDUALS

- Wash Hands
- Wear a Mask
- Physical Distancing
- Avoid crowds
- No indoor places

COMMUNITIES

- Support those affected
- Community care centres
- Share good information
- Emotional support
- Nutritional support

SYSTEMS

- Build better health system
- Health promoters
- Community health workers
- Mobilise for social justice and equality

TREATMENT

- Steroids
- Anti coagulation
- Oxygen
- Other drugs:
 - Rapid development of new drugs and re-use of older
- So far, no drug found that is a cure

COVID-19 SPREADS Hospitals full People dying

WE ARE STILL CAUGHT IN THE COVID-19 CYCLE

EASING OF

LOCKDOWN

IS THERE A WAY OUT OF THIS CYCLE...?

- Once a person recovers from COVID-19 they are likely to have individual immunity and antibodies.
- Once 60–70% people recovered from COVID-19 we are likely to have Population (Herd) Immunity.
- Population (Herd) Immunity = Virus stops spreading

BUT

- 60–70 % of South African population is 40 million people.
- For every 100 people infected with COVID-19, about two will die.
- If we wait for 40 million people to get COVID-19 and recover we may see 800 000 deaths!!

Vaccination is a way of giving people immunity without becoming ill with COVID-19. It's a safer path to Population Immunity...



THE HISTORY OF VACCINES

In the last 100 years several vaccines have been developed:

- Less dangerous virus cow pox prevented small pox (Jenner 1796).
- Small pox killed between 1/5 and 8/10 babies (1800's).
- In 1979 small pox was eradicated.
- 99% of polio has been eradicated.

Childhood Vaccines (South Africa)

- BCG
 Measles
- Mumps
 Rubella
- Hepatitis B Rabies
 - Meningococcus
 - Pneumococcus
 - Diptheria
 - Whooping Cough
- HPV Chickenpox
 - Rotavirus

WHO Immunisation Report July 2020:

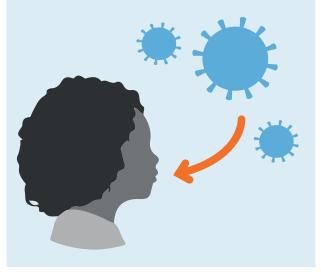
- One billion children vaccinated in 10 years.
- Immunisation saves 2–3 million lives per year.

No Effective Vaccine yet against:

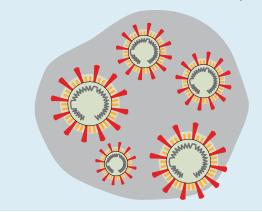
•TB • Malaria • HIV

WHAT HAPPENS WHEN COVID-19 ENTERS THE BODY?

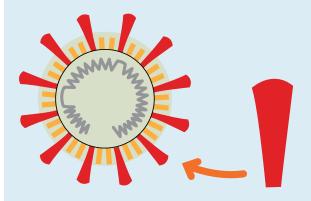
1. Virus enters nose, mouth or eyes.



3. COVID-19 uses the cell protein factory to multiply until the cell is full of virus, bursts and releases COVID-19 into the body.

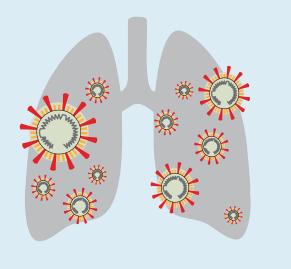


2. COVID-19 uses a spike protein to stick onto then enter our cells.



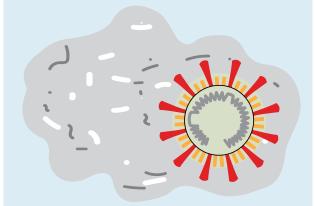
Spike Protein (Antigen)

4. COVID-19 Virus causes illness.



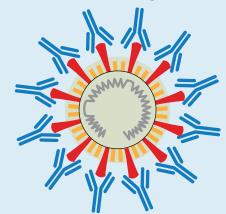
HOW THE BODY RESPONDS TO COVID-19 (IMMUNE RESPONSE)

1. General immune cells notice the virus, swallow and destroy it.

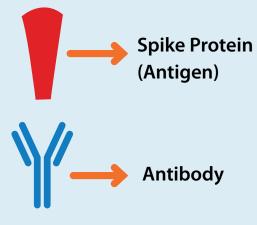


Happens immediately but only a few viruses destroyed at a time

3. Antibodies against COVID-19 are made. They block the spike protein and stop the virus from sticking to cells.



2. Shows immune system what the virus looks like (spike protein).



Body starts making antibodies

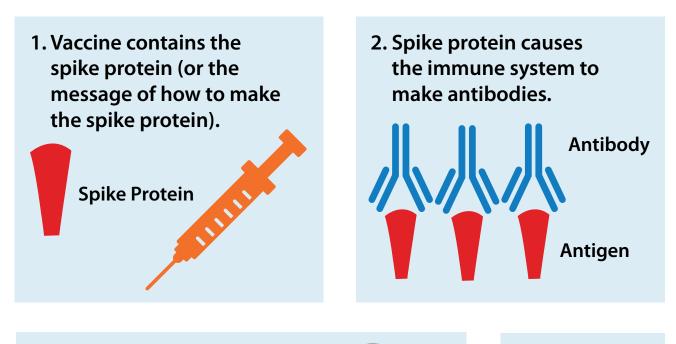
4. Antibody response is very effective but it takes days to weeks to make the right antibodies against COVID-19. Memory Cells Store a memory of the virus so can destroy COVID-19 if seen again.





HOW VACCINES WORK

Vaccines train the immune system to recognize and fight COVID-19 <u>before</u> infection happens.



3. When the COVID-19 virus enters the body, the immune system is ready with antibodies to block them from entering our cell.

4. Memory Cells Store a memory of the virus so can destroy COVID-19 if seen again.



HOW VACCINES ARE DEVELOPED

PRECLINICAL TRIALS: animal/lab studies to test the idea

PHASE I: is it safe? <100 people

PHASE II: does it work? (few hundred people)

PHASE III: safe and effective? (thousands of people)

Most vaccines take 10–15 years to develop... So how could a COVID-19 vaccine be developed in one year?

How were these vaccines developed so fast?

- 1. Massive resources public and private money invested
- 2. SARS/MERS/Ebola recent vaccines produced scientific basis
- 3. Pandemic conditions:
 - working together
 - many people getting infected with COVID = faster results
 - many, many volunteers for trials

Over 290 vaccine candidates, from these only seven completed phase II and registered world-wide:

1. Pfizer 2. Moderna 3. AstraZeneca 4. J & J 5. Novovac 6. Sputnik 7. Sinovac



COVISHIELD (OXFORD/ ASTRAZENECA) VACCINE

- Trial started in April 2020 in the (UK, Brazil, South Africa)
- 11 636 volunteers received the vaccine OR injection without the COVID vaccine (placebo)

	NO VACCINE (PLACEBO)	COVISHIELD VACCINE
Number of People	5829	5807
COVID positive	101	30 (70% effective)
Severe COVID	10	0
Severe covid (hospitalised)	10	0
COVID death	1	0
Adverse events	180	163
Allergic RXN	0	1

VERY COMMON SIDE EFFECTS – USUALLY LAST A FEW DAYS (UP TO 1 IN 10 PEOPLE)

- tenderness, redness and swelling at injection site
- feeling sick (nausea)
- tiredness, feverish, headache

COMMON SIDE EFFECTS (UP TO 1 IN 10 PEOPLE)

- a lump at the injection site
- being sick (vomiting)

UNCOMMON SIDE EFFECTS (UP TO 1 IN 100 PEOPLE)

- Feeling dizzy
- decreased appetite/abdominal pain
 sweating, itchy skin or rash
- enlarged lymph nodes

 - Only 10% effective against mild/mod 501Y.V2 Variant (SA Variant)
 - May prevent severe disease but we don't know yet...
 - TAKE HOME: It is safe but does not work well against our variant to prevent mild disease



Health for All Now! **People's Health Movement** South Africa

muscle ache

flu-like symptoms

JOHNSON AND JOHNSON COVID-19 VACCINE

43 783 volunteers (US, Latin America and RSA) received the vaccine OR injection without the COVID vaccine (placebo)

	NO VACCINE (PLACEBO)	J and J VACCINE
Number of people	21888	21895
COVID infection	195	66 (66% effective)
In South Africa	64	23 (64% effective)
Severe COVID	34	5 (85% effective)
In South Africa	22	4 (81% effective)
Deaths due to COVID	7	0
Serious Adverse Events	96	83
Allergic RXN	0	1

VERY COMMON SIDE EFFECTS (UP TO 50%)

- pain, redness, or swelling at injection site
- feeling sick (nausea)
- muscle aches
- tiredness, fever, headache

Side Effects usually lasts for 2-3 days All other AE = except slight increase thrombosis – being watched



PFIZER COVID-19 VACCINE

43 448 volunteers (US, Brazil, Argentina, RSA) received the vaccine OR injection without the COVID vaccine (placebo)

	NO VACCINE (PLACEBO)	PFIZER VACCINE
Number of people	21728	21720
Symptomatic COVID	8	162 (95% effective)
Severe COVID	9	1(90% effective)
Deaths due to COVID	0	0
Serious adverse events	126 (0.6%)	111 (0.5%)
Allergic RXN	0	10 per million

VERY COMMON SIDE EFFECTS

- tiredness, fever, headache
- pain, redness, or swelling at injection site

muscle aches

Side effects usually last for 2-3 days



VACCINE EQUITY IN AN UNEQUAL WORLD

Who has received COVID-19 vaccines thus far?

BY 22 MARCH 2021, 458 MILLION VACCINE DOSES HAD BEEN ADMINISTERED...



Patents, intellectual property and a profitbased pharmaceutical industry are a threat to equity and solidarity in vaccine access.



SOUTH AFRICAN VACCINE PLAN



Phased approach for vaccine introduction:

PHASE I

Frontline healthcare workers (HCW) Target population: 1,250,000

PHASE II

Essential workers Target population: 2,500,000

Persons in congregate settings Target population: 1,100,000

Persons > 60 years Target population: 5,000,000

Persons > 18 years with comorbidities Target population: 8,000,000

PHASE III

Other persons > 18 years Target population: 22,500,000

Source: National Department of Health (South Africa)



INTELLECTUAL PROPERTY/ PATENTS & TRIPS

INTELLECTUAL PROPERTY

- When a person develops something new/original, it can be registered to their name.
- This is now that person's Intellectual Property (IP)

PATENTS

- A patent is one form of Intellectual Property where a government gives the inventor the right to stop others from making, using or selling something they have invented.
- Patents are for a set time-period (in South Africa = 20 years).

TRIPS

- Trade Related Aspects of Intellectual Property Rights (TRIPS) is an international legal agreement between country members of the World Trade Organisation (WTO).
- It governs Intellectual Property Laws during trade between countries.

WHY THESE LAWS ARE BAD FOR HEALTH

- Patents allow drug companies to monopolise theproduction of medicines and to control prices
- TRIPS agreements canprevent countries frommaking life savingtreatments/equipment
- e.g patent on COVID-19 test equipment impact on SA



GLOBAL EFFORTS TO ENSURE ACCESS TO VACCINES – COVAX AND C-TAP

COVID-19 VACCINES	COVID-19 TECHNOLOGY		
GLOBAL ACCESS (COVAX)	ACCESS POOL (C-TAP)		
 Plan to Pre Purchase/ Reserve vaccine Low Income Countries – get free vaccine Middle Income Countries purchase at market prices 	 Voluntary commitment to share COVID-19 health technology and knowledge Hopes to speed up discovery of vaccines, medicine etc 		
BUT			
 Not enough doses	 Supported by 34 Low/Mid		
(only 20% population) No challenge to IP/	Income countries No support UK, USA To date, not one pharma		
Patents/price fixing/profit	company has contributed		



People's Health Movement South Africa

THE ALTERNATIVE

COVID-19 TRIPS WAIVER

- South Africa and India proposed an IP Waiver for all COVID-19 related technologies
 - > Duration of the epidemic
 - > Until vaccine has covered the population; or
 - > majority global peopleimmune
 - > Not mandatory for countries
 - > To enable, for example, local production of vaccines
- Co-sponsored Kenya and eSwatini, supported byrange of LICs, MICs, the Vatican, WHO, UNAIDS
- Opposed by US, EU, Japan and others

PEOPLE'S VACCINE CAMPAIGN



Covid19 People's Coalition SA @CovidCoalition

A People's Vaccine Campaign!

The call to action, endorsed by over 500 organisations and individuals, is to work to educate the public and to push gevernment and big pharmaceutical companies to ensure equitable access and allocation.

https://c19peoplescoalition.org.za/towards-a-peoples-vaccine-campaign-a-call-to-action/

We need to organise and mobilise for a just response to COVID-19, including equity in access to COVID-19 vaccines

