



The introduction of a COVID-19 Vaccine in South Africa

Nothing about us without us!

A NATIONAL CONSULTATION

25TH JANUARY 2021



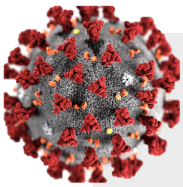
University of the Witwatersrand
WITS RHI



**African
Alliance**



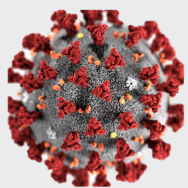
VACCINE ADVOCACY
RESOURCE GROUP



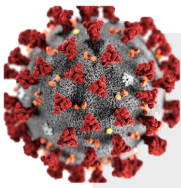
What to expect...

- **What is the purpose of this consultation?**
Communications and Demand Creation – understanding what the public needs before making a decision to use a vaccine
 - **Poll Questions**
- **COVID in South Africa**
 - Current Situation
 - Transmissions Dynamics are Rapidly Changing
 - What puts you at risk?
 - Transmission Dynamics
- **Vaccine 101**
 - Our immune response
 - Vaccine Development to Delivery
- **COVID-19 vaccine landscape**
 - What are the options?
 - How will South Africa choose a vaccine?
 - What can we expect in SA?
- **Session Questions**





Purpose of this consultation



What is the purpose of this consultation?

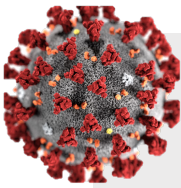
Learning & Sharing



The purpose:

We want to have conversations with key community leaders and civil society groups in South Africa to understand better understand what potential challenges may be expected and what key issues we need to consider in terms of communications, engagement and mobilization of communities for the rollout of a COVID-19 vaccine

- **You** represent one of the key groups of people who will be targeted for vaccine introduction
- **You** serve as a voice for these groups for us to understand what needs to be considered when designing communications and demand creations strategies and to highlight issues around the best places and approaches in communities to reach those at risk of COVID-19
- The information we get from this consultation will be shared with the National Department of Health to help with the development of vaccine rollout plans



What is the purpose of this consultation?



Communications and Demand Creation

MYTH: There is a microchip in the vaccine



There is no microchip or tracking device of any kind in either vaccine



Vaccine manufacturers are required to declare their ingredients to SAHPRA before the vaccine is approved for use. Despite theories circulated on social media, they do not contain microchips or any form of tracking device. If they did contain such items SAHPRA will not authorize use of the vaccine.

MYTH: The vaccines will alter your DNA



The vaccines will not change your DNA



The vaccine contains mRNA (messenger RNA). RNA is the messenger that carries and instruction from the DNA and translates it into protein. After mRNA has performed its function it gets into the muscle cell and then gets degraded. There is no change to the DNA.

- There is great public and media interest in a vaccine
- It is important to use this moment to ensure that communications support knowledge, awareness and uptake of a COVID-19 vaccine for those who want it.
- It is very important to recognise concerns, fears and hesitancy in communities when planning for COVID-19 vaccine introduction.
- Communicating about and creating demand for a vaccine must be situated in **increasing knowledge, raising awareness, and increasing the population's confidence in vaccination**



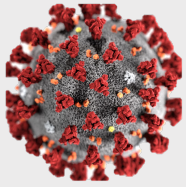
POLL QUESTIONS

What support do you need for your sector to engage meaningfully with the COVID-19 vaccine roll out? (Funding, information, training etc)

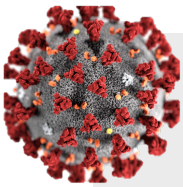
Who do you rely on for information on COVID-19

What COVID-19 related issue would you like more information/training/engagement on to support your work?

Would you take a COVID-19 vaccine?

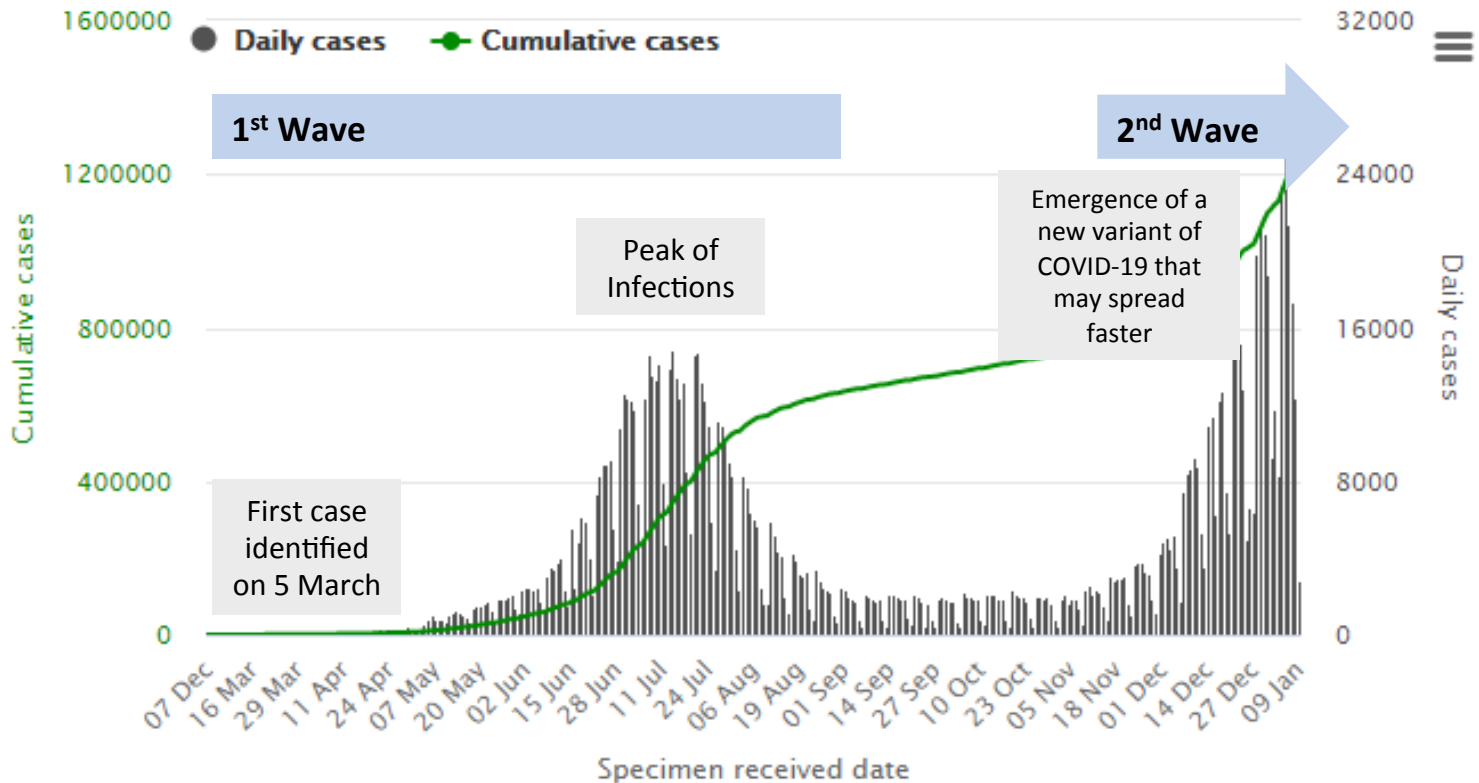


COVID-19: Current Situation in South Africa



COVID-19 in South Africa

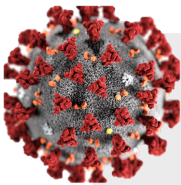
Current Situation



10 Jan 2021
Total Cases to Date
 = 1 231 597
Recovered
 = 966 368 (78,4%)
Total Deaths =
 33 163
Active Cases =
 232 066

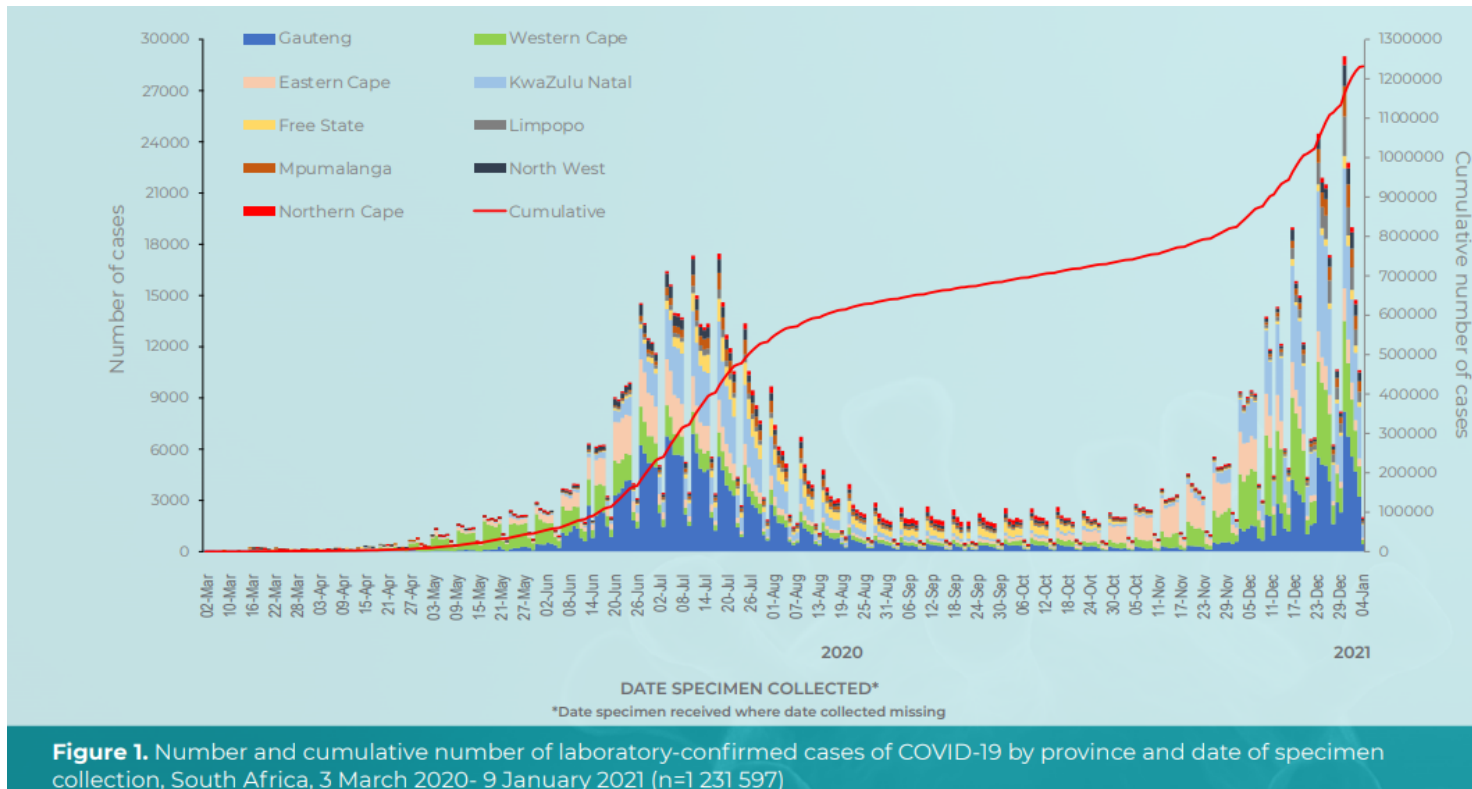
Province Most Affected:

**KwaZulu Natal,
 Western Cape,
 Gauteng**

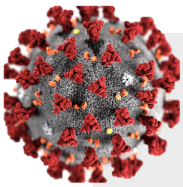


COVID-19 in South Africa

Transmission Dynamics are Rapidly Changing:



These are just snap-shots of a moment in time



COVID-19 in South Africa

What puts you at risk?

Outside Your Home:

- Employment and type of employment
- Use of public transport
- Overcrowded/ poor ventilated workspaces
- Lack of access to water and sanitation

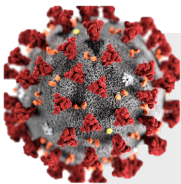
In Your Home:

- Overcrowded living space
- Lack of access to water and sanitation
- Living with school-going children

Your Health:

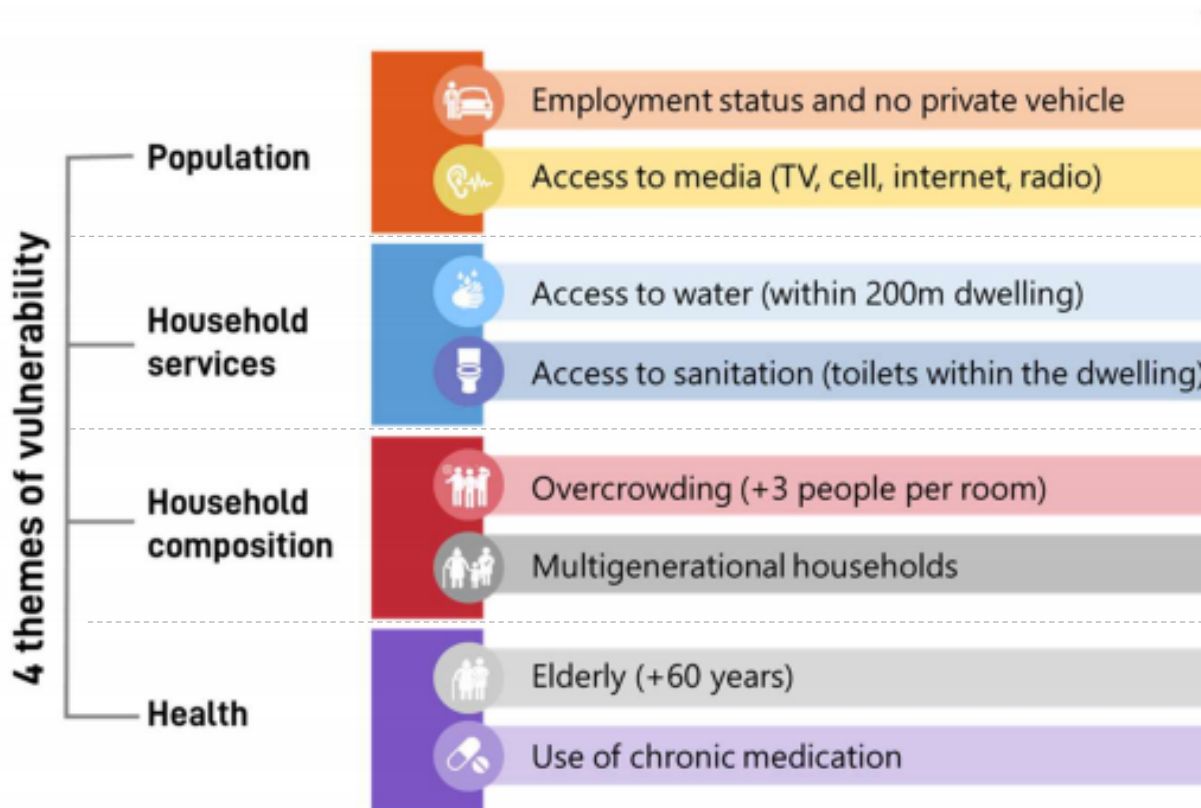
- Age (being 60 years and older)
- Having a chronic condition like heart disease, diabetes, lung disease, etc.



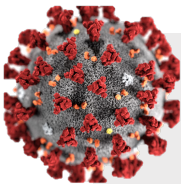


COVID-19 in South Africa

Take Charles for example...



- Charles is an essential worker and provides cleaning services at the local hospital
 - His wife is an informal trader at the taxi rank
 - His family uses public transport daily
-
- There is a major water shortages in the area so he uses publicly provided water and sanitation services
-
- He lives in a one bedroom house with his wife & 3 grandchildren – aged 10-15
 - His grandchildren attend school
-
- Charles is 60 years old
 - Charles has diabetes for the past 10 years



COVID-19 in South Africa

Transmission Dynamics

Potential Exposures



Charles and his family use an **overcrowded taxi** to work and school



Charles at Work

- High risk work environment with COVID positive patients
- **Overcrowded** lunch space



Wife at Work

- High foot traffic in workspace
- **No social distancing**
- Use of **communal** toilet



Kids at School

- **Congregate setting** – 35 children/class
- **Lack of social distancing** in class and at break times
- Use of **communal** toilet



Charles and his family use an **overcrowded taxi** to get home



Charles and his family use communal water and sanitation services shared with the street

Charles and his family have had multiple exposures throughout the day, and could infect others and each other

WE ARE ALL AT RISK



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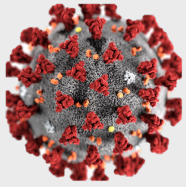
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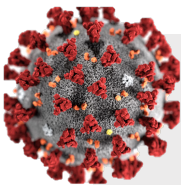
African Alliance



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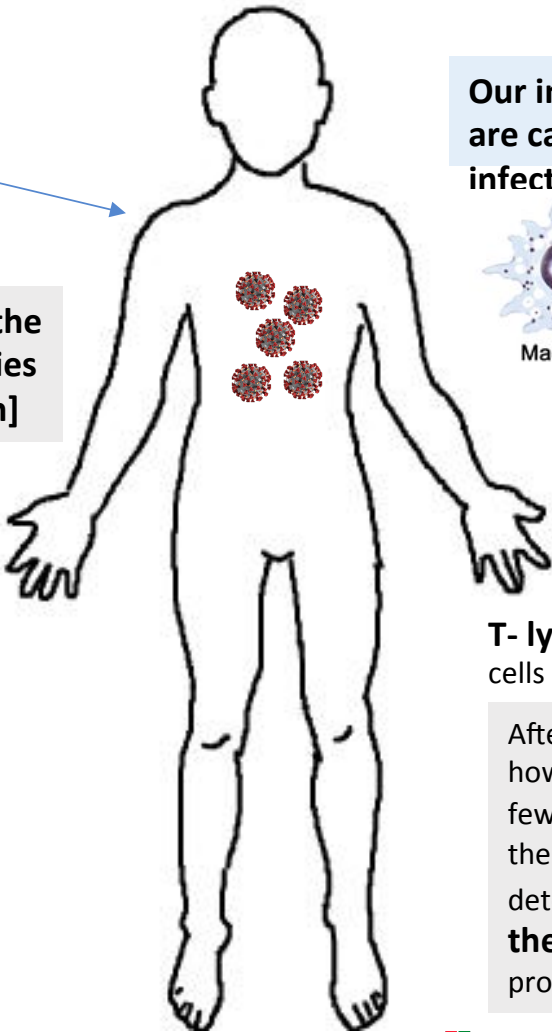


**Now lets learn about
vaccines....**



Vaccine 101: Our Immune Response

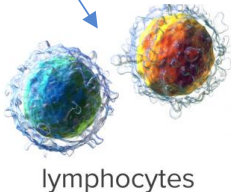
COVID-19 enters the body and multiplies [COVID Infection]



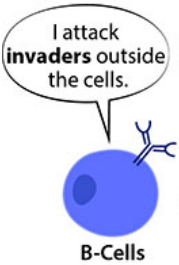
Our immune system uses several tools to fight infection. These are called **white blood cells** or **immune cells**, which fight infection.



Swallow up and digest germs and dead or dying cells and leave behind parts of the germs called **antigens**. The body identifies antigens as dangerous and stimulates antibodies to attack them.

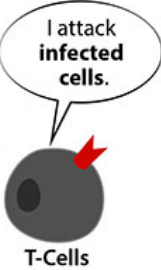


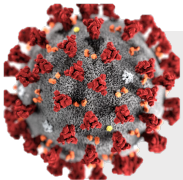
B-lymphocytes are defensive white blood cells. They produce antibodies that attack the pieces of the virus left behind by the macrophages.



T-lymphocytes are defensive white blood cells. They attack cells in the body that have already been infected.

After the infection, the person's immune system remembers how to protect the body from the antigen. The body keeps a few T-lymphocytes, called **memory cells**, that act quickly if the body encounters the same virus again. When the antigen is detected, **B-lymphocytes produce antibodies to attack them**. Experts are still learning how long these memory cells protect a person against the virus that causes COVID-19.





Vaccine 101: Development to Delivery

What is in a vaccine: vaccines contain weakened or inactive parts of a particular organism that triggers an immune response within the body. This weakened / inactive version will not cause the disease in the person receiving the vaccine, but it will prompt their immune system to respond.



Pre-Clinical Stage: How will the vaccine work?

Scientists try to find out what induces an immune reaction in your body (the right antigen). This can take up to **4 years**.

Approved for Human Testing

Aims

Participants Needed

Time Taken

Clinical Trials		
PHASE 1	PHASE 2	PHASE 3
Safety	Safety & Dose	Safety & Efficacy
First time vaccine tested in humans to evaluate its safety and immune response	To determine the effective dose and expand on the safety information	To determine how effective the vaccine is
20-80	100-300	300-3000
Weeks/Months	1-2 Years	3-5 Years

Regulatory

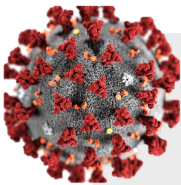
Regulatory Approval & Licensure

After a positive phase 3 trial – an application is submitted to SAHPRA where the trial data is reviewed

SAHPRA – South African Health Products Regulatory Authority - monitoring, evaluating, investigating, inspecting and registering all health products. Ensures safety, efficacy and quality of products

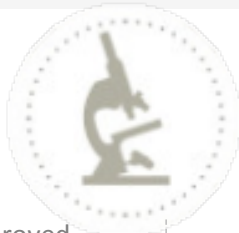
Approved

Need to Manufacture Product



Vaccine 101: Development to Delivery

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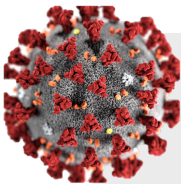


Pre-Clinical Stage: How will the vaccine work?

Scientists try to find out what induces an immune reaction in your body (the right antigen). This can take up to **4 years**.

Approved for Human Testing



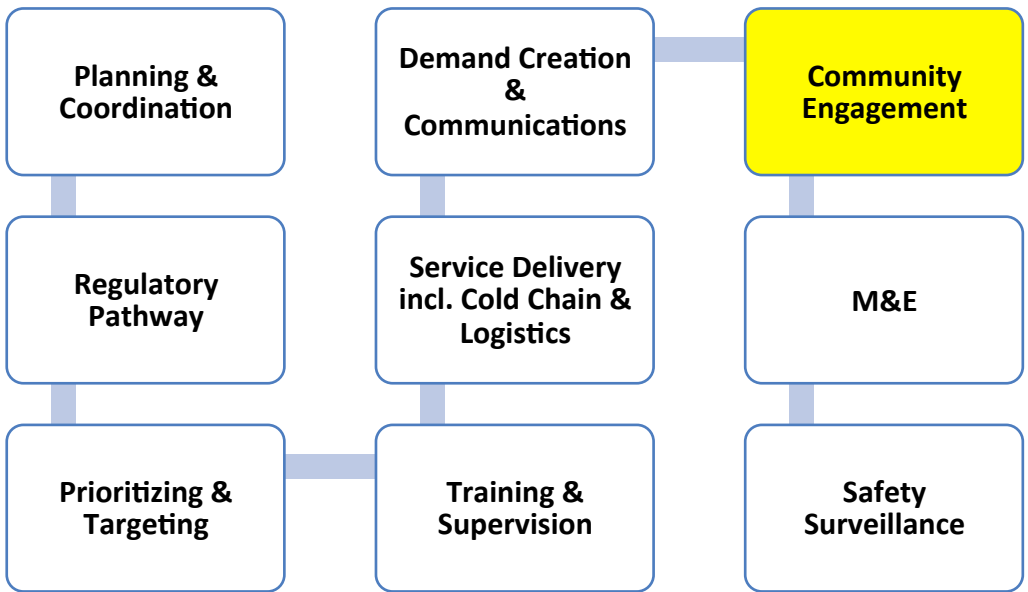


Vaccine 101: Development to Delivery

Vaccine Readiness

Post-Marketing Monitoring

A set of steps that need to be undertaken to prepare the health system and population for the rollout of a vaccine. These include:



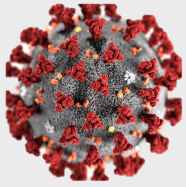
Key Points:

- Creating COVID-19 competent communities
- Address issues on vaccine hesitancy
- Determining how to reach target population
- Identifying the best service delivery channels
- Developing district level implementation plans

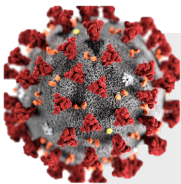
PHASE 4

Surveillance

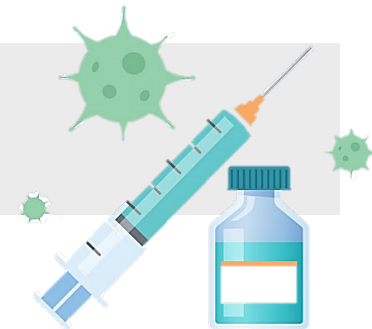
After a vaccine is approved and licenced – continued monitoring



The COVID-19 Vaccine Landscape in South Africa

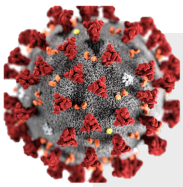


COVID-19 vaccine landscape

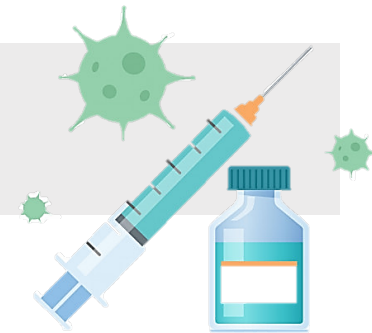


What are the options?

VACCINE	Pfizer-BioNTech	Moderna	Johnson & Johnson	Oxford-Astra Zeneca
DETAILS	<ul style="list-style-type: none"> • 95% efficacy rate • Two doses several weeks apart • Immunity build up after four weeks of the first dose 	<ul style="list-style-type: none"> • 100% efficacy rate, as far as known - effective up to 3 months • Two doses several weeks apart 	<ul style="list-style-type: none"> • Single dose with high effectiveness Easier storage – can be stored for 3 months before use In Phase 3 trials 	<ul style="list-style-type: none"> • Two dose vaccine, 62% effective Easier storage – 2-8 degrees Celsius for at least 6 months
MAY RECEIVE	5%	5%	20%	70%
INITIAL DOSES	?	?	12 million doses – COVAX (April – June)	1.5 million doses – Serum Institute of India (Jan – Feb 2021)



COVID-19 vaccine landscape

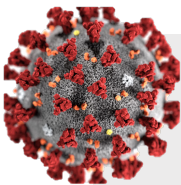


How will South Africa choose vaccines?

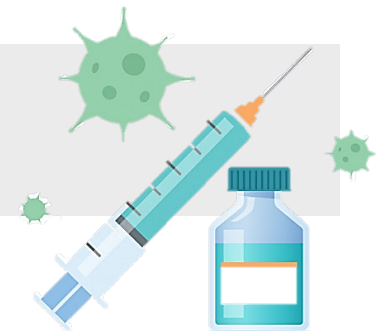
Criteria for choosing a vaccine:



1. Does a supplier have stock available?
2. Is the vaccine safe, effective and of good quality?
3. How easy is it to use and how many doses are required?
4. Can it be easily stored and distributed?
5. Does the supplier have capacity to produce the volumes needed for South Africa's rollout?
6. How much does it cost?



COVID-19 vaccine landscape



What can we expect in SA?

South Africa's Vaccine Rollout Plan



Phase 1:

Frontline healthcare workers

Target population: 1 250 000

Phase 2:

Essential workers

Target population: 2 500 000

People in congregate settings

Target population: 1 100 000

People over 60 years old

Target population: 5 000 000

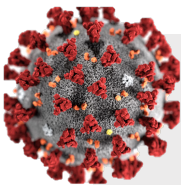
People over 18 years old with co-morbidities

Target population: 8 000 000

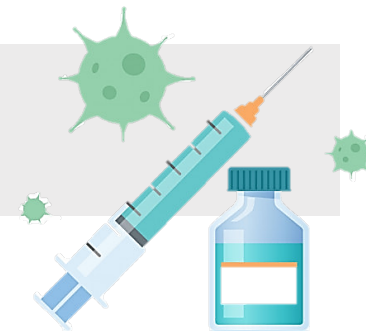
Phase 3:

Other persons over 18 years old

Target population: 22 500 000



COVID-19 vaccine landscape



THIS IS NOT AN EXHAUSTIVE LIST – CHANGES AS NEW INFORMATION COMES IN

What can we expect in SA?

Who falls into which group?



Essential Workers

Police officers, miners, teachers, people working in security, retail, food, funeral, banking, and essential municipal and home affairs, border control and port health services.



People in congregate settings

People in care homes, detention centres, shelters and prisons. People working in the hospitality and tourism industry and in educational institutions.

People over 18 with co-morbidities

People living with uncontrolled diabetes, chronic lung disease, poorly controlled cardiovascular disease, renal disease, HIV, tuberculosis and obesity.



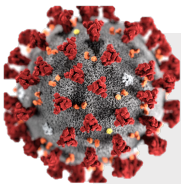
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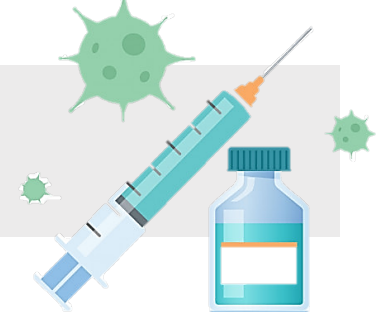
African Alliance



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COVID-19 vaccine landscape

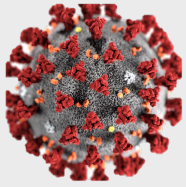


What can we expect in SA?

PHASED APPROACH BASED ON AVAILABILITY OF VACCINE

Distribution will adjust as volume of vaccines increases, moving from targeted to broader population reach (phased approach)

	PHASE 1	PHASE 2	PHASE 3
Doses Available	Limited Doses Available	Larger Number of Doses Available	Continued Vaccination, Shift to Routine Strategy
Key Factors	<ul style="list-style-type: none"> Constrained Supply Highly Targeted Delivery – to achieve coverage in priority populations Front-line Health Care Workers 	<ul style="list-style-type: none"> Increased supply, increased access COVAX Facility Essential workers, persons in congregate settings, adults with co-morbidities/ over 60 	<ul style="list-style-type: none"> Supply through contracted manufacturers Other persons older than 18 years
Likely Strategies	<ul style="list-style-type: none"> Focused delivery Delivery in closed setting specific to priority populations Public & Private Sector 	<ul style="list-style-type: none"> Delivery through private settings (pharmacies, doctors, work) Delivery through public settings (hospitals, clinics, outreach, mobile) 	<ul style="list-style-type: none"> Open vaccinations Delivery through public and private sector but strong focus on primary health care



Now lets talk...



Session Questions

Those who are national leaders in the following sectors please raise your hands

- What are top concerns in your sector about vaccines?
- What is your main concern about the upcoming roll out?
- What should we be thinking about in terms of building knowledge and awareness in our sectors and communities about vaccines in general?
- With phased supply of vaccines expected, how do you think we can create demand for the COVID-19 vaccine without raising unrealistic expectations?



Thank you for engaging!

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