

Advisory on IPC recommendations during and after vaccination

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Problem statement

The vaccination programme in South Africa has started in mid February, 2021 and the roll out is based on recommendations by Vaccination MAC. South Africa is accustomed to carrying out mass immunization programmes, for example measles, and for other diseases. The infra structure exists to deal with large populations during mass immunization even in rural areas. Additional IPC recommendations, aimed specifically at COVID-19 vaccination, is addressed in this advisory.

COVID-19 vaccination is aimed at reducing severity of disease and mortality, thereby reducing hospital admissions and burden on the healthcare system to manageable levels. Currently, evidence on reducing transmission is limited, however reports that the vaccine is not immediately protective¹ therefore it is essential that non pharmaceutical interventions (NPI) are continued regardless of personal vaccination status.

Infection prevention and control (IPC) recommendations are necessary to safeguard those delivering the vaccines to the public as well as the target population. The IPC COVID-19 Guidelines, Version 3, (currently being revised), will address IPC implementation during and after vaccination.

Evidence Review

The Vaccination-MAC has extensively reviewed, and continues to review, global and local evidence on vaccine efficacy, safety and roll out programmes in other countries. This advisory reviews IPC evidence based on WHO², CDC³ and Africa CDC guidelines. The WHO guidance on COVID-19 vaccination is outlined in an *aide memoire* which supplements the vaccination plan (WHO)⁴.

The key points are applying standard precautions, transmission based precautions, specific IPC training of HCF delivering the vaccination, a clean and well ventilated environment⁵, and ensuring the National guidelines and protocols for IPC⁶ and the COVID-19 IPC guidelines⁷ are in place and implemented.

¹ Amit S, Beni SA, Biber A, Grinberg A, Leshem E, Regev-Yochay G. Post-vaccination COVID-19 among healthcare workers, Israel. *Emerg Infect Dis.* 2021 Apr [date cited]. <https://doi.org/10.3201/eid2704.210016>

²WHO. Guidance on developing a national deployment and vaccination plan for COVID-19 vaccines https://www.who.int/publications/i/item/WHO-2019-nCoV-Vaccine_deployment-2020.1

³ Centers for Disease Control and Prevention (CDC): <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/index.html>

⁴WHO. Infection Prevention and Control (IPC) principles and procedures for COVID-19 vaccination activities. 15 Jan, 2021. <https://www.who.int/publications/i/item/who-2019-ncov-vaccination-ipc-2021-1>

⁵ ANSI/ASHRE/ASHE. Addendum to ANSI/ASHRE/ASHE standard 170-2017. Ventilation of Healthcare Facilities

⁶ National Department of Health, Practical Manual on the Implementation of National IPC Policies (March, 2020)

⁷ National Department of Health. COVID-19 Disease: Infection Prevention and Control Guidelines (Version 2), May 2020

The WHO recommends⁸, an IPC focal person should be appointed to the vaccination planning team who can advise on planning, monitoring and deployment of vaccination activities. This IPC person should be responsible for training of HCW in safe IPC practices during and after vaccination. HCW should wear appropriate personal protective equipment; gloves are not necessary however hand hygiene is essential before and after patient contact. An apron may be worn if indicated. The person receiving the vaccination must wear a face cover such as a cloth mask.

Social distancing must be maintained for those queuing for their vaccinations, and preferably, an appointment system is established to ensure the recommended distance (1.5m in South Africa) is maintained. Disposal of sharps and other healthcare waste must be well controlled.

Recommendations for COVID-19 vaccination plan

- **Appoint an IPC trained focal person** to be part of the vaccination planning team
- The IPC trained person will be responsible for **IPC training** of all staff delivering vaccination (IPC vaccination training package, NDOH)
- HCW should wear **appropriate PPE**, surgical mask/ face shield and aprons; gloves not necessary.
- **Hand hygiene** is carried out using ABHR between patients
- **Screening** of all persons coming for vaccination must be carried out.
- Every vaccinee must **wear a face cover** such as a cloth mask. If not available a surgical mask will be provided at the vaccination station
- The **vaccine delivery environment** must be clean, well laid out and well ventilated (6 ACH/hour). Spillages are dealt with as outlined in the National IPC Implementation manual (2020).
- An **IPC checklist** for each site must be completed for each vaccination session (see Appendix A Eastern Cape checklist).
- Full **documentation** of each person vaccinated is essential. Using paper-based system and EVDS electronic system⁹
- A robust **communication** system must be established to reduce vaccine hesitancy and to follow up persons for 30 days.

Post vaccination

- After vaccination, NPI must continue regardless of vaccination status to avoid or reduce transmission, and this must be clearly emphasized and communicated.
- Any side effects, including injection site infections, must be reported. Complete Adverse Events Following Immunization (AEFI) form if indicated⁹

⁸ WHO. Guidance on developing a national deployment and vaccination plan for COVID-19 vaccines https://www.who.int/publications/i/item/WHO-2019-nCoV-Vaccine_deployment-2020.1

⁹ Western Cape DOH. Circular: H22/2021; Adverse Events Following Immunization (AEFI) Monitoring for COVID-19 Vaccination.

Appendix A

(CHECKLIST FROM EASTERN CAPE)

Site Readiness		
Category	Specific item	Check
Infrastructure	Space available for 4 stations:	
	1. COVID-19 Screening station	
	2. Registration station	
	3. Vaccination station	
	4. Observation station	
	Space is well ventilated	
	Handwashing and ablution facilities available	
	Electrical power points for IT Equipment	
	Layout - social distancing applicable	
	One way movement of people	
	Clear way finding signage	
Equipment	Furniture	
	1. Tables	
	2. Chairs	
	3. Desks	
	IT Equipment	
	1. Computer/tablet/laptop for each admin	
	2. Computer/tablet/laptop for each vaccinator	
	3. Computers have connectivity and internet access	
	IT equipment set up	
	IT equipment tested	
	Emergency equipment	
	1. Resuscitation equipment	
	2. Trolley	
	Clinical equipment (thermometers etc.)	
	Cleaning equipment	
	1. Buckets	
	2. Janitor trolleys	
Cell phone (to receive OTP number)		
Human Resources	Vaccinators	
	1. Determine number of vaccinators required	
	2. Vaccinators completed training	
	Support staff	
	1. Admin staff (note 1 for every 3 vaccinators)	
	2. Queue Marshal/s	
	3. Security	
4. Supervisor/monitor to ensure integrity of vaccine		
Consumables	Obtain all necessary consumables as listed below:	
	1. Handwash/sanitiser	
	2. PPE	

	3. Healthcare risk waste disposal contract extended/increased	
	4. Healthcare waste risk containers and boxes	
	5. Healthcare waste bags and bins	
	6. Cleaning supplies	
	Necessary stationary for administrative purposes	
	1. Vaccination forms	
	2. Vaccination cards	
	3. Adverse events case forms	

Vaccination Site daily checklists			
Category	Specific item	Morning	Evening
Site Layout (as per initial layout)	Tables – Social distance applicable		
	Chairs – Social distance applicable		
	Clear way finding signage		
Site prep	Working hours of vaccination site displayed		
	Vaccination stations numbered / or direction available		
	All staff are wearing uniforms		
	All staff are wearing name tags		
	All staff allocated PPE		
<i>Cleaning as per National IPC Manual</i>	Vaccination site is clean, all surfaces disinfected		
	Floors cleaned and disinfected		
	Ablution facilities cleaned		
	Hand sanitizer available – at each station		
<i>Covid screening</i>	Covid-19 screening register available		
	clinical thermometer available for screening		
<i>Administration</i>	Appointment register updated		
IT system	Computers available at each vaccinator, switched on and functional		
	Computers available at each admin, switched on and functional		
	Vaccinator to login on their own account (EVDS)		
	Vaccinator to login out of their own account (EVDS)		
	Admin to login on their own account (EVDS)		
	Admin to login out of their own account (EVDS)		
	Device to record on the Stock Visibility System (SVS)		
	Update SVS		
Vaccine Cold chain compliance	Vaccine monitor identified to ensure integrity of the vaccine		
	Vaccine fridge has power, is switched on, and functional		
	Continuous temperature monitoring device available		
	Ample storage in fridge for vaccines		

	Temperature recorded twice daily		
	If temperature below 2°C and above 8°C, facility manager /responsible site pharmacist notified		
	Thaw vaccine if required (J&J and Pfizer if applicable)		
Emergency trolley	Check Emergency trolley as per Ideal clinic list twice per day and replenish all items		
Consumables replenished	Needles (per vaccine type requirements)		
	Syringes (per vaccine type requirements)		
	Cotton Wool Balls		
	Diluent if applicable		
Health care waste	Health care Risk waste disposal -, seal and remove to designated storage area		
	health care risk waste containers and boxes replenished		
	health care waste boxes/bags replenished		
Stationery	JnJ Consent forms		
	Vaccination forms		
	Vaccination cards		
	Case reporting forms		
	Case investigation forms		
	Adverse events special interest forms		
IEC material	fact sheets		
	posters in place at relevant stations		
	job aids at vaccinator station		