
Vaccines and immunizations for monkeypox- Where are we?

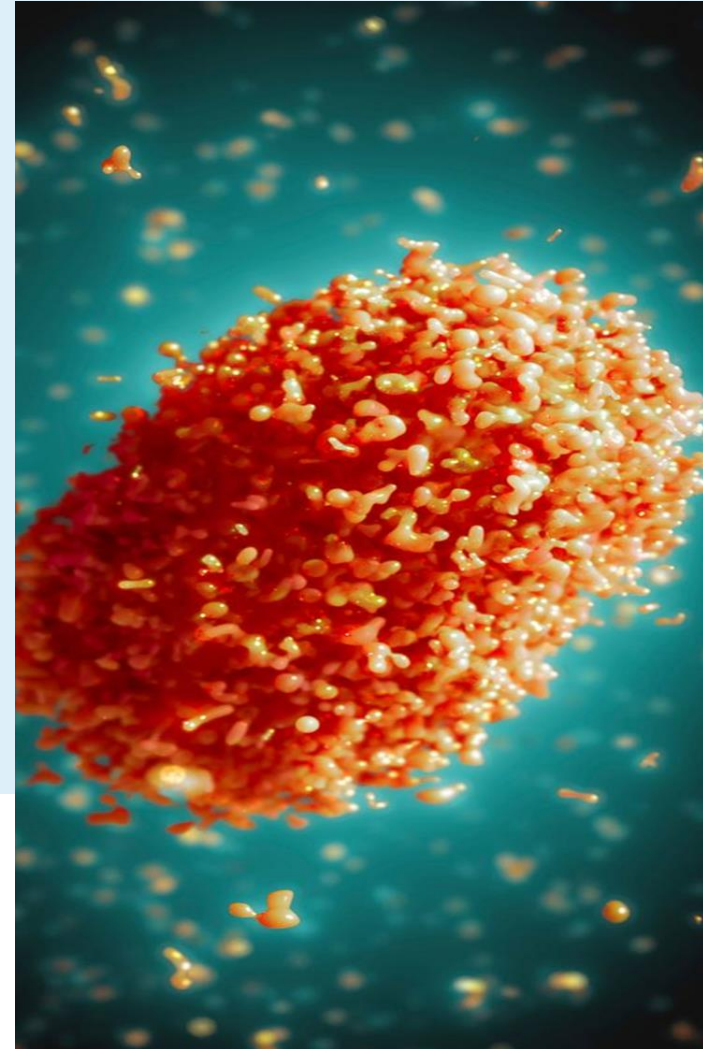
SAA- WHO- AFRO Webinar

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Vaccines and Immunizations for monkeypox

History of vaccine development

- In the past, smallpox vaccine was ~85% effective in preventing monkeypox (DRC, 1986)
- Second generation smallpox vaccines (ACAM 200)
- Third generation MVA – BN & LC16 smallpox vaccines
- WHO working closely with manufacturers to expand production capacity and access
- New vaccines in development - mRNA



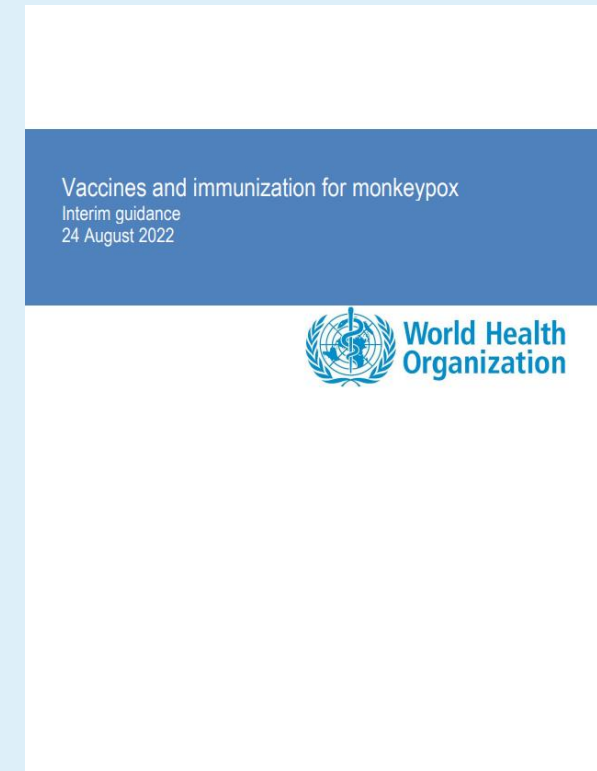
EVIDENCE

- Randomized control trials strongly recommended
- Other proposed Study Designs
 - Randomization during deployment (Brazil, Columbia, South Africa)
 - Ring vaccination (DRC, Nigeria)

Vaccines and Immunizations for monkeypox

Interim guidance V2 – 24 August 2022

- Primary (pre-exposure) preventive vaccination (PPV) is recommended for persons at high risk of exposure:
 - men who have sex with men, others with multiple sex partners
 - health workers, clinical laboratory personnel working on monkeypox
- Others who may be at high risk
- Post-exposure vaccination (PEPV) is recommended for close contacts of cases



Research priorities for monkeypox vaccines and immunization

- Clinical efficacy/effectiveness
- Schedule
- Other populations
- Behavioural insights
- Deployment strategies



WHO SAGE Working Group on Smallpox & Monkeypox Vaccines

WHO proposed research designs for vaccine studies to evaluate vaccine effectiveness

Generating evidence during vaccine deployment

- Randomise order in which people are invited for vaccination
- Offer vaccine as fast as vaccine supply and local infrastructure permit
- Compare outcomes in those vaccinated earlier vs those vaccinated later
- Assess efficacy from differences in disease onset rates during “informative” period in which there was a substantial difference between proportions vaccinated in early and late groups

Ring vaccination community trial

- Ring vaccination:
 - is an infectious disease control strategy in which contacts are vaccinated to protect them and prevent the spread of the disease
 - includes vaccination of all identified contacts of an index case
 - is not necessarily limited to a single geographic site
- Contacts must be identified according to defined criteria.