

Infection Prevention and Control (IPC) for Immunization during COVID-19



WHE IPC Pillar

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Agenda

1. *Introduction to Infection prevention and Control*
2. *IPC guidance for COVID-recommendations for immunization settings*



Introduction to IPC

Importance of Infection Prevention and Control



Protecting yourself

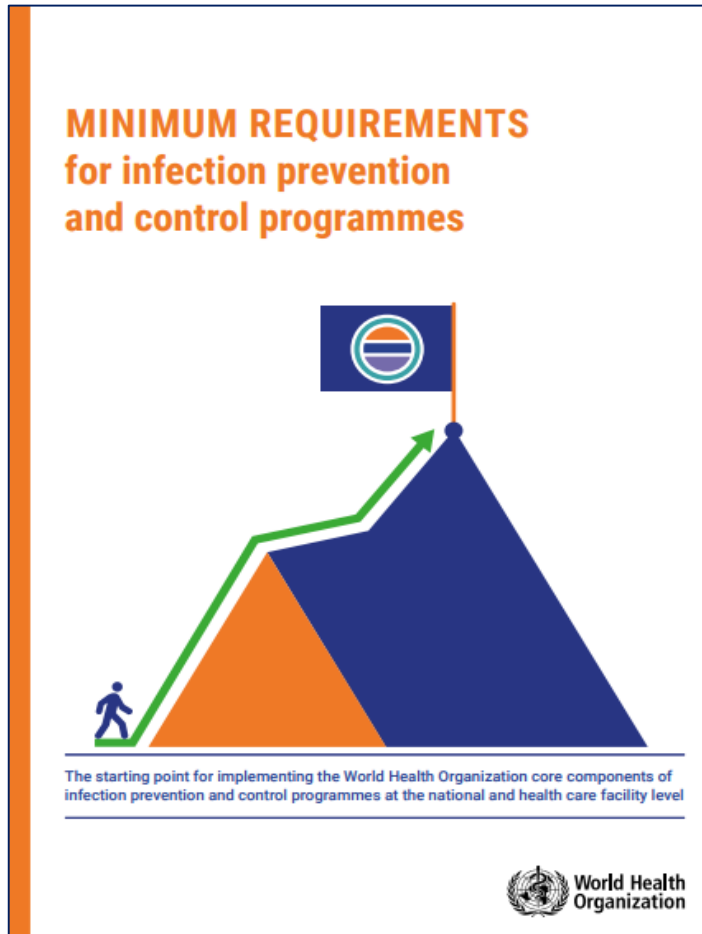


Protecting your patients



Protecting your family & community

IPC Core Components



Infection Prevention and Control (IPC)

Programmes should be implemented at national and health care facility levels; it should include an IPC focal point at each facility.

IPC should be an ongoing activity undertaken by all health workers.

IPC programme involves training in IPC measures; including personal protective equipment (PPE) and understanding of modes of transmission of diseases, including COVID-19 virus.

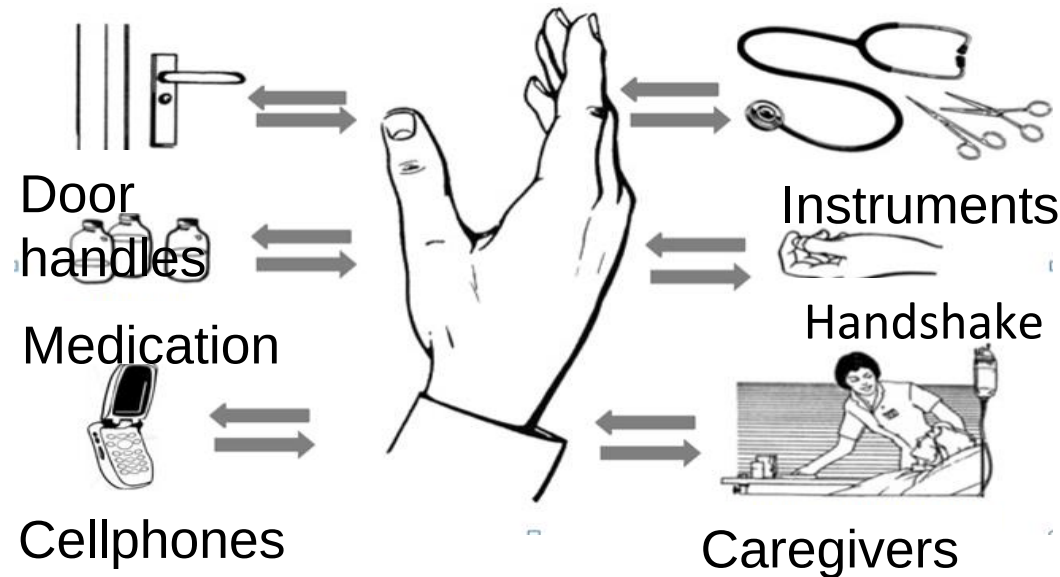
IPC: Standard Precautions for all health care settings

1. Hand hygiene
2. Respiratory hygiene (etiquette)
3. PPE according to the risk assessment
4. Safe injection practices, sharps management and injury prevention
5. Safe handling, cleaning and disinfection of patient care equipment
6. Surface and environmental cleaning
7. Safe handling and cleaning of soiled linen
8. Waste management

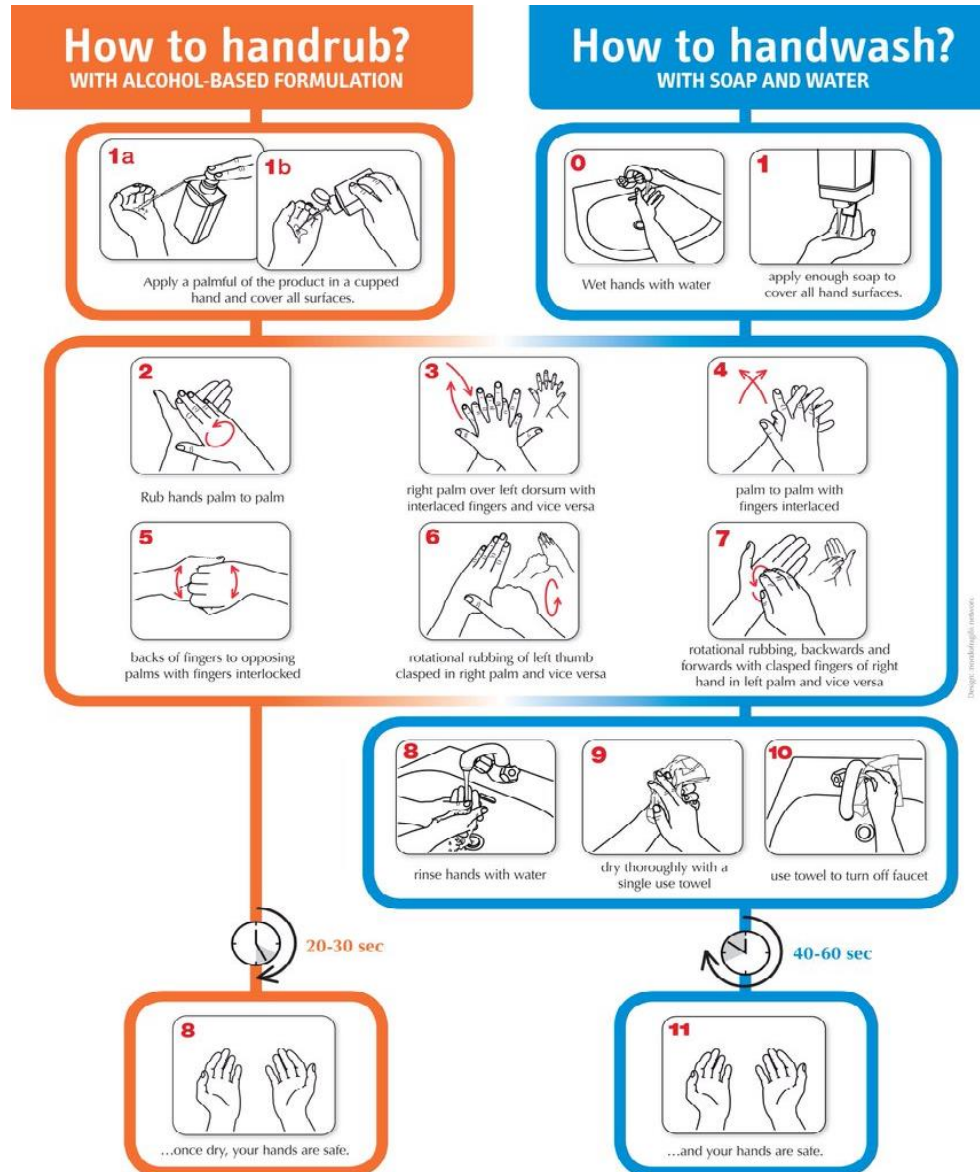


Why is hand hygiene important?

- Practicing good hand hygiene is the best way to prevent the spread of germs in the health care setting and community
- Our hands are our main tool for work as health care workers- and they are the key link in the chain of transmission



Hand Hygiene: HOW



Use appropriate product and technique

An alcohol-based hand rub product is preferable, if hands are not visibly soiled

- Rub hands for 20–30 seconds!

Soap, running water and single use towel, when visibly dirty or contaminated with proteinaceous material

- Wash hands for 40–60 seconds!

Respiratory Hygiene

Good respiratory hygiene/cough etiquette can reduce the spread of microorganisms into the environment that cause respiratory infections.

**** For health workers – do not come to work if experiencing respiratory symptoms!****

HOW?

- Cover the nose and mouth when sneezing and/or coughing with a tissue or your sleeve/inside of your elbow, if no tissue is available
- Perform hand hygiene afterwards with alcohol based hand rub products or water and soap if hands are visibly soiled
- Stay away from others when ill (particularly for health workers to avoid coming to work when ill)
- Avoid introductory kissing or shaking hands when ill
- Avoid close contact with people who exhibit symptoms
- Wear a medical mask if having respiratory symptoms



Risk Assessment and Standard Precautions



Risk assessment: risk of exposure and extent of contact anticipated with blood, body fluids, respiratory droplets, and/or open skin

- Select which PPE items to wear based on this assessment
- Perform hand hygiene according to the WHO "5 Moments"
- Should be done for each patient, each time

Make this routine!

Personal Protective Equipment (PPE) items:

Gown



Body

Gloves



Hands

Face Mask



**Nose +
mouth**

**Respirator
N95**



Nose + mouth

Face shield



Eyes + nose + mouth

Goggle



Eyes

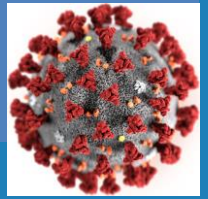
The type of PPE used will vary based on the health service provided, the individual risk-assessment, and additional transmission-based precautions needed.

The seven steps to safe injections

1 Clean workspace	7
2 Hand hygiene	
3 Sterile safety-engineered syringe	
4 Sterile vial of medication and diluent	
5 Skin cleaning and antisepsis	
6 Appropriate collection of sharps	
7 Appropriate waste management	

IPC recommendations for COVID-19 in the context of immunization

Modes of transmission of COVID-19



Droplet

- Respiratory droplets (particles $>5\text{-}10\text{ }\mu\text{m}$ in diameter)
- generated when an infected person coughs or sneezes
- Any person who is in close contact with someone who has respiratory symptoms (sneezing, coughing) is at risk of being exposed to potentially infective respiratory droplets

Contact

- *Direct contact* with infected people through touching
- *Indirect contact* with surfaces in the immediate environment; droplets may land on surfaces, thus, the immediate environment of an infected individual can serve as a source of transmission if someone touches it and then their face

Airborne

- Only aerosol-generating procedures in health settings
- tracheal intubation, non-invasive ventilation, tracheotomy, cardiopulmonary resuscitation, manual ventilation before intubation, and bronchoscopy

Infection prevention and control during health care when COVID-19 is suspected



Interim guidance
19 March 2020



[https://www.who.int/publications-detail/infection-prevention-and-control-during-health-care-when-novel-coronavirus-\(ncov\)-infection-is-suspected-20200125](https://www.who.int/publications-detail/infection-prevention-and-control-during-health-care-when-novel-coronavirus-(ncov)-infection-is-suspected-20200125)

Rational use of personal protective equipment for coronavirus disease (COVID-19) and considerations during severe shortages

Interim guidance
6 April 2020



https://apps.who.int/iris/bitstream/handle/10665/331695/WHO-2019-nCov-IPC_PPE_use-2020.3-eng.pdf

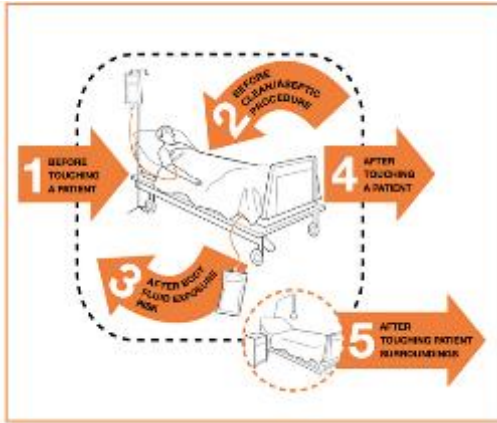
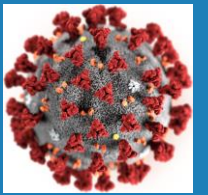
Advice on the use of masks in the context of COVID-19

Interim guidance
5 June 2020



[https://www.who.int/publications/i/item/advice-on-the-use-of-masks-in-the-community-during-home-care-and-in-healthcare-settings-in-the-context-of-the-novel-coronavirus-\(2019-ncov\)-outbreak](https://www.who.int/publications/i/item/advice-on-the-use-of-masks-in-the-community-during-home-care-and-in-healthcare-settings-in-the-context-of-the-novel-coronavirus-(2019-ncov)-outbreak)

IPC online training options



Standard precautions: Hand hygiene

Show course details Enroll me for this course

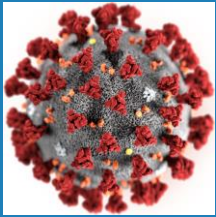
How to put on and remove personal protective equipment (PPE)

•
Show course details Enroll me for this course

Infection Prevention and Control (IPC) for Novel Coronavirus (COVID-19)

Show course details Enroll me for this course

Risk assessment recommendations for immunization – COVID-19



Program leaders

(National or subnational level)

1. Confirm the local COVID-19 transmission scenario.
2. Consider health service and delivery strategy to be used and make a risk assessment .
 - Define and recommend which personal protective equipment items which should be used for the health service delivery and the setting based on this assessment and assure appropriate IPC training and appropriate supply of necessary equipment.

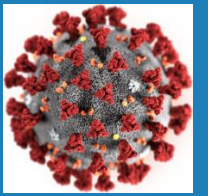


Individual Health Worker

(Fixed site/outreach/campaign site)

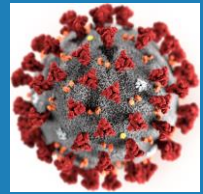
1. Adhere to national guidance and protocols for IPC measures
2. Perform a risk assessment before every patient interaction
 - Based on this personal risk assessment of exposure to COVID-19, select which additional personal protective equipment items to wear.

Recommended IPC Activities for Health Workers



COVID-19 Transmission setting	IPC activities in any setting (fixed, outreach, mass campaign)	Personal Protective Equipment
No Cases	- Adhere to national IPC protocols - Always apply standard precautions - Screening recommended in all settings - Maintain 1 meter distance between vaccinators and accompanying members/family members as much as possible - Ensure that the recipient and caretaker is positioned sideways to the vaccinator (not face to face) - Hand hygiene between recipients - Disinfection of surfaces after every patient (if applicable)	- Adhere to national IPC protocols - Additional PPE indicated by the risk assessment per recipient
Sporadic or Cluster cases		- Adhere to national IPC protocols - Medical masks can be considered for use by health workers - Where surveillance is weak, health workers are encouraged to wear medical masks
Community transmission		- Adhere to national IPC protocols - Health workers should wear medical masks throughout the session

Use of PPE during immunization delivery



Hand hygiene 	Practice between each recipient (before and after contact).
PPE item	When to use
Masks 	In areas with COVID-19 community transmission, health workers should wear a medical mask throughout the immunization session. If COVID-19 cases are sporadic or in clusters, medical masks can be considered for use by health workers. The mask should be replaced when damaged, contaminated or damp.
Eye protection 	Not routinely required. Use only if risk of splashes from droplets or body fluids are anticipated into the eyes, as indicated by risk assessment conducted before every interaction with recipients. Consider for oral vaccination when self-administration is not possible.
Gloves 	Not routinely required. Use only if there is risk of direct contact with blood and body fluids, non-intact skin is anticipated, as indicated by risk assessment conducted before every interaction with recipients.
Gown 	Gown or gloves should be discarded after single use.

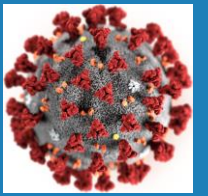
Community Engagement

- Risk communication
 - Ensure safety measures are communicated to the community prior and throughout the campaign
 - Messages need to be adapted to immunization campaign in the outbreak context
- Community engagement
 - Allocate time to engage community leaders and mobilizers about the vaccination site
 - Train community mobilizers in IPC measures

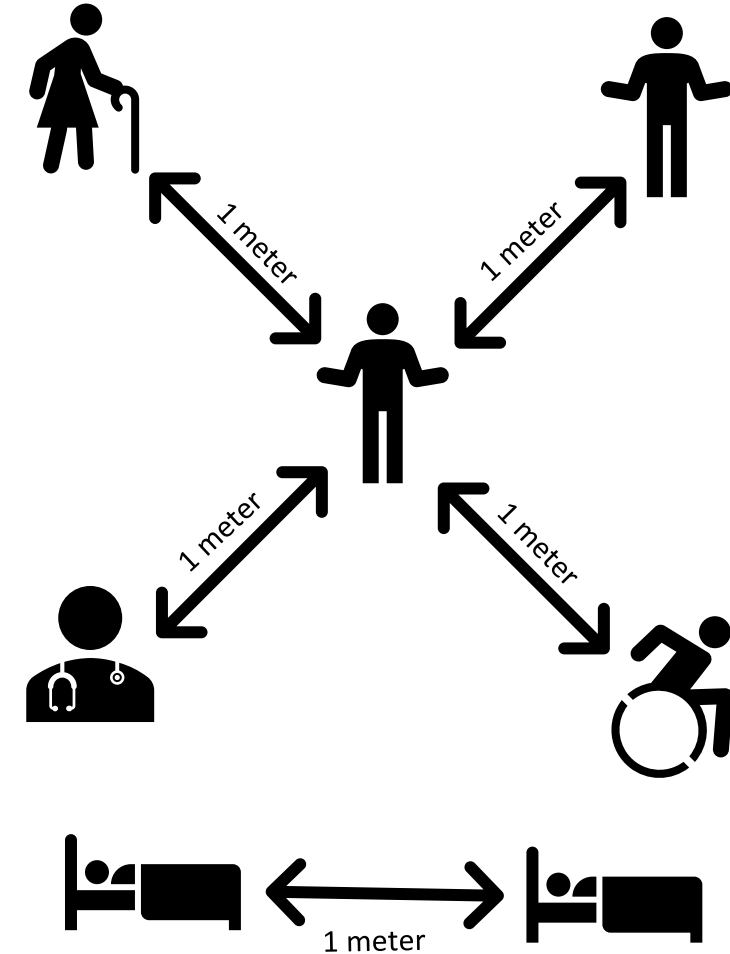


Physical distancing, Measles Campaign. DRC March 2020

How to set up a safe vaccination site



- **Built environment:** Pick a well **ventilated area** or outdoor space where you can ensure one-way flow and physical distance
- Avoid crowded **waiting areas**, limit persons accompanying the person needing vaccination, and ensure a 1metre distance between others or between chairs
- Ensure the availability of **hand sanitizer** or a hand washing station is available at the entrance of the health facility
- Perform **screening** of persons presenting respiratory symptoms before admission to the vaccination posts to prevent the spread of COVID-19 infection
- Ensure adequate space for the **sideways positioning** of the recipient and caretaker so they are not face-to-face to the vaccinator



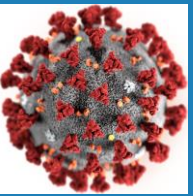
Screening

- Intended for the early recognition of possible COVID-19 cases to determine protection measures
- Ensure one way direction (flow) of recipients throughout process
- Separation: at least 1 meter maintained between all patients
- Signage posted for recipients to report symptoms
- Masks are required for screening by health workers unless 1 meter physical distance can be maintained between the screener and recipient



Physical distancing during routine Immunization. Malawi, May 2020

PPE required when managing suspect COVID-19 cases



Droplet & Contact precautions for suspected or confirmed COVID-19 cases

1. hand hygiene
2. gown
3. eye protection (face shield or goggles)
4. medical mask
5. gloves

1 Perform hand hygiene
Alcohol based handrub | **Water and soap**
Rub hands for 20–30 seconds. | Wash hands for 40–60 seconds.



2 Put on the gown



3 Eye protection
Put on goggles or face shield.



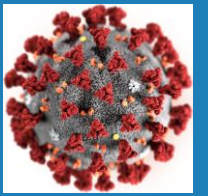
4 Put on the mask
Medical mask | **Respirator mask (N95, FFP2, FFP3, or equivalent).**
Only use if performing aerosol generating procedures.



5 Put on gloves
Ensure gloves are placed over the cuff of the gown.



Recommended IPC Kit for Outreach/Campaign Kit



In addition to vaccination supplies, health workers are advised to carry IPC kits with them, as a precaution. This kit contains PPE that may be required based on individual risk assessment.

This kit should at minimum contain:

1. **Alcohol based hand rub**
2. **Medical mask** (bring several for replacement needs)
3. **Eye protection** (in case there is a need)
4. **Gloves** (in case there is a need)
5. **Gowns** (in case there is a need)
6. **Garbage bag**

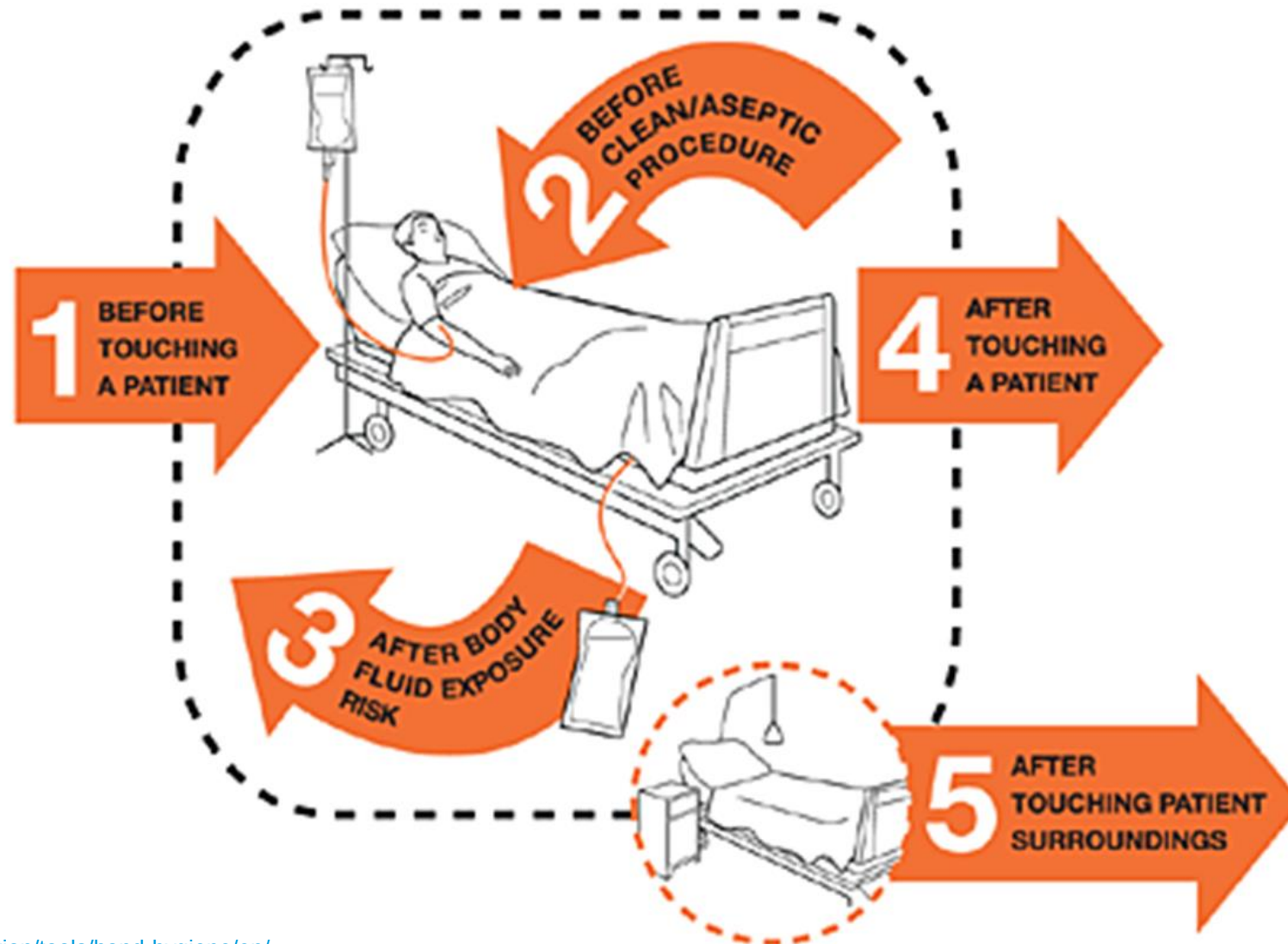




Thank You!



Hand Hygiene: WHO 5 moments



How to wash hands in settings with little water?

- Practicing good hand hygiene is the best way to prevent the spread of germs in the health care setting and community
- Best possible efforts should be made to provide hand washing stations
- Local innovations and creative solutions are encouraged and may be adapted to assure a water source for facilitating handwashing with soap and water before/after each recipient
- If water is not available, alcohol-based hand rubs must be made available to health workers
- WHO has a recommended local hand rub formulation instructions
<https://www.who.int/infection-prevention/tools/hand-hygiene/handrub-formulations/en/>



How to wear a mask properly

- Ensure **hand hygiene** is performed before putting on the mask
- Place the mask carefully, ensuring it **covers the mouth and nose**, and tie it securely to minimize any gaps between the face and the mask.
- **Avoid touching** the mask while wearing it. If a used mask is inadvertently touched, use an alcohol-based hand rub or soap and water to clean hands.
- Replace masks as soon as they become damp with a new clean, dry mask.
- **Remove the mask** using the appropriate technique: do not touch the front of the mask but untie it from behind or from the straps
- After removal of the used mask, clean hands either using alcohol-based hand rub or use soap and water (if hands are visibly soiled)
- Do not re-use single-use masks. Discard after each use and dispose of them immediately upon removal.



Recipients and Caregivers

- Facilitate ways for recipients and caregivers to respect physical distancing from other clients visiting the health service (e.g., sign posts, physical markings)
- Community members should not be refused access to health services if they are not wearing masks; if they have COVID-19 symptoms, they should be given a medical mask and separated from other clients
- Masks are not encouraged for children
- Fabric masks can be used by the general public if distancing cannot be maintained



Physical distancing, Measles Campaign. DRC March 2020

Resources for COVID-19

IPC documents

<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/infection-prevention-and-control>

<https://www.who.int/infection-prevention/publications/en/>

https://apps.who.int/iris/bitstream/handle/10665/331695/WHO-2019-nCov-IPC_PPE_use-2020.3-eng.pdf

[https://www.who.int/publications/i/item/advice-on-the-use-of-masks-in-the-community-during-home-care-and-in-healthcare-settings-in-the-context-of-the-novel-coronavirus-\(2019-ncov\)-outbreak](https://www.who.int/publications/i/item/advice-on-the-use-of-masks-in-the-community-during-home-care-and-in-healthcare-settings-in-the-context-of-the-novel-coronavirus-(2019-ncov)-outbreak)

Questions and Answers

<https://www.who.int/news-room/q-a-detail/q-a-coronaviruses>

If you cannot find an answer you can email our general IPC email with your question:

WHEIPC@who.int

Immunization services in fixed site – IPC Actions (1)

To be applied...	Infection Prevention & Control Actions
For vaccinators and health workers	- Do not come to work if having symptoms compatible with respiratory illness; these are symptoms consistent with the surveillance definition of a severe acute respiratory illness. https://www.who.int/publications-detail/global-surveillance-for-human-infection-with-novel-coronavirus-(2019-ncov) - Adhere to national guidance and protocols for IPC measures and use recommended personal protective equipment in line with national policy (next slide) - Perform a risk assessment before every patient interaction - Perform hand hygiene before/after each recipient using soap and water or with a hand sanitizer that contains 60 - 80% alcohol - Clean and disinfect environmental surfaces often, including table tops, chairs, light switches https://www.who.int/publications-detail/cleaning-and-disinfection-of-environmental-surfaces-in-the-context-of-covid-19 - Ensure the availability of hand sanitizer or a hand washing station with soap and water for use by recipients and companions at the entrance of vaccination sites and health facilities. - Strictly adhere to safe waste management protocol for discarded PPE https://www.who.int/publications-detail/water-sanitation-hygiene-and-waste-management-for-the-covid-19-virus-interim-guidance
During screening	Maintain 1 metre distance between screener and recipients/companion at all times.
During all sessions	- Conduct sessions in well-ventilated areas or outdoor spaces if possible. A well-ventilated area is one that can be achieved through open windows and natural ventilation. The recirculation of indoor air through the use of fans, air-conditioning units is to be avoided. - Whenever possible, separate the vaccination site from curative services (i.e., different hours and different spaces). - Minimise wait times as much as possible - Limit number of individuals present at immunization visit to avoid crowded wait rooms; hold smaller sessions at more frequent intervals; schedule immunization appointments - Bundle immunization with other health services to limit visits to the health centre
For recipients	- Limit the number of family members accompanying the person to be vaccinated (one companion) - Maintain 1 metre distance among recipients at all times

Immunization services in fixed site – **PPE equipment (2)****

Item	Recommendation
Medical masks	• Health workers should wear masks in areas with COVID-19 transmission and use for the duration of the immunization session. The mask can be replaced when damaged, contaminated or damp. • In areas with clusters of cases, health workers may consider wearing masks • https://www.who.int/publications-detail/rational-use-of-personal-protective-equipment-for-coronavirus-disease-(covid-19)-and-considerations-during-severe-shortages • In areas where the surveillance systems are weak, health workers should consider wearing masks • If during screening, 1 meter distance cannot be assured between recipient and the health worker, the health worker should wear a mask • Any recipient identified with respiratory symptoms should be given a mask and removed from common waiting areas.
Gloves	• Not routinely required. Use only if direct contact with blood and body fluids, non-intact skin is anticipated, as indicated by risk-assessment per recipient • If gloves are used, then they must be changed between every recipient and disposed in a bin with a lid, followed by proper hand hygiene.
Gowns	• Not routinely required. Use only if there is risk of splashes (of body fluids or droplets) onto the health care worker's body, as indicated by risk-assessment per recipient
Eye Protection	• Unlikely. Only if risk of splashes from droplets or body fluids into the eyes, as indicated by risk assessment per individual. Consider for oral vaccinations when self-administration is not possible.

**** When no direct contact** with individuals is involved and 1 meter distance can be respected, (e.g. self-administration of oral vaccines), use of personal protective equipment by health workers is not required

Immunization services in outreach – IPC Actions (1)

To be applied...	Infection Prevention & Control Actions
For vaccinators and health workers	• Do not come to work if having symptoms compatible with respiratory illness; these are symptoms consistent with the surveillance definition of a severe acute respiratory illness. • Adhere to national guidance and protocols for IPC measures and use recommended personal protective equipment in line with national policy (next slide) • Perform a risk assessment before every patient interaction • Perform hand hygiene before/after each recipient using soap and water or with a hand sanitizer that contains 60 - 80% alcohol • Clean and disinfect environmental surfaces often, including vaccine carriers and transported materials https://www.who.int/publications-detail/cleaning-and-disinfection-of-environmental-surfaces-in-the-context-of-covid-19 • Strictly adhere to safe waste management protocol for discarded PPE https://www.who.int/publications-detail/water-sanitation-hygiene-and-waste-management-for-the-covid-19-virus-interim-guidance
During screening	• Maintain 1 metre distance between screener and recipients/companion at all times.
At outreach posts	• Conduct sessions in well-ventilated areas or outdoor spaces if possible • Minimise wait times as much as possible • Limit number of individuals present at outreach post to avoid crowds
House to house visits	• Adapt measures to maintain distance between health workers and additional family members • Avoid unnecessary interaction with those who are not recipients
For recipients	• Limit the number of family members accompanying the person to be vaccinated (one companion) • Maintain 1 metre distance among recipients at all times

Immunization services in outreach – PPE equipment (2)**

Item	Recommendation
Medical masks	• Health workers should wear masks in areas with COVID-19 transmission and use for the duration of the immunization session. The mask can be replaced when damaged, contaminated or damp. • In areas with clusters of cases, health workers may consider wearing masks • https://www.who.int/publications-detail/rational-use-of-personal-protective-equipment-for-coronavirus-disease-(covid-19)-and-considerations-during-severe-shortages • In areas where the surveillance systems are weak, health workers should consider wearing masks • If during screening, 1 meter distance cannot be assured between recipient and the health worker, the health worker should wear a mask • Any recipient identified with respiratory symptoms should be given a mask and removed from common waiting areas.
Gloves	• Not routinely required. Use only if direct contact with blood and body fluids, non-intact skin is anticipated, as indicated by risk-assessment per recipient. Should be brought in IPC kit for outreach as a precaution. • If gloves are used, then they must be changed between every recipient and disposed in a bin with a lid, followed by proper hand hygiene.
Gowns	• Not routinely required. Use only if there is risk of splashes (of body fluids or droplets) onto the health care worker's body, as indicated by risk-assessment per recipient
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**** When no direct contact with individuals is involved and 1 meter distance can be respected, (e.g. self-administration of oral vaccines), use of personal protective equipment by health workers is not required**

Immunization services in mass campaigns – IPC Actions (1)

To be applied...	Infection Prevention & Control Actions
For vaccinators and health workers	• Do not come to work if having symptoms compatible with respiratory illness; these are symptoms consistent with the surveillance definition of a severe acute respiratory illness. • Adhere to national guidance and protocols for IPC measures and use recommended personal protective equipment in line with national policy (next slide) • Perform a risk assessment before every patient interaction • Perform hand hygiene before/after each recipient using soap and water or with a hand sanitizer that contains 60 - 80% alcohol • Clean and disinfect environmental surfaces often, including vaccine carriers and transported materials https://www.who.int/publications-detail/cleaning-and-disinfection-of-environmental-surfaces-in-the-context-of-covid-19 • Strictly adhere to safe waste management protocol for discarded PPE https://www.who.int/publications-detail/water-sanitation-hygiene-and-waste-management-for-the-covid-19-virus-interim-guidance
During screening	• Maintain 1 metre distance between screener and recipients/companion at all times.
At outreach posts	• Conduct sessions in well-ventilated areas or outdoor spaces if possible • Minimise wait times as much as possible • Limit number of individuals present at outreach post to avoid crowds
House to house visits	• Adapt measures to maintain distance between health workers and additional family members • Avoid unnecessary interaction with those who are not recipients
For recipients	• Limit the number of family members accompanying the person to be vaccinated (one companion) • Maintain 1 metre distance among recipients at all times

Immunization services in mass campaigns – PPE equipment (2)**

Item	Recommendation
Medical masks	• Health workers should wear masks in areas with COVID-19 transmission and use for the duration of the immunization session. The mask can be replaced when damaged, contaminated or damp. • In areas with clusters of cases, health workers may consider wearing masks • https://www.who.int/publications-detail/rational-use-of-personal-protective-equipment-for-coronavirus-disease-(covid-19)-and-considerations-during-severe-shortages • In areas where the surveillance systems are weak, health workers should consider wearing masks • If during screening, 1 meter distance cannot be assured between recipient and the health worker, the health worker should wear a mask • Any recipient identified with respiratory symptoms should be given a mask and removed from common waiting areas.
Gloves	• Not routinely required. Use only if direct contact with blood and body fluids, non-intact skin is anticipated, as indicated by risk-assessment per recipient. Should be brought in IPC kit for outreach as a precaution. • If gloves are used, then they must be changed between every recipient and disposed in a bin with a lid, followed by proper hand hygiene.
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**** When no direct contact** with individuals is involved and 1 meter distance can be respected, (e.g. self-administration of oral vaccines), use of personal protective equipment by health workers is not required

Guiding principles for immunization activities during the COVID-19 pandemic

Interim guidance
26 March 2020



POLIO ERADICATION PROGRAMME CONTINUITY PLANNING

Bacille Calmette-Guérin (BCG) vaccination and COVID-19

Scientific brief
12 April 2020



Immunization in the context of COVID-19 pandemic

Frequently Asked Questions (FAQ)
16 April 2020



Community-based health care, including outreach and campaigns, in the context of the COVID-19 pandemic

Interim guidance
May 2020



Global guidance issued – immunization related

<https://www.who.int/publications-detail/guiding-principles-for-immunization-activities-during-the-covid-19-pandemic-interim-guidance>



Available Arabic, Chinese, French, Russian, Spanish

<http://polioeradication.org/wp-content/uploads/2020/03/COVID-POL-programme-continuity-planning-20200325.pdf>

[https://www.who.int/publications-detail/bacille-calmette-gu%C3%A9rin-\(bcg\)-vaccination-and-covid-19](https://www.who.int/publications-detail/bacille-calmette-gu%C3%A9rin-(bcg)-vaccination-and-covid-19)

<https://www.who.int/publications-detail/immunization-in-the-context-of-covid-19-pandemic>

Available Arabic, Chinese, French, Russian, Spanish

<https://www.who.int/publications-detail/community-based-health-care-including-outreach-and-campaigns-in-the-context-of-the-covid-19-pandemic>

Considerations for school-related public health measures in the context of COVID-19

Annex to Considerations in adjusting public health and social measures in the context of COVID-19

10 May 2020



Framework for decision-making: implementation of mass vaccination campaigns in the context of COVID-19

Interim guidance
22 May 2020



POLIO GLOBAL
ERADICATION
INITIATIVE

RECOMMENDATIONS

Thursday, 21 May 2020

POLIO ERADICATION IN THE CONTEXT OF THE COVID-19 PANDEMIC

Updated urgent country and regional recommendations

Maintaining essential health services: operational guidance for the COVID-19 context

Interim guidance
1 June 2020



Global guidance issued – immunization related



<https://www.who.int/publications-detail/considerations-for-school-related-public-health-measures-in-the-context-of-covid-19>

<https://www.who.int/publications-detail/framework-for-decision-making-implementation-of-mass-vaccination-campaigns-in-the-context-of-covid-19>

<http://polioeradication.org/wp-content/uploads/2020/03/updated-POB-country-and-regional-recommendations-20200521.pdf>

<https://www.who.int/publications-detail/10665-332240>