RESPONDING TO THE COVID-19 PANDEMIC: Resources Compiled by NEST for Use in Hospital-Based Newborn Care

Last updated on 15 May, 2020

USE INSTRUCTIONS

Intended use of this guidance is to aid clinicians and hospital staff to manage COVID-19 response efforts in newborn care units in sub-Saharan Africa. The guidance material includes a combination of NEST-developed and compiled documents from various organizations and institutions. It also links to further information developed by national bodies. To view the complete document see the NEST360° COVID-19 Resources webpage.

DISCLAIMER: COVID-19 guidance continues to evolve rapidly. We intend to update the material as new resources become available and will work with others to bring together the best available information. As such, we include a qualifier of “Last Updated on [date]” as reference. We encourage use of this guidance alongside local operational policies developed by your institutions and organizations.

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GENERAL INFORMATION ON PERSONAL PROTECTIVE EQUIPMENT (PPE):
Donning, Doffing, and Levels of PPE for Different Areas and Types of Work

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COVID-19 Safe ways of working

A visual guide to safe PPE

General contact with confirmed or possible COVID-19 cases

- Eye protection to be worn on risk assessment
- Fluid resistant surgical mask
- Disposable apron
- Gloves

Aerosol Generating Procedures or High Risk Areas

- Eye protection eye shield, goggles or visor
- Filtering facepiece respirator
- Long sleeved fluid repellent gown
- Gloves

Clean your hands before and after patient contact and after removing some or all of your PPE

Clean all the equipment that you are using according to local policies

Use the appropriate PPE for the situation you are working in (General / AGPs or High Risk Areas)

Take off your PPE safely

Take breaks and hydrate yourself regularly

For more information on infection prevention and control of COVID-19 please visit:

Putting on (donning) personal protective equipment (PPE) for aerosol generating procedures (AGPs)

Use safe work practices to protect yourself and limit the spread of infection
- keep hands away from face and PPE being worn
- change gloves when torn or heavily contaminated
- limit surfaces touched in the patient environment
- regularly perform hand hygiene
- always clean hands after removing gloves

Pre-donning instructions
- ensure healthcare worker hydrated
- tie hair back
- remove jewellery
- check PPE in the correct size is available

Putting on personal protective equipment (PPE). The order for putting on is gown, respirator, eye protection and gloves. This is undertaken outside the patient’s room.

Perform hand hygiene before putting on PPE

1. Put on the long-sleeved fluid repellent disposable gown - fasten neck ties and waist ties.

2. Respirator.
   Note: this must be the respirator that you have been fit tested to use. Where goggles or safety spectacles are to be worn with the respirator, these must be worn during the fit test to ensure compatibility
   Position the upper straps on the crown of your head, above the ears and the lower strap at the nape of the neck. Ensure that the respirator is flat against your cheeks. With both hands mould the nose piece from the bridge of the nose firmly pressing down both sides of the nose with your fingers until you have a good facial fit. If a good fit cannot be achieved DO NOT PROCEED
   Perform a fit check. The technique for this will differ between different makes of respirator. Instructions for the correct technique are provided by manufacturers and should be followed for fit checking

3. Eye protection - Place over face and eyes and adjust the headband to fit

4. Gloves - select according to hand size. Ensure cuff of gown covered is covered by the cuff of the glove.
Quick guide

Removal of (doffing) personal protective equipment (PPE) for aerosol generating procedures (AGPs)

PPE should be removed in an order that minimises the potential for cross contamination.

The order of removal of PPE is as follows:

1. **Gloves** –
   - the outsides of the gloves are contaminated
   - Clean hands with alcohol gel

2. **Gown** –
   - the front of the gown and sleeves will be contaminated

3. **Eye protection** –
   - the outside will be contaminated

4. **Respirator**
   - Clean hands with alcohol hand rub. Do not touch the front of the respirator as it will be contaminated

5. **Wash hands with soap and water**
### Recommended PPE for healthcare workers by secondary care inpatient clinical setting, NHS and independent sector

<table>
<thead>
<tr>
<th>Setting</th>
<th>Context</th>
<th>Disposable Gloves</th>
<th>Disposable Plastic Apron</th>
<th>Disposable fluid-resistant gown</th>
<th>Surgical mask</th>
<th>Fluid-resistant (Type IIR) surgical mask</th>
<th>Filtering face piece respirator</th>
<th>Eye/face protection¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute hospital inpatient and emergency departments, mental health, learning disability, autism, dental and maternity settings</td>
<td>Performing a single aerosol generating procedure² on a possible or confirmed case³ in any setting outside a higher risk acute care area⁴</td>
<td>✓ single use¹</td>
<td>✓</td>
<td>✓ single use²</td>
<td>✗</td>
<td>✓ single use⁵</td>
<td>✓ single use²</td>
<td>✓ single use²</td>
</tr>
<tr>
<td>Working in a higher risk acute care area¹ with possible or confirmed case⁴</td>
<td>✓ single use¹</td>
<td>✓ single use³</td>
<td>✓</td>
<td>✗</td>
<td>✓ single use⁵</td>
<td>✓ single use⁵</td>
<td>✓ single use⁵</td>
<td>✓ single use⁵</td>
</tr>
<tr>
<td>Working in an inpatient, maternity, radiology area with possible or confirmed case⁴ (not within 2 metres)</td>
<td>✓ single use¹</td>
<td>✓ single use³</td>
<td></td>
<td>✗</td>
<td>✓ single use⁵</td>
<td>✓ single use⁵</td>
<td>✓ single use⁵</td>
<td>✓ single use⁵</td>
</tr>
<tr>
<td>Working in an emergency department/acute assessment area with possible or confirmed case⁴ (not within 2 metres)</td>
<td>✓ single use¹</td>
<td>✓ single use³</td>
<td></td>
<td>✗</td>
<td>✓ single use⁵</td>
<td>✓ single use⁵</td>
<td>✓ single use⁵</td>
<td>✓ single use⁵</td>
</tr>
<tr>
<td>All individuals transferring possible or confirmed case⁴ (within 2 metres)</td>
<td>✓ single use¹</td>
<td>✓ single use³</td>
<td></td>
<td>✗</td>
<td>✓ single or sessional use⁵,6</td>
<td>✓</td>
<td>✓ risk assess single or sessional use⁵,6</td>
<td></td>
</tr>
<tr>
<td>Operating theatre with possible or confirmed case⁴ – no AGPs²</td>
<td>✓ single use¹</td>
<td>✓ single use³</td>
<td></td>
<td>✗</td>
<td>✓ single or sessional use⁵,6</td>
<td>✓</td>
<td>✓ risk assess single or sessional use⁵,6</td>
<td></td>
</tr>
<tr>
<td>Labour ward/area – 2nd/3rd stage labour vaginal delivery (no AGPs⁵) – possible or confirmed case⁴</td>
<td>✓ single use¹</td>
<td>✓ single use³</td>
<td></td>
<td>✗</td>
<td>✓ single or sessional use⁵,6</td>
<td>✓</td>
<td>✓ single or sessional use⁵,6</td>
<td></td>
</tr>
<tr>
<td>Inpatient care to any individuals in the extremely vulnerable group undergoing shielding⁴</td>
<td>✓ single use¹</td>
<td>✓ single use³</td>
<td></td>
<td>✗</td>
<td>✓ single use⁵</td>
<td>✓</td>
<td>✓ single use⁵</td>
<td>✓</td>
</tr>
</tbody>
</table>

Table 1

1. This may be single or reusable face/eye protection/full face visor or goggles.
2. The full list of aerosol generating procedures (AGPs) is within the COVID-19 IPC guidance [note AGPs are undergoing a further review at present].
4. Higher risk acute areas include: ICU/HDUs; ED resuscitation areas; wards with non-invasive ventilation; operating theatres; endoscopy units for upper Respiratory, ENT or upper GI endoscopy; and other clinical areas where AGPs are regularly performed.
5. Single use refers to disposal of PPE or decontamination of reusable items e.g. eye protection or respirator, after each patient and/or following completion of a procedure, task, or session; dispose or decontaminate reusable items after each patient contact as per Standard Infection Control Precautions (SICPs).
6. A session refers to a period of time where a healthcare worker is undertaking duties in a specific care setting/exposure environment e.g. on a ward round, providing ongoing care for inpatients. A session ends when the healthcare worker leaves the care setting/exposure environment. Sessional use should always be risk assessed and considered where there are high rates of hospital cases. PPE should be disposed of after each session or earlier if damaged, soiled, or uncomfortable.
7. Risk assessed use refers to utilising PPE when there is an anticipated/likely risk of contamination with splashes, droplets of blood or body fluids.

### Patient use of PPE: In cohort wards, communal waiting areas and during transportation, it is recommended that suspected or confirmed cases wear a surgical face mask if this can be tolerated. The aim of this is to minimise the dispersal of respiratory secretions, reduce both direct transmission risk and environmental contamination. A surgical face mask should not be worn by patients if there is potential for their clinical care to be compromised (e.g. when receiving oxygen therapy).