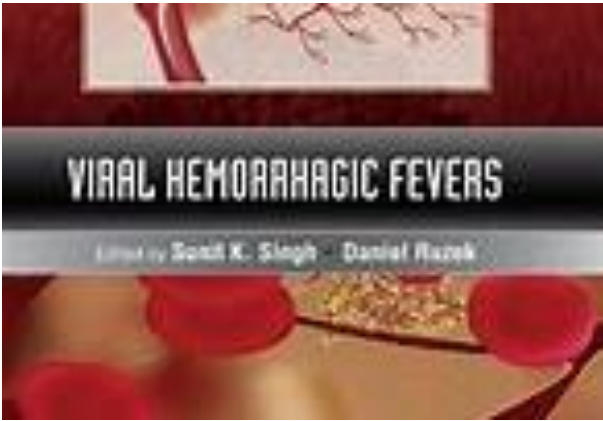


# Infection Prevention and Control The basic principles in implementing a high security isolation area

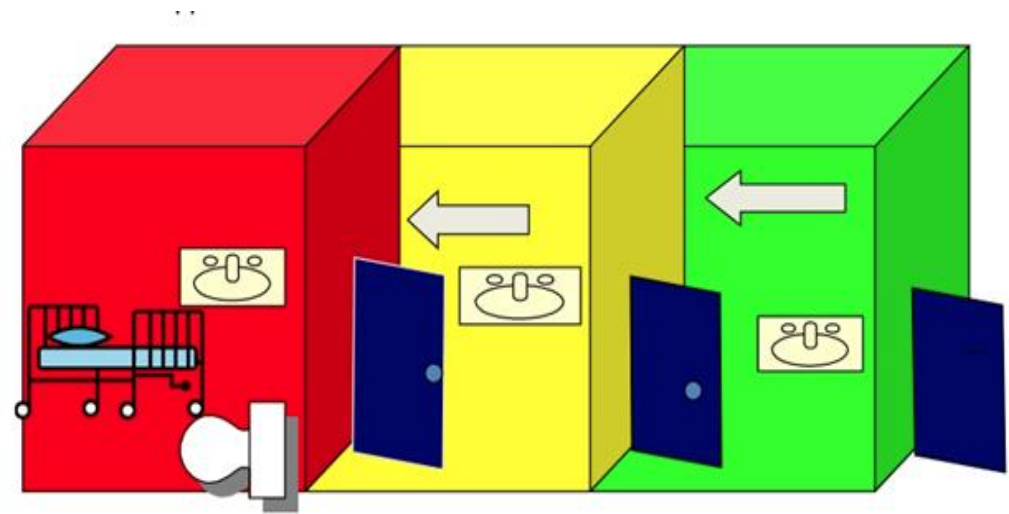


# The basic principles in implementing a high security isolation area

It can be summarized as “The Rule of Three”

(Lighthelm 2004)

- Three (3) areas for patient care.
- Three (3) groups of staff.
- Three (3) layers of protective clothing.
- Three (3) steps in supplying equipment.
- Three (3) steps in decontamination when leaving the area
- Three (3) layers to isolate waste.
- Three (3) layers to isolate a body.
- Three (3) layers to isolate a specimen.



# 1: Red Isolation Area:

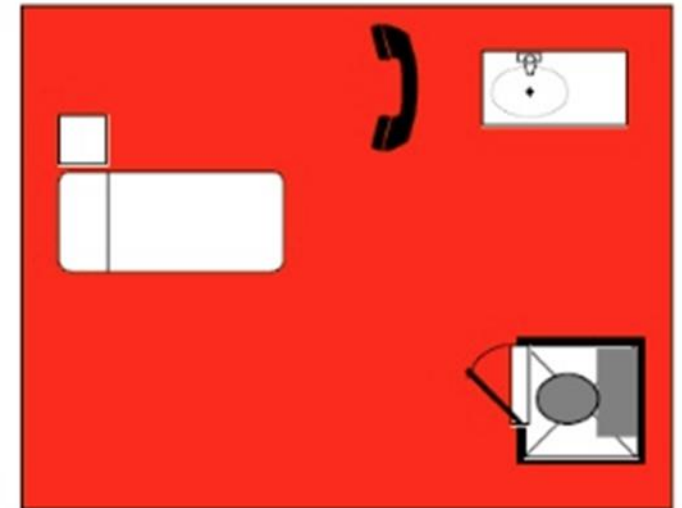
To accommodate the patients with explicit barrier nursing techniques.  
This is a high-risk area which is highly contaminated and holds a serious risk for unprotected staff  
The patient room with an adjoining toilet or sluice and a hand wash basin.  
The isolation area must have a door that can close.

Registered nurses alternate, assist and relieve each other every 2 hours.

## Duties:

- The nursing care of Viral Haemorrhagic Fever patients requires adaptation of standard nursing techniques to limit the risk of exposure to nursing staff
- To care for the patient
- To dust and clean the cubicle, as no cleaners will be allowed into the isolation area
- To maintain isolation technique.
- Always utilise the buddy-system to check one another. Do not wash or clean a patient alone due to the very close contact required to turn a patient alone.

## Red Area



## Minimum items required in the red area

- Bedding and curtains (recommended that clean “condemned” linen may be used and incinerated).
- Mattress and pillows covered with impervious plastic.
- Thermometer, baumanometer (protected in plastic) and disposable cuff
- Stethoscope
- Bedpan, receiver and urinal.
- Basin stand with basin X 2 (one for sample collection and one for decontamination)
- A large container for vomitus (as these patients can develop sudden projectile vomiting (plastic bucket with sealable lid)
- Whiteboard with pens and eraser
- Ridged walled, puncture resistant sharps container with absorbent paper towel and bubble wrap (for transportation of specimens)
- Rigid walled, puncture proof sharps containers.
- 20 litre HCRW cardboard healthcare risk waste bin with double red 100-micron plastic bags.
- Puncture proof tray with soapy water for instruments.
- Plastic tray to pass/receive equipment etc., **no hand-to-hand contact.**
- Hand washing basin
- Liquid hand soap and paper towels
- Bucket, mop, dustpan for spills.
- Measuring jug for mixing chlorine for spillage.
- Hypochlorite disinfectant mixed to 500 ppm available chlorine in a covered container. (General cleaning and washing of gloves and PPE)
- Hypochlorite disinfectant mixed to 10000 ppm available chlorine in a covered container. (Cleaning of spills of blood and other body fluids).
- Cleaning cloths

## 2. Yellow Transit Area

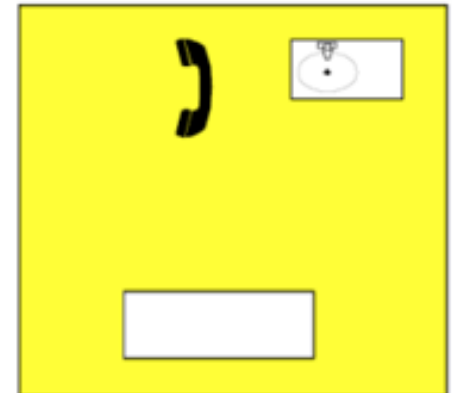
Ante-room that forms the barrier between the dangerous isolation area and the outside environment. This is a medium risk area used mainly to decontaminate staff and waste leaving the isolation area. It is however the most important area to ensure safe isolation practices.

A registered nurse is stationed inside the yellow area. She does not go into the isolation cubicle unless she is urgently needed. She will be fully clothed in isolation gear at all times.

### Duties:

- To communicate with document and stock support staff in green area and the Registered Nurse in the isolation (Red) Area.
- To assist with the donning and doffing of protective clothing of any healthcare worker and doctors who enter the isolation cubicle (Yellow and Red Area).
- His or her main objective is to ensure safe removal of PPE with no exposures.
- To assist with correct containment of waste leaving the cubicle – she ensures that containers are sealed, cleaned and labelled.
- To damp-dust the main area outside the cubicles with hypochlorite disinfectant – 500ppm.

### Yellow Area



## Minimum items required for yellow area

- Infectious waste bags, HCRW cardboard boxes
- Lidded container with 500 ppm available chlorine disinfectant solution.
- Lidded container with 5000 ppm available chlorine disinfectant solution.
- Roll of plastic tape for taping pants and sleeve cuffs to protective clothing
- Table to place various containers on.
- Wall clock with a second hand for measuring respiration rates and pulse
- See through plastic for cordoning off and sealing of areas (if necessary)
- Lockable container/cupboard for pharmaceuticals.
- Display posters for donning and doffing PPE.

Decontamination station is set up close to the entrance from the Red Area.

- Large healthcare risk waste cardboard box fitted with a red plastic bag for disposed second layer of protective wear. This must be positioned next to the hand washbasin for use in the decontamination of staff.
- The top quarter of the bag is folded back to create a safe area for sealing filled bags.
- Large plastic dustbin or bucket with chlorine disinfectant to submerge visors or hoods in after decontamination.
- Deep tray with disinfectant to clean boots.
- Disposable cup to rinse boots. (Note: spraying of disinfectants is prohibited).

### 3. Green Supportive Area

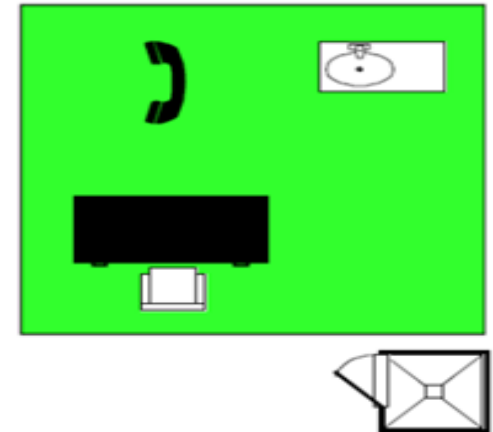
The area that provides support services to the isolation area.  
This is a relatively safe area where equipment's and records are kept  
Should have a hand washing basin

The registered nurse is able to assist staff in the yellow and red areas. She must remain in the restricted green area and never enters the yellow or red area.

#### Duties:

- To receive medication, supplies and patient food etc.
- To communicate with designated person in the yellow area.
- To restrict entry into the main area to authorized personnel only.
- To supervise and coordinate decontamination and disposal of bio-hazardous waste.
- To keep control of contacts
- She instructs contacts to report to the follow-up venue daily.
- To keep patient documentation up to date, as no documentation may enter the yellow or red areas.
- Registered nurses in the red and yellow areas will communicate with the document/stock support staff member and he/she will document relevant information on patient documentation.

#### Green Area



## Minimum required items green area

### Patient documentation

- Standard resuscitation emergency trolley with equipment.
- Extra supplies of  
PPE  
sharps container  
waste containers
- Medication
- Consumables etc.
- The documentation room is limited to the IPS and NM (apart from the designated staff)
- Minimum 3 body bags.

Decontamination station is set up close to the entrance from the Yellow Area.

- Hand washbasin with chlorhexidine based liquid hand soap.
- Large refuse containers / dust bins fitted with a clear plastic bag for general waste.
- HCRW cardboard box with red plastic for disposed third / inner layer of protective wear. This must be positioned next to the hand wash basin for use in the decontamination of staff.
- The top quarter of the bag is folded back to create a safe area for sealing filled bags.

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**HOW I FEEL  
COMING OUT OF**



**ISOLATION ROOMS**