PPE/Infection Control approach for 'Fever in Returning Traveller'.

Step 1 - Patient identified as being an infection risk (can be for any reason, at any point):

Examples:

- Known colonisation with specific micro-organism
- Diarrhoea and vomiting
- Fever/rash in a returning traveller
- Sx consistent with influenza

Step 2 - Minimise risk of infection on patient arrival.

-This ideally should be considered at triage or as soon as possible on arrival to a pod.

- If identified at reception the patient should be placed in the ECG room in triage until clinical risk assessment can be made.
- If the patient appears VERY unwell then place in Resus 2.
- If possible/tolerated patients should be asked to wear a surgical facemask, especially for patients with cough/resp symptoms. Colonised wounds should be covered over with non-adhesive dressings.
- Patient should be isolated as soon as possible – taking into account other risks in the department.
- Failing that a cubicle, commode and barrier nursing with the curtain drawn.
- Minimise movement around the department.
- Avoid leaving the patient in corridor.

Step 3 – Take a history and examine patient wearing Personal Protective Equipment (PPE) (Kept in major incident cupboard).

1) Suspected/confirmed organism known? Or is there a particular organism that you are wanting to protect yourself against? Check the PPE advice by Pathogen (from the infection control manual) to assess for the recommended PPE.
2) Infectious organism unknown: need to make an empirical decision based on what is known about the patient, see **'PPE Advice'** below.

Risk increases the more we are exposed to bodily fluids. Patients with active vomiting, diarrhoea or coughing are at higher risk of passing on infection. Taking blood from patient can also expose us to risk of infection and should be delayed until you have spoken to ID. PPE can be escalated up and down this list depending on what symptoms the patient has. Most patients can be managed with the addition of the following PPE without the need to use enhanced precautions (see later).

Detailed Travel hx :
Where, How long, Dates of travel?
What were they doing there?
Did they have contact with anyone else who was unwell?

Consider whether there is a risk of HCID.

Information on **HCID** endemic countries can be found at

High consequence infectious disease: country specific risk - GOV.UK (www.gov.uk)

Addition Questions to help risk assess:

Has the patient travelled to any area where there is a current **HCID** outbreak?

(High consequence infectious disease: country specific risk - GOV.UK (www.gov.uk))

OR

Has the patient lived or worked in basic rural conditions in an area where Lassa Fever is endemic? (https://www.gov.uk/lassa-fever-origins-reservoirs-transmission-and-guidelines) OR

Has the patient visited caves / mines, or had contact with or eaten primates, antelopes or bats in a Marburg / Ebola endemic area?
(https://www.gov.uk/ebola-and-marburg-haemorrhagic-fevers-outbreaksand-case-locations)
OR
Has the patient travelled in an area where Crimean-Congo Haemorrhagic Fever is endemic (http://www.who.int/csr/disease/crimean_congoHF/Global_CCHFRisk_20080918.png?ua=1) AND sustained a tick bite* or crushed a tick with their bare hands OR had close involvement with animal slaughter? (*If an obvious alternative diagnosis has been made e.g. tick typhus, then manage locally) OR

Has the patient visited the Middle East and reporting a fever (>37.5◦C), difficulty breathing or a cough?

(MERS-CoV: clinical management and guidance - GOV.UK (www.gov.uk)

Step 4 - D/W Infectious Diseases (ID).

- Should this patient be managed as an HCID or not?
- Advice on testing/placement/PPE/admission for non HCID

Don't take bloods until AFTER discussing differential diagnosis with ID.

For suspected or confirmed High Consequence Infectious Disease (HCID)

These are specific infectious organisms that are both highly infectious and also can be difficult to treat.

They can be:

- Spread by DIRECT/INDIRECT CONTACT Examples: Ebola virus, Lassa virus
- Spread by the AIRBORNE route Examples: SARS, MERS-CoV, Avian Influenza

Usually this will only occur after discussion with ID/Virology. Avoid moving the patient before discussion.
It is important to D/W ID prior to bloods as they can risk assess the likelihood of VHF, which will inform how bloods are handled.
If MERS/VHF are on the differential then refer to the specific guidance for these on RIDU clinical guidelines.
PPE for VHF is dependent on risk assessment.

If the patient is considered at risk of an IDHC they should be managed in Red resus (surgical observation ward room with anteroom)

For suspected HCID patients we should use enhanced precautions – see separate document

Otherwise follow ID advice for appropriate placement, PPE and testing.

PPE Advice:

Depending on a patients risk we can use additional PPE - known as transmission based precautions (TBPs)

Contact precautions:

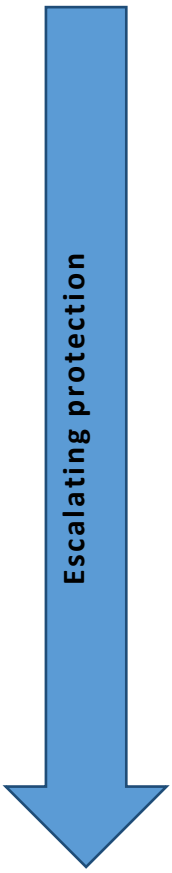
Used to prevent and control infections that spread via direct contact with the patient or indirectly from the patient's immediate care environment (including care equipment). This is the most common route of cross-infection transmission.

Droplet precautions

Used to prevent and control infections spread over short distances (at least 3 feet or 1 metre) via droplets (greater than 5µm) from the respiratory tract of one individual directly onto a mucosal surface or conjunctivae of another individual. Droplets penetrate the respiratory system to above the alveolar level.

Airborne precautions

Used to prevent and control infections spread without necessarily having close patient contact via aerosols (less than or equal to 5µm) from the respiratory tract of one individual directly onto a mucosal surface or conjunctivae of another individual. Aerosols penetrate the respiratory system to the alveolar level.



DIRECT/INDIRECT CONTACT PPE
Suspected or confirmed infectious agent spread by DIRECT/INDIRECT CONTACT – Often D&V.
Examples: C. difficile, Hepatitis C, MRSA, Norovirus, Salmonella
Anticipated exposure to blood and/or other body fluids

- Disposable apron; consider long sleeved disposable apron if usual apron provides inadequate cover for the procedure/task being performed
- Disposable gloves
- Consider (if risk of spraying or splashing):Eye & face protection – surgical facemask with visor

DROPLET (RESPIRATORY) PPE
Suspected or confirmed infectious agent spread by the DROPLET route (coughing +/- talking)
Examples: Whooping cough, Influenza

- Disposable apron; consider long sleeved disposable apron if usual apron provides inadequate cover for the procedure/task being performed
- Disposable gloves
- Eye and face protection surgical face mask and full face visor

AIRBORNE (RESPIRATORY) PPE
Suspected or confirmed infectious agent spread by the AIRBORNE route
Examples: Pulmonary TB, Measles

- Disposable apron; consider long sleeved disposable apron if usual apron provides inadequate cover for the procedure/task being performed
- Disposable gloves
- Filtering face piece 3 (FFP3) respirator AND eye protection or a Jupiter hood

In addition it is recommended that when performing aerosol generating procedures (see appendix) we should use airborne precautions.