How to use a point-of-care risk assessment (PCRA) for infection prevention and control

A point of care risk assessment (PCRA) is an integral part of standard practice which should be performed by every healthcare worker (HCW) **BEFORE** every patient/resident/client interaction to allow them to accurately assess the risk **of exposing themselves and/or others to infectious agents/transmissible microorganisms**.

This PCRA supports the selection of appropriate actions and personal protective equipment (PPE) in addition to any infection prevention and control (IPC) recommendations already in place such as patient placement and occupational aspects, (including healthcare worker vaccination) to further minimise any risk of exposure. Refer to the following link for details on healthcare worker vaccination.
https://www.hse.ie/eng/health/immunisation/hcpinfo/guidelines/chapter4.pdf

This PCRA also supports the early identification of individuals who may have travelled to an area where they may have been exposed to a high consequence infectious disease (HCID).

This is a generic tool, and risk assessments are likely to vary from person to person.

Step 1
Before each patient interaction, a healthcare worker must assess the following:

PATIENT

- Has the patient been screened recently for infectious symptoms (for example in triage, or in daily symptom check)?
- What are the patient's current symptoms (for example respiratory symptoms, such as new onset of coughing, unexplained fever, rash, enteric symptoms, diarrhea)?
- Has the patient a recent travel history?
- Have they come from a country with a current high consequence disease (HCID) alert (see Appendix 1)?
- Are there additional precautions (droplet, contact, airborne) in place?
- Has the patient a history of carriage/infection with multi-drug resistant organisms (MDROs) etc.?
- Is the patient mobile/ambulatory and are they capable and willing to perform hand hygiene and practice respiratory etiquette etc.?

TASK

- What type of task am I about to perform (for example providing personal care, carrying out an invasive procedure, turning off a monitor, performing an aerosol generating procedure (AGP), or is it a non-clinical interaction)?
- Will the task increase the likelihood that my skin/clothing will come in direct contact with blood/body fluid?
- Will I be undertaking an AGP, non-clinical interaction?

- Is additional equipment required to enable me perform the task safely (for example use of dressings, provision of tissues, emesis basin)?

ENVIRONMENT

- Are there potential ergonomic hazards that may affect my ability to undertake the task safely (for example physical clutter)?
- Is there a risk to/from other individuals (for example shared rooms, mobile patients with infectious symptoms)?
- Is there enough space for physical distancing to be maintained?
- Can my planned work area be properly clean and disinfected?

Step 2
Choose appropriate PPE and implement the required actions as per Standard precautions including the following:

- **Hand hygiene** (as per WHO 5 Moments)
- **Respiratory etiquette** (offer the patient a mask, if tolerated, support the patient to use tissues/their elbow to cover coughs and provide necessary equipment)
- **Personal space** (encourage everyone (Staff and patients) to respect each other's personal space)
- **Implement additional precautions if required** (contact precautions and droplet and/or airborne precautions)
- **Environmental hygiene-** clean and disinfect (if required) environmental surfaces especially those that are frequently touched
- **Decontamination of reusable equipment** (clean & disinfect reusable equipment between each use)
- **Patient placement** - whenever possible prioritise patients with identified risks for infectious diseases/agents to single rooms

Select PPE items based on the results of the PCRA always taking into account the vaccination status of individual personnel and that of their patients, for example measles, chickenpox etc.

NOTE: Reassessment of PPE requirements should occur as the clinical scenario develops to reflect changes in transmission risk.

For further information, refer to **Draft National Guidelines for Infection and Prevention Control (IPC) 2022, ncec-ipc-guideline-2022-for-consultation.pdf (hse.ie).**

Footnote

Source: Adapted from Nova Scotia Health authority/IWK Health Centre, Canada
The term patient is used throughout this document, however it equally applies to residents and clients

Appendix 1. High consequence infectious diseases (HCIDs)

A high consequence infectious disease (HCID) has some or all of the following characteristics:

- Acute infectious disease
- Typically, a high case fatality rate
- May not have effective prophylaxis or treatment
- Often difficult to recognise and detect rapidly
- Ability to spread in the community & within healthcare settings
- Requires an enhanced individual, population and system response to ensure it is managed effectively, efficiently and safely

Source: Public Health England (PHE) and UK's National Health Service

See www.hpsc.ie as source of ongoing information re countries affected by health threats

Examples of high-consequence infectious diseases (HCID) and modes of transmission

Contact HCID	Airborne HCID
Argentine haemorrhagic fever (Junin virus)	Andes virus infection (hantavirus)
Bolivian haemorrhagic fever (Machupo virus)	Avian influenza, highly pathogenic A(H7N9) and A(H5N1)
Crimean Congo haemorrhagic fever (CCHF)	Avian influenza, highly pathogenic A(H5N6) and A(H7N7)
Ebola virus disease (EVD)	Middle East respiratory syndrome (MERS)
Lassa fever	Monkeypox * Differential between different clades: **NOTE:** WA-MPX Clade is no longer considered a HCID as it does not meet the relevant criteria outlined above. The Congo Basin (CB-Clade) continues to classified as a HCID Further information is available on: www.hpsc.ie
Lujo virus disease	Nipah virus infection
Marburg virus disease (MVD)	Pneumonic plague (Yersinia pestis)
Severe fever with thrombocytopaenia syndrome (SFTS)	Severe acute respiratory syndrome (SARS)

Adapted from the following source: ECDC Technical Report. Health Emergency Preparedness for Imported cases of High Consequence Infectious Diseases. Operational checklist for country preparedness planning in the EU/EEA Countries available to download at www.ecdc.europa.eu