### PUBLIC HEALTH SERVICES

# **Transmission Based Precautions**

### A guide for health care workers

#### Key points

- Standard precautions are infection prevention controls used for all patients, at all times, in all healthcare settings.
- Transmission based precautions (TBP) are an extra layer of control used to reduce the risk of transmitting infection via specific routes from specific pathogens.
- TBP are recommended as per the "Australian Guidelines for the Prevention and Control of Infection in Healthcare".
- TBPs should be applied to patients suspected or confirmed to be infected with pathogens transmitted by contact, droplet and airborne routes.

## Infection prevention and control basics

Infection prevention and control involves implementing work practices that reduce the risk of transmission of infectious agents through a two-tiered approach:

- Standard Precautions used when caring for all patients, regardless of the patient's perceived or actual infectious status; and/or when handling blood and/or all other body substances, secretions and excretions (excluding sweat), non-intact skin or mucous membranes.
- Transmission Based Precautions (TBP)

   used in addition to standard precautions when managing patients suspected or

known to be infected or colonised with agents transmitted by the contact, droplet or airborne routes or by a combination of these routes.

#### What are TBP?

TBP are work practices that are used when the route of transmission of an infectious agent is not interrupted by using Standard Precautions alone. They are used in addition to Standard Precautions when caring for patients known or suspected of being infected with agents transmitted by contact, droplet or airborne routes or a combination of these routes.

#### **Contact transmission**

- Direct contact germs are transferred directly by touch from one person to another person.
- Indirect contact germs are transferred between one person to another or many people, via a contaminated intermediate object.

#### **Droplet transmission**

Respiratory droplets carrying germs are transmitted over a short distance, from an infectious person to another person to their oral or nasal mucosa.

#### Airborne transmission

Germs are spread through airborne droplet nuclei or small particles and dispersed over



long distances by air currents and can be inhaled by susceptible persons.

Some viruses are transmitted via respiratory particles of varying sizes and can involve a combination of droplet and airborne transmission.

#### **TBP Implementation**

#### **Contact Precautions**

- Single patient room with ensuite bathroom.
- Before entering the patient's room, and when anticipating contact with the patient or their surroundings, perform hand hygiene (HH), put on gown/apron and gloves.
- After completing care, perform HH, remove gown/apron, perform HH, remove gloves and perform HH again (either in the patient's room or after leaving).
- Clean and disinfect non-disposable equipment and items after use.

#### **Droplet Precautions**

- Single patient room with ensuite bathroom.
- Before entering the patient's room, perform HH and put on surgical mask.
- After leaving the patient's room, perform HH, remove and dispose of mask and perform HH again.
- Educate the patient about respiratory hygiene and cough etiquette.
- Patient to put on a surgical mask when leaving room.

#### **Airborne Precautions**

- Single, negative pressure room with ensuite bathroom (if available)
- Door to remain closed.
- Before entering the patient's room, perform HH and put on a N95/P2 mask. Perform fit check.
- After leaving the patient's room, perform HH, remove and dispose of mask and perform HH again.

- Educate the patient about respiratory hygiene and cough etiquette.
- Limit patient movement outside the room to medically necessary purposes.
- Patient to put on surgical mask when leaving room.

#### **Other Considerations**

- A combination of TBP types may need to be used together in cases where an infectious agent has more than one route of transmission, during outbreaks, or for epidemiologically important organisms.
- Staff should explain the requirements of TBP to patients and visitors. <u>Information for</u> <u>patients/visitors</u> on VRE, MRSA, C.diff, hand hygiene and MRO screening and clearance have been produced by TIPCU and can be distributed to assist in this process.

#### **Further resources**

The Australian Commission on Safety and Quality in Health Care have resources regarding the implementation of TBP including posters, guides & signage: <u>Standard and transmission-based</u> <u>precautions posters | Australian Commission on</u> <u>Safety and Quality in Health Care</u>.

For more detailed information, please refer to the <u>Australian Guidelines for the Prevention and</u> <u>Control of Infection in Healthcare.</u> Refer to section 3.2 for information regarding TBP and 3.1 for information regarding standard precautions.

**Public Health Services** 

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www.health.tas.gov.au/health-topics/infectionprevention-and-control

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Transmission Based Precautions Quick Guide						
Precaution	Single room	Gloves	Gown or apron	Eye wear	Mask	
Standard	Not required	When at	When at risk of contact with body fluids			
Contact	Yes	Yes	Yes	As per Standard Precautions		
Droplet	Yes	As per S	tandard Pre	Yes (Surgical)		
Airborne	Yes (Negative pressure)	As per S	As per Standard Precautions			