



# First Responder Accreditation

## Topic 4:

## Infection Prevention

This resource has been put together to assist you in completing your First Responder Accreditation workbook. This topic is to be completed using these materials in conjunction with the St John Ambulance Australia Infection Control Guidelines.

## Acknowledgements

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## Introduction

Infection prevention is the application of knowledge, policy and techniques to prevent, minimise or control the spread of infection.

For the transmission of infection to occur, three key elements are required:

1. Source of infection
2. Susceptible host
3. Means of transmission

All members, patients and bystanders are potential sources of infection and hosts of infective organisms. Other sources of infection are those normally found in and around the human body and environmental sources including water, food, equipment and air that may have become contaminated.

A host may be a person who:

- Is acutely unwell (for example: febrile, productive cough, tachycardia)
- Has no symptoms but who is in the incubation period of a disease or an infection
- Is a carrier of a chronic infectious disease – this person will also have no symptoms

People have a variable resistance or susceptibility to infection. This may be dependent upon age, existing and previous medical history, trauma, immune status and their general health status. The insertion of invasive devices such as cannulas and indwelling catheters can increase the risk of infection; particularly when used over prolonged periods.

Read through the St John Ambulance Australia Infection Control Guidelines for further information in the prevention of infections.

## Personal protective equipment (PPE)

If you are required to full gown up due to an outbreak of an infectious disease or the nature of the injury you are treating, you will need to know the correct order for putting on and taking of your PPE. In order for your PPE to be effective, you must follow the correct order.

Below is a table listing the order to put on and take of you PPE

Putting PPE on:	Removing PPE:
1. Hand hygiene	1. Gloves
2. Gown/Apron	2. Hand hygiene
3. P2 mask	3. Eye wear
4. Fit check	4. Gown/apron
5. Eye wear	5. Hand hygiene
6. Refit check	6. Mask
7. Gloves	7. Hand hygiene
8. Stop check	

## Transmission-based precautions

Transmission-based precautions are those applied in addition to standard precautions to patients suspected or confirmed to be infected with agents transmitted by the contact, droplet or airborne routes. Although unlikely, transmission-based precautions may need to be implemented by members in response to a variety of circumstances including:

- Food and/or water contamination at a major event or mass gathering
- A public health emergency (for example, a Pandemic or chemical spill)

From a St John Ambulance Australia perspective, transmission-based precautions include:

- Continued implementation of standard precautions;
- Enhanced use of PPE
- Patient-dedicated equipment
- Allocation of single rooms or grouping of patients
- Enhanced cleaning and disinfecting of the patient environment
- Restricted transfer of patients

### **NOTE:**

You will need to do your own research in order to complete questions 6-8 of this topic.