COLLEGE OF PHYSIOTHERAPISTS of ONTARIO

Implementing Infection Prevention and Control Practices

Guide to the Standard for Professional Practice

2012

Implementing Infection Prevention and Control Practices

Introduction

As health professionals registered to practice in Ontario, physiotherapists have a responsibility to provide safe, quality care. This includes implementing appropriate infection prevention and control practices. The College's expectations for registrants with respect to infection, prevention and control are defined in the Standard for Professional Practice: Infection Control.

To assist physiotherapists in meeting the performance expectations outlined in the Standard, some key elements have been highlighted in the form of a checklist. This list is not exhaustive but rather is intended to provide physiotherapists with an optional tool that can be used to facilitate the application of the Standard into clinical practice. The checklist should not be used in isolation as the Standard provides additional information and there may also be legislative or employer requirements that are not covered in the checklist.

Although the checklist is based on the basic principles underlying appropriate infection control measures, best practice information in this area is continually evolving. For the most up-to-date and accurate information, registrants are encouraged to contact the experts in this area. The Standard for Professional Practice: Infection Control offers an annotated list of resources on infection control. While this list is in no way complete, using resources such as these will ensure that registrants' infection control practices reflect the current evolving environment.

The information in the checklist was adapted from a document titled "Routine Practices and Additional Precautions in all Health Care Settings" available on the Ontario Agency for Health Protection and Promotion (OAHPP) website at **www.oahpp.ca**. This document provides details on how to implement the steps outlined in the checklist for all health care settings and includes information on how to:

- determine and use appropriate barrier equipment
- clean, disinfect and sterilize equipment and the environment
- manage waste
- understand the concepts and applications of routine practices
- determine why and when to use additional precautions
- understand the elements for contact precautions, droplet precautions and airborne precautions

The "Routine Practices and Additional Precautions in all Health Care Settings" document also provides decision-making algorithms, sample signage and other valuable tools. We urge you to visit their website for more information at **www.oahpp.ca**.

How Infections Are Spread[1]

Infections are caused by microorganisms like bacteria and viruses and can be spread or transmitted from one person to another. An understanding of how infections are spread is essential to improving infection control practices. In one simple model, the transmission of microorganisms and infections within a health care setting is likened to a chain. Each link of the chain represents a factor related to the spread of microorganisms. There are six factors or links in the chain and transmission cannot take place unless all six links are present (see Figure 1).

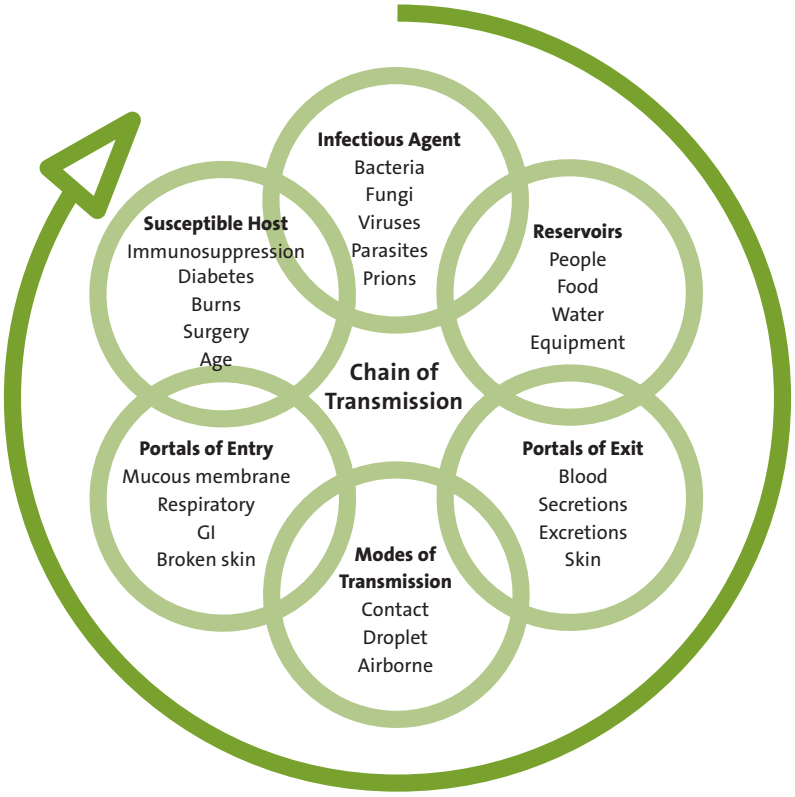

Figure 1: Chain of Transmission

Transmission occurs when an **infectious agent** in a reservoir exits the **reservoir** through a **portal of exit** and travels via a **mode of transmission** to a **susceptible host** to gain entry through a **portal of entry**.

1 Adapted from the Ontario Ministry of Health and Long-Term Care/Public Health Division/Provincial Infectious Diseases Advisory Committee, Toronto, Canada, January 2009

Preventing the Spread of Infection

Disrupting the chain of transmission will prevent the spread of infection. In other words, if any one of the links is eliminated, the chain is broken and transmission does not occur (see Figure 2).

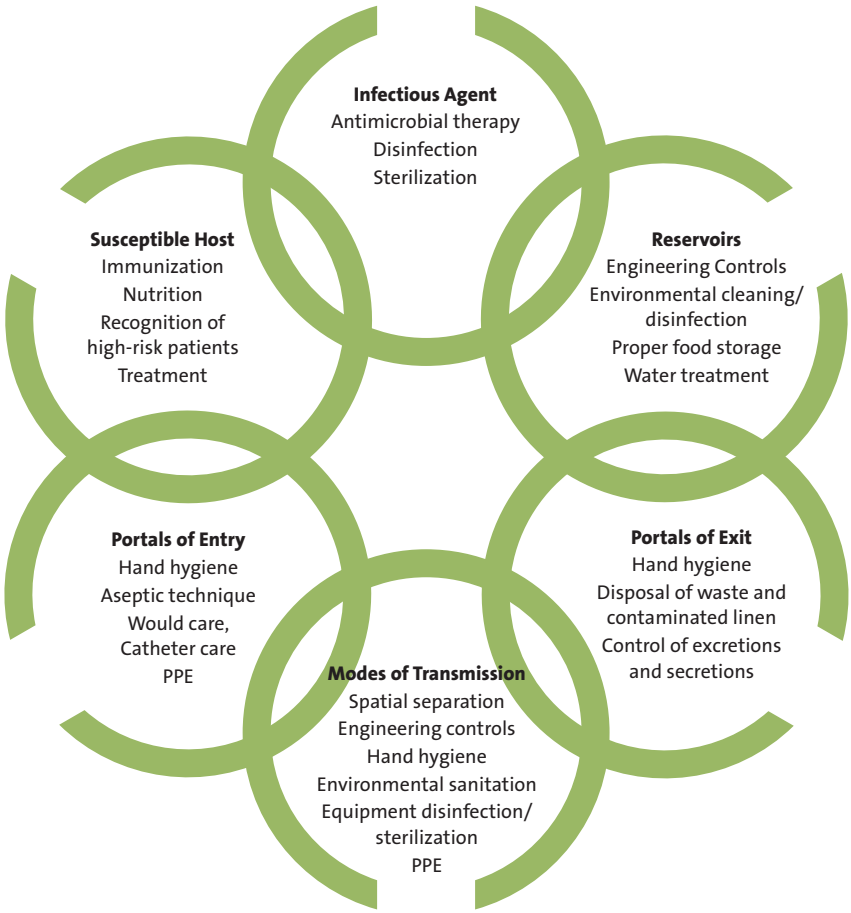

Figure 2: Breaking the Chain of Transmission

Transmission may be interrupted when:

- the infectious agent is eliminated, inactivated or cannot exit the reservoir
- portals of exit are eliminated through safe practices
- transmission between objects or people does not occur due to barriers and/or safe practices
- portals of entry are protected
- hosts are not susceptible

One of the most effective means of preventing the transmission of infection is through the use of Routine Practices. Routine Practices means that all patients/clients/residents are treated as potentially infectious and the same safe standards of practice are used routinely with all patients/clients/residents. Health care providers are expected to adopt Routine Practices to prevent the spread or transmission of infections.

For more information on the chain of transmission and Routine Practices, visit the Ontario Agency for Health Protection and Promotion (OAHPP) website at **www.oahpp.ca**.

Steps to Follow to Incorporate Appropriate Infection Prevention and Control Strategies into Daily Practice

Develop an understanding of how infectious agents are transmitted—see the "Chain of Transmission"—and consider the application to your practice setting.

- Do you know the infectious agents and modes of transmission likely to be encountered in your practice setting?
- Can you identify portals of entry/exit and susceptible hosts common to your patient population?
- Which reservoirs need special attention in your practice setting?

Assess the risk of exposure before every patient encounter and identify strategies to reduce exposure and prevent transmission

- Do you know how to assess risk and what to screen patients for?
- If a potential exposure or transmission risk is identified, do you know what steps to take?
- Do you understand the difference between contact precautions, droplet precautions and airborne precautions? Do you know the protective equipment required for each precaution type?
- Have you considered alternate booking or triaging arrangements to reduce risk for vulnerable patients?

Institute routine precautions with every patient

- Do you understand what routine precautions are? Is the appropriate barrier equipment available? Do you know how to use and dispose of equipment?

Implement additional precautions as needed based on the risk assessment

- Do you understand what additional precautions means in your practice? Is the appropriate barrier equipment available? Do you know how to use and dispose of equipment?
- Can information on additional precautions be accessed and implemented quickly and easily when the need arises?

Devote appropriate resources to infection prevention and control

- Has housekeeping staff received appropriate information and training on how equipment and environmental surfaces are to be cleaned / disinfected / sterilized?
- Have you considered all equipment (i.e. not only in the clinical practice environment but also in waiting areas, restroom facilities etc)?
- Is there an understanding of how soiled linens, sharps and other wastes should be handled?
- Are special storage facilities or private rooms needed?
- Are the relevant policies and procedures updated regularly and readily available?
- Is there a mechanism in place to receive updated information, best practice advice and guidance from organizations such as the MOHLTC and Public Health Agency Canada (PHAC)?
- Do you measure compliance with infection prevention and control strategies?

Ensure appropriate access, supply and use of personal protective equipment (PPE)

- Do you know how to select, put on, remove and dispose of PPE?

Ensure good hand hygiene for all

- Are the appropriate products, techniques, education and signage available for patients as well as staff?
- Have patients and staff received appropriate information and instruction?

Consider your own health

- Are you at risk for spreading an illness? Are your immunizations up to date? Do you stay home when you are unwell and infectious?

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