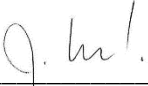



Leamington Mennonite Home
Long Term Care

**INFECTION CONTROL
POLICY AND PROCEDURE**

CATEGORY: Infection Prevention & Control Program	SUBJECT: The Chain of Disease Transmission	SECTION: A POLICY: 8
DATE: July 12, 2022	Administrator's Signature: <u></u>	
REVISION DATES:	IPAC Lead's Signature: <u></u>	

THE CHAIN OF DISEASE TRANSMISSION

POLICY:

Staff will understand the chain of disease transmission based upon the six links that contribute to disease transmission.

THE SIX LINKS:

- 1) **Infectious Agent:** Any microorganism (bacteria, fungi, virus, etc.) capable of causing disease.
- 2) **Reservoir:** The environment (human, animal, or inanimate) in which the organism lives and multiplies (it may be a resident with an active infection or a person who is an indistinguishable "carrier" of disease).
- 3) **Portal of Exit:** The means by which infectious organisms leave their reservoir, e.g. microorganisms in the respiratory tract are expelled by coughing and sneezing; microbes in the intestinal tract are expelled by defecation; and organisms on the skin leave by shedding or by direct contact.
- 4) **Mode of Transmission:** The routes by which organisms reach their new host are as follows:
 - Direct contact between the reservoir and the host (i.e. direct physical contact with infected person, e.g. venereal disease)
 - Indirect contact via an inanimate object (i.e. close contact with infected respiratory droplets on hands, then inoculating oneself by touching eyes, nose, or mouth)
 - Transmission by inhalation of contaminated respiratory droplets, which can be suspended in airborne dust particles (e.g. tuberculosis)
 - Transmission by the fecal-oral route where the infectious organism is harboured in feces and then ingested by susceptible persons (e.g. salmonella)
 - Transmission by an intermediate carrier, such as a flea or mosquito (e.g. malaria)
- 5) **Portal of Entry:** The means by which the infectious agent enters a new host. The means of entry parallels the portal of exit, e.g. ingestion, breathing, skin puncture.

- 6) **Susceptible Host:** The final link is the person. Residents of long-term care communities often have a poor resistance to infection.

Any outbreak can be controlled effectively by breaking the infection chain. Each disease presents unique problems, but knowledge of the pattern of specific diseases enables us to attack at its weakest link.