



Outbreak Management in Ontario Adult Correctional Services

**Ministry of Community Safety and
Correctional Services**

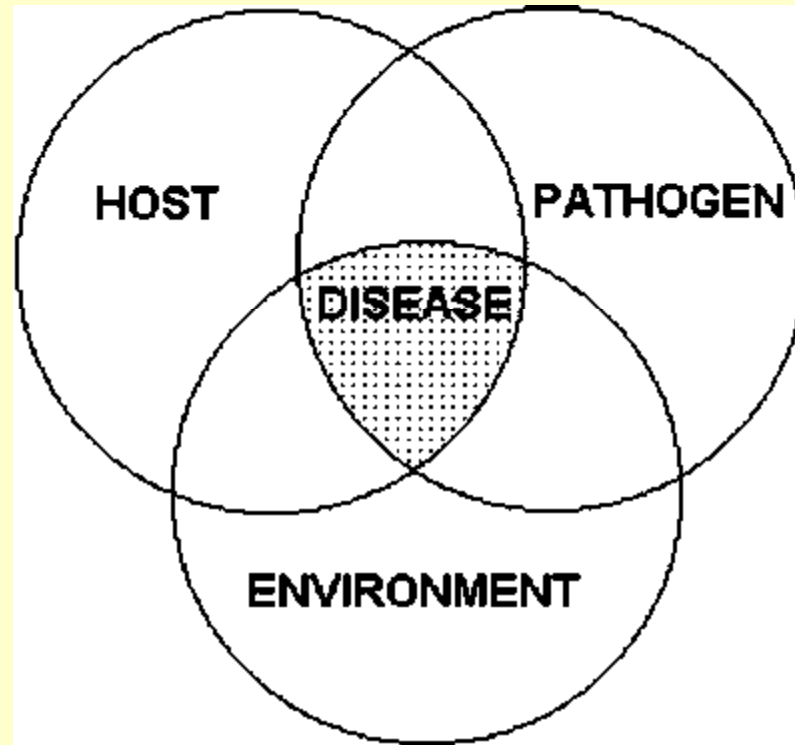
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Epidemiologic Triad

- **Host**
- **Agent**
- **Environment**





Host: New Admissions

- 76,000 annual **admissions**
(n = 54,000 unique individuals) (2009/10)
- Admission **screening** (ARI, TB)
- **Immunocompromised** and poor health status
- **Hygiene** challenges
 - mental illness & addictions
 - inadequate housing & shelter use, remote areas
- **Intermittent** Inmates (n = 550/d)
- **Immigration** Holds (n = 1600)
- **Younger!**



Host: MCSCS Staff

- No Occupational Health services
- No mandatory immunization or pre-employment check of immune status (for CO's)
- Lack of understanding and education
- HC staff may work in other health settings = import/export
- Labour issues



Agent

- Run-of-the-mill respiratory, enteric virus
- VPDs (chicken pox, pertussis, measles)
- MRSA
- TB
- Food-borne disease
- Hepatitis A
- Invasive Pneumococcal disease (ST5)
- Exotic disease (1600 immigration holds 08/09)

Require droplet/ contact precautions,
and sometimes airborne



Environment: Infrastructure

- Most correctional facility buildings built <1980
 - Oldest 1842 – Brockville Jail
 - Newest 2003/04 – Central East CC & St. Lawrence Valley Correctional and Treatment Centre
 - 2 new facilities to be built in southern Ontario
- Poor design, ventilation (old HVAC), barred vs. solid cell doors



Environment: Food

- most facilities prepare food **freshly**
- “**cook-chill**” meals prepared & trayed in one facility
 - distributed to several others
 - re-heated (potential for wide-spread food-borne outbreaks)



Environment: Crowding

- Size 19 to >1000 **beds** (new TJ = 1650 beds)
- **Ranges:** 30 – 40 people
- **Sleeping Quarters:**
 - mostly cells (2 – 3 persons)
 - a few “dormitories” (open-air 30 beds)



Environment: Infection Prevention and Control

- 1 toilet/ cell (night), 1-2/ range (day)
- hand hygiene = bar soap, push-button sink & shared towel; little ABHR
- inmates perform cleaning → variable quality
- all laundry sent to 2 or 3 correctional facilities for washing and re-distribution
- 35 infirmary type beds (3 facilities)
- Medical Segregation unit in all facilities
- 52 negative pressure cells in province



Cell





Toilet





Dayroom





Admitting





Environment: Mixing

- transfers between facilities = 27,000
- to/from court >100,000
- 26 / 31 facilities can accommodate “video court”
- Short stays:
 - Median LOS (sentenced = 17d) (remand = 8d)
→ mixes with community
- Intermittent inmates (~550 on any day)
→ mixes with community



Environment: Expertise and Authority

- A Health Care Manager/Health Care Coordinator or Head Nurse (report to Deputy Superintendent)
- 1 or more nurses
 - 254 Full Time Equivalents (RN, RPN) in the Ministry
 - coverage ranges from 24/7 (9) to week days only (5)
- Contracted Physicians / Psychiatrists / Dental
 - 100+ Physicians (part-time) (some only once/week)
- Corporate Health Care
- Public Health Unit