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Santé publique Ontario

> Acknowledgements to Isabelle Guerreiro, Program IPAC Specialist with the Response and System Support Unit.

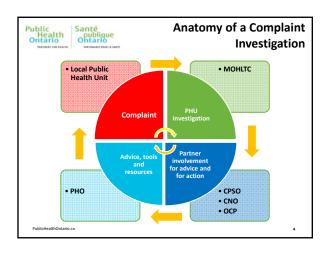
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Objectives

- A brief overview of PHO's role in IPAC Lapses
- To discuss the collaboration and partnership between Public Health Ontario (PHO) and the local public health unit (PHU)
- Work through an IPAC lapse
- Share and review PHO resources

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Expert Guidance Provided

- General IPAC practices
- Cleaning, disinfection and sterilization of medical equipment and devices
- Safe medication administration
- Environmental cleaning

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Working with the PHU

PHO supports the PHU with:

- IPAC Risk Assessment
 - Review information and analyze audit results
- Qualitative/quantitative risk assessment helps inform the local MOH's decision for patient look-back
 - Determine the risk of exposure to blood-borne pathogens
 - Identify issues with improper reprocessing of medical equipment/devices or improper medication administration practices
 - Complete literature search
- Access to IPAC Resources checklists and IPAC training
- Access to laboratory/epidemiology support

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Risk Assessment

Takes into consideration:

- The nature of the IPAC lapse
- The setting
- The potential for BBI transmission type of body fluid and type of exposure
- In some cases, the local epidemiology of BBI in the region
- The disease prevalence of BBI in the population potentially exposed to the poor practice

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Risk Assessment

Consider the persistence of these BBIs in the environment:

- HBV in dried blood on environmental surface at room temp up to 7 days
- HCV under similar conditions 16 hours to 4 days
- In contrast, HIV does not persist in the environment, though it has been noted in lab conditions to persist for up to 7 days +

CDC cautions against using the results from laboratory studies for individual risk assessment

LLDs and HLDs can kill enveloped viruses (HIV, HCV, HBV)

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Let's look at some IPAC Lapses

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Cleaning, Disinfection and Sterilization Lapse #I

- Physician using improperly reprocessed critical instruments to perform minor procedures such as removal of cutaneous warts, skin tags and sutures
 - o No pre-clean or cleaning of instruments
 - o Instruments being placed directly in enzymatic cleaner
 - Soaked for an undetermined period of time (may be up to one week)
 - Instruments removed from solution when needed, rinsed and pat dry
- Not compliant with established CSR practices
- Improper reprocessing practice stopped
- Follow-up inspection completed by the PHU

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Lapse #I (cont...)

Issues:

- Minor procedures were considered high risk (excessive bleeding)
- Instruments classified as critical requiring sterilization
- No pre-cleaning done and cleaning was questionable
 - No monitoring of enzymatic soaking solution
- Increased risk of exposure to blood-borne pathogens
- Carrying out these procedures for decades
- Large caseload and difficult to track patients having had a high risk procedure done
- · Literature search did not reveal any relevant information

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Lapse #1 - Decision

- Physician's practice could have resulted in the risk of transmission of BBP (HBV, HCV & HIV)
- Those patients verified as having one or more of the minor procedures of concern to be notified and offered testing for HBV, HCV & HIV

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Lapse #1 - Outcome

- 580 patients were sent letters with testing recommendations
 - 150 patients initially identified but because record keeping was an issue, PHU went public
 - Revealed additional patients
 - Practice then came forward with additional 400 patients
- As of mid-February 2016, 360 tested but additional results trickle in (2-3 per week)
- BBP identified but not definitively attributable to the practice:
 - 1 HIV; 2 HBV; 4 HCV

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Cleaning, Disinfection and Sterilization Lapse #2

- Improper use of single patient-use glucometers and lancing device holders during blood-glucose monitoring on multiple patients at walk-in clinics.
- Non-disposable, pen-like lancing devices that holds the lancet that may become contaminated with blood.
- Reprocessing (cleaning and disinfection) of these devices between each patient use was not done.
- Involved multiple walk-in clinics in multiple jurisdictions (within and beyond Ontario).
- MOHLTC was involved.

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Lapse #2 (cont...)

- Issues:
 - Use of these lancing devices by multiple persons could potentially result in exposures to blood borne infections (i.e., hepatitis B, hepatitis C and HIV).
 - Hepatitis B transmission has been epidemiologically linked to the shared use of lancing devices intended for single patient-use in multiple instances in the US and the UK longterm care facility settings.
 - In addition, an increased risk of hepatitis C transmission has been associated with shared lancing device use for blood glucose monitoring in a hospital setting.

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Lapse #2 - Decision

- Taking the observations and risk estimates into account, it was the unanimous consensus of PHO that the risk of transmission of blood borne viruses was extremely low.
- We recommended that those patients verified as having received glucose monitoring using single patient-use glucometers and lancing device holders be notified of these exposures.
- Affected patients were encouraged to discuss the situation with their primary care provider and, if concerned, could be considered for HBV, HCV and HIV testing.

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Medication Administration Lapse #3

• Instructions would be given

to the patient on how to draw

up a dose in an insulin syringe

- · Previous poor practice stopped
- Clinic considering preloading 7 equal doses of reconstituted medication.
- Clinic would draw from original vial and inject into a sterile vial to be given to the client for home use.

for injection. • The withdrawal of the drug

and placement into a sterile vial was performed using aseptic technique on a clean surface in a medication preparation area in the office.



Lapse #3 (cont...)

Issues

- Once any drug is reconstituted according to manufacturer's instructions, any further reconstitution or dilution of a conventionally manufactured sterile product is considered compounding.
- Repackaging of a conventionally manufactured sterile product from its original primary container into another primary container must be performed in accordance with USP 797 standards for CSPs, including preparation in an ISO 5 environment.



Lapse #3 - Decision

- Clinic was advised that:
 - This proposed practice is not recommended
 - Medication was to be prepared at a compounding pharmacy and handled accordingly
- No patient notification was required due to previous practice



PHO Resources - Checklists

- Three checklists available on PHO website:
 - Core
 - Reprocessing of medical equipment/devices
 - Endoscopy
- Based on IPAC best practices (Provincial Infectious Diseases Advisory Committee (PIDAC) and Canadian Standards Association (CSA) documents)
- Useful audit tools

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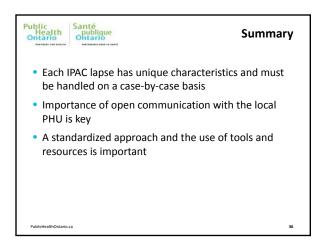














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