

PROCEDURE

The Use of iPHIS Searches in an IPAC Lapse Investigation

Public health units enter cases of reportable bloodborne infections (BBIs) and their potential exposure sources into the integrated Public Health Information System (iPHIS). At times, this information can be useful as part of an infection prevention and control (IPAC) lapse investigation. Two types of iPHIS searches may be considered to support an IPAC lapse investigation: a case search when at least one BBI has been identified as part of the investigation, or an exposure search when there is no case identified. As iPHIS searches can be resource intensive, requiring manual searches or patient roster linkages, the most effective and efficient searches need to be narrow in scope and directly related to decision making around the specific public health response. This resource offers suggestions on when and how to conduct an iPHIS search to support an IPAC lapse investigation.

Figure 1. Flowchart of how to optimally conduct an iPHIS search for an IPAC lapse investigation

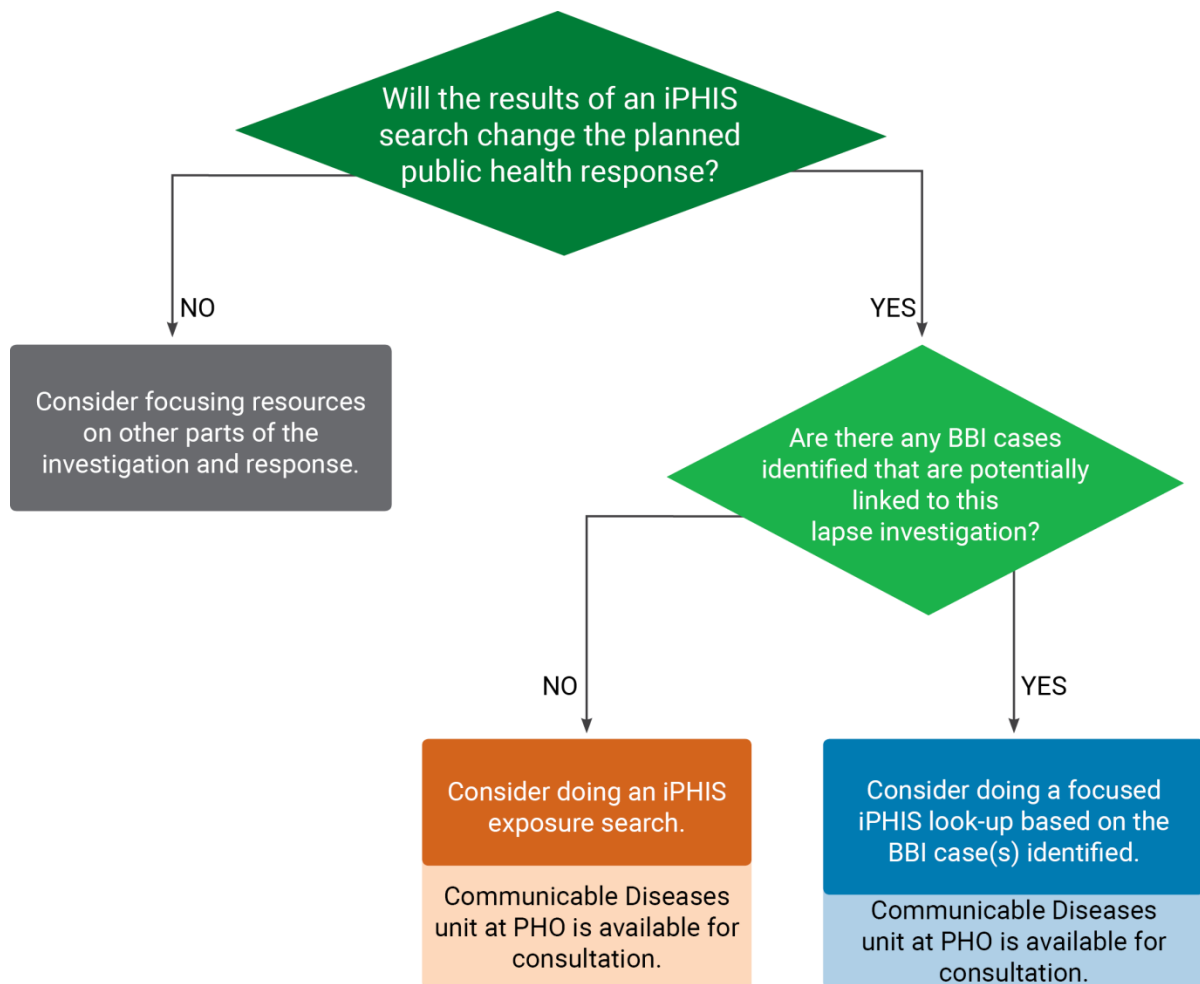


Table 1. Suggested types of iPHIS searches based on the number of BBI case(s) identified

	Poor IPAC practices identified without a case	One case of BBI identified	Two or more cases of BBI identified
iPHIS search type	Exposure search	Case search	Case search
Purpose	Identify potential case(s) with the same exposure location(s) or health care providers (HCPs) name(s).	Identify potential source case or transmission to another case from the source case.	Identify potential source case or transmission to another case from the source.
BBI(s) of interest	Hepatitis B, Hepatitis C, Human Immunodeficiency Virus (HIV)	BBI of the identified case	BBI of the identified cases
Search period	Retrospective from the time period when poor IPAC practices likely occurred based on investigation details.	Based on disease viability and the nature of the poor IPAC practice(s), a narrow search window should be considered (i.e., a few days around the case's likely exposure(s)).	Based on the nature of the investigation, as narrow as possible search windows should be considered to target transmission events.
Required information	Establishment name(s) and/or HCP(s) name(s).	Client names Dates of birth Gender Appointment location(s), date(s) and time(s)	Client names Dates of birth Gender Appointment location(s), date(s) and time(s)
Considerations	<p>Search for exposures using various potential spellings of the establishment(s)/ HCP(s) name(s).</p> <p>In the event that the exposure of interest is found in association with BBI cases in iPHIS, it can be difficult to make causal inferences to the implicated establishment(s) and/or HCP(s).</p> <p>Assessment of other possible BBI risk factors for the case(s) may provide additional context.</p>	<p>Targets time period(s) when a source or secondary case is most likely to be identified.</p> <p>If one or more additional cases of the BBI are found in the iPHIS search, it can be difficult to make causal inferences with identified case(s) to the implicated establishment(s) and/or HCP(s).</p> <p>Assessment of other possible BBI risk factors for the case(s) and further investigations may provide additional context.</p>	<p>If one or more additional cases of the BBI are found in the iPHIS search, it can be difficult to make causal inferences with identified case(s) to the implicated establishment(s) and/or HCP(s).</p> <p>Assessment of other possible BBI risk factors for the case(s) and further investigations may provide additional context.</p>

Consultation with Communicable Diseases Unit at PHO

The Communicable Diseases unit at Public Health Ontario (PHO) can provide consultation when health units are considering performing iPHIS searches in support of an IPAC lapse investigation. Please contact cd@oahpp.ca for further discussions.