

Influenza and Respiratory Infection Surveillance Package 2016–17

For the 2016-17 season, influenza and respiratory infection surveillance activities will begin on September 1, 2016.

The purpose of this surveillance package is for Public Health Ontario (PHO) to provide public health units (PHUs) with a resource to help with their local surveillance activities.

This package is intended to support PHU entry of high-quality data into the integrated Public Health Information System (iPHIS). The information PHUs provide helps to understand and describe the influenza and respiratory infection activity in Ontario and is used in provincial and national reports. PHO is committed to the continued dissemination of our surveillance reports that describe the epidemiology of influenza and respiratory infections in Ontario, and cannot do this without the assistance and support of our colleagues in local PHUs who provide high-quality data.

Summary of Public Health Unit Responsibilities

Influenza is a reportable disease in Ontario as per Regulation 559/91 and amendments under the Health Protection and Promotion Act.

Public health units are required to report all laboratory-confirmed cases of influenza in accordance with iPHIS Bulletin 17 – Timely Entry of Cases. For the 2016-17 season data collected by PHUs during follow-up or documented on laboratory reports must be collected according to the August 11, 2015 CMOH memorandum in regards to the reporting of influenza, as delineated below. Entry of data into iPHIS must be in accordance with the most recent version of the “Sporadic Influenza Cases” User Guide which is accessible through the [eHealth Ontario Portal](#): *iPHIS Ontario > Documents > User Guides > OM > Influenza UG_V 1.0*

Laboratory-Confirmed Influenza Case Follow-up: 2016-17 season

General information contained on the laboratory report is to be entered into iPHIS for all reported cases of influenza, while more detailed information is entered only on a representative number of laboratory-confirmed influenza cases. This is the process outlined in the memorandum from the Acting Chief Medical Officer of Health, *CMOH Memo re Influenza Surveillance August 2015*, distributed August 11, 2015. More detailed information will be obtained and entered on every fifth case, based on the order that case reports are received by the PHU. For the remaining four cases, only information obtained from the laboratory report is required to be entered. This process is intended to enable an equal chance of selecting cases for more detailed data entry from across the clinical spectrum and patient care settings. The processes would apply to each PHU, or if case

reports are received at more than one site/office, it would apply to each of these sites/offices.

Laboratory-Confirmed Influenza Case Data Entry Process: 2016-17 season

For 4 out of every 5 consecutively reported laboratory-confirmed influenza cases, PHUs are required to enter into iPHIS only information available from the laboratory report. Please enter the specific data elements found on the report in accordance with the “Sporadic Influenza Cases” User Guide.

As per usual practice, please continue to link all laboratory-confirmed cases that are outbreak-associated to the relevant outbreak in iPHIS.

For every fifth consecutively reported laboratory-confirmed influenza case, in addition to the data elements reported on the laboratory requisition as outlined above, PHUs are required to collect and enter **detailed information into iPHIS as listed below** in accordance with the “Sporadic Influenza Cases” User Guide.

- Relevant immunizations up-to-date field for the case. Please note that only influenza immunization status needs to be reported (i.e. yes/no/unknown) and only this immunization-related field needs to be completed, provided the conditions as outlined in the “Sporadic Influenza Cases” User Guide have been met
- Symptoms
- Exposure location (required for outbreak-associated cases only)
- Medical risk factors
- Hospitalization (as appropriate)
- Outcome (i.e., death) (as appropriate)

Institutional Respiratory Infection Outbreaks

"Respiratory Infection Outbreaks in Institutions" are reportable under the Health Protection and Promotion Act (HPPA). All institutional respiratory infection outbreaks **must** be entered into iPHIS within **one business day** of the PHU receiving notification, in accordance with **iPHIS Bulletin 17 – Timely Entry of Cases**. Definitions and other relevant information can be found in “Respiratory Infection OB in Institutions User Guide v. 1.0” posted in August, 2014 and accessible through the [eHealth Ontario Portal: iPHISOntario > Documents > User Guides > OM > >Outbreaks > Respiratory Infection OB in Institutions UG v1](#). **Required fields** to be reported within the first business day include but are not limited to:

- Summary case count by role (e.g. staff and residents)
- Outbreak description
- Laboratory-confirmed organism (if known)
- Outbreak setting type

Final reports of respiratory infection outbreaks in institutions **must** be entered into iPHIS **and the outbreak closed no later than 15 business days** after the outbreak has been declared over; however **PHUs are asked to enter the “declared over” date for the outbreak as soon as possible, ideally within 1 business day of the declared over date**. Between the declaration of the outbreak and it being declared over, information should be updated in iPHIS as required, such as if there are significant changes to the status of the outbreak (e.g. marked increase in the number of cases, hospitalizations or outbreak-associated deaths).

Reporting Requirements

- Public health units are requested to immediately contact **Anne Winter, Epidemiologist Specialist (647) 260-7188** or anne-luise.winter@oahpp.ca when you have been notified of the **first** laboratory-confirmed influenza case **and** institutional influenza outbreak in your jurisdiction for the 2016-17 respiratory virus season.
- **Public health units are also requested to report weekly influenza activity year round** by sending Appendix C to Public Health Ontario (PHO) via email: cd@oahpp.ca. PHO will no longer accept faxed Appendix C submissions from PHUs. **The deadline for reporting is 4:00 PM each Tuesday** to ensure your PHU's activity level is included in the Ontario Respiratory Pathogen Bulletin and Ontario Influenza Activity Map.

Important Note: We request that you take time to review the attached Appendix C form and ensure that the 2016-17 version is used when reporting the influenza activity level for your PHU. **Influenza activity levels reported through Appendix C should correspond to the information reported through iPHIS (see Appendix B).** If you have any questions about how to fill out the form prior to submission, please contact Anne Winter (see contact information above).

Goal and objectives

Ontario Respiratory Virus Surveillance Program

GOAL:

To promote early detection and provide timely, comprehensive information regarding respiratory infections in Ontario, including influenza, in order to guide prevention and control efforts.

OBJECTIVES:

1. To raise awareness of influenza and respiratory virus activity and support the implementation of appropriate prevention and control measures, accurate and timely information is collected that will:
 - a. Allow the onset, duration, conclusion, geographic patterns, severity and progression of seasonal respiratory virus activity, especially influenza, to be determined;
 - b. Detect unusual events (e.g., new respiratory pathogens, unusual outcomes or syndromes, unusual severity or distribution, and new influenza strains including epizootic strains, antigenic drift/shift);
 - c. Identify dominant circulating respiratory viruses;
 - d. Identify influenza types and subtypes to enable comparisons between circulating influenza strains and strains included in and/or recommended for the influenza vaccine;
 - e. Estimate influenza and influenza-like illness (ILI) indicators such as attack rates, emergency department visits, hospitalization rates, and case fatality rates;
 - f. Identify high-risk groups for influenza illness and complications; and
 - g. Allow comparison with national and international respiratory virus activity.
2. To share accurate and timely surveillance information with public health partners at the local, provincial, national and international levels in order to:
 - a. Anticipate and guide prevention, response, and control efforts;
 - b. Evaluate treatment, prophylaxis and control measures in the management and termination of outbreaks; and
 - c. Guide and inform timely research.

Appendix A: Program Components

For the 2016–17 influenza and respiratory infection season, surveillance will consist of the following five main components of which the first three are provided by PHUs:

1. Influenza activity reporting (Appendix C)

Influenza activity in the PHU’s surveillance area should be assessed by the Medical Officer of Health or designate in consultation with the MOH) and reported as one of four categories described in Appendix C. A surveillance week runs from Sunday to Saturday. When assessing influenza activity levels based on laboratory-confirmed cases, please use the date the report was received at the PHU to determine if the case occurred in the surveillance week. When assessing influenza activity based on institutional influenza outbreak data, please use the date the outbreak was declared to assess if the outbreak started or is ongoing in the surveillance week. Additional information on influenza activity reporting is provided in Appendix B.

PHO runs a weekly report from iPHIS to validate local influenza activity level assessments as part of an ongoing data quality initiative for influenza. PHO will follow-up with PHUs when the weekly report from iPHIS determines a different activity level assessment than what was submitted by the PHU. Often the difference in the activity level assessment is seen because sporadically occurring and outbreak-associated cases or outbreaks in institutions may not have been entered when PHO extracts the data, the summary case counts by role section has not been entered, PHUs did not enter the “declared over” date or the outbreak status was not “closed” within 15 business days.

2. Integrated Public Health Information System (iPHIS) reporting of laboratory-confirmed influenza cases

Case records for both sporadic and outbreak-associated cases of laboratory-confirmed influenza must be entered individually. Please note that laboratory-confirmed cases associated with an institutional outbreak must also be linked to that outbreak. In addition, all outbreak-related cases must be captured in aggregate in the outbreak summary section of iPHIS as per the “Respiratory Infection Outbreaks in Institutions” section below.

3. iPHIS reporting of “Respiratory Infection Outbreaks in Institutions”

The reporting of respiratory infection outbreaks, many of which may be caused by pathogens other than influenza, is a legal reporting requirement under the HPPA. Public health units must report on respiratory infection outbreaks in iPHIS for the following institutions: certain long-term care homes including nursing homes, homes for the aged, and facilities operating under the former *Developmental Services Act*; and psychiatric, acute and chronic care hospitals operating under the *Public Hospitals Act*.

Reporting by retirement homes is not required under the HPPA; however, respiratory virus activity occurs regularly in these types of group-living environments. In recent years, the level of care provided in some retirement homes can be similar to that of nursing homes. For these reasons, we encourage reporting of respiratory infection outbreaks in retirement homes with more than 10 residents. Influenza outbreaks in retirement homes can be considered as outbreaks when determining influenza activity levels by PHUs.

Reporting of respiratory infection outbreaks by schools is not required; however some PHUs use reports by schools to assist in determining influenza activity in their jurisdiction. School influenza outbreaks can be used when determining influenza activity levels by PHUs, however if influenza outbreak/s in schools have been used

to determine the activity level, please note this information in the comments section of Appendix C. (See Q7 of Appendix C Reporting: Questions and Answers)

Where reporting is required, preliminary reports of institutional respiratory infection must be entered within one business day of outbreak notification. All outbreak-associated influenza cases linked to an institution **must be entered using the aggregate case count field in iPHIS**, which can be located via this path: **Outbreak Description > Summary > Counts > Outbreak Numerator Counts > CASES**. The term aggregate case count refers to the number of cases entered for both 'RESIDENTS' and 'STAFF' (see red box highlighted below) and should include both laboratory-confirmed and epi-linked cases associated with the outbreak. The aggregate case count in iPHIS reports are extracted from this field, and are not based on epi-curve data or laboratory-confirmed cases that are linked to the outbreak.

OB Desc. Reporting Info Symptoms Exposures Case Defn. Interven. Questionnaire Referral Notes **Summary**

Outbreak Description > Counts

Outbreak Denominator Counts

	RESIDENT STAFF	
TOTAL # AT RISK IN THE AFFECTED AREA	84	95
TOTAL # IN THE FACILITY / AT EVENT	84	95

Outbreak Numerator Counts

	RESIDENT STAFF	
TOTAL # IN INSTITUTION IMMUNIZED PRIOR TO OUTBREAK	0	0
TOTAL # IN AFFECTED AREA IMMUNIZED PRIOR TO OUTBREAK	0	0
CASES	17	11

The final report of an institutional respiratory infection outbreak must be entered into iPHIS no later than 15 business days after the outbreak has been declared over. However, please ensure the “declared over date” is entered as soon as possible, ideally within 1 business day of the declared over date for the outbreak. The **Date Outbreak Declared Over** for an institutional influenza outbreak is a key component in the influenza activity level assessment. By entering this information as soon as possible, users will minimize follow-up telephone calls from PHO to their PHU regarding local influenza activity level assessments and will enhance data quality in iPHIS.

Between the declaration of the outbreak and it being declared over, information on outbreaks should be updated when there are significant changes to the status of the outbreak (e.g., the causative organism has been identified, there have been deaths or hospitalizations attributed to the outbreak, or high attack rates are

noted). This will enable accurate and timely analysis of surveillance data and estimates of the level and severity of influenza-like illness (ILI) activity in the province as the influenza and respiratory infection season progresses.

Other components that contribute to respiratory virus surveillance

4. Laboratory surveillance conducted by the Public Health Agency of Canada (PHAC)

Sixteen Ontario laboratories participate in national respiratory virus surveillance providing laboratory results to both the appropriate PHU and PHAC. Further strain characterization of influenza isolates (approximately 5-10% of positive influenza isolates, primarily at the beginning and end of the season) and other laboratory testing (e.g., antiviral resistance testing) for influenza are done at PHAC's National Microbiology Laboratory (NML) in Winnipeg).

Dissemination Strategy for Surveillance Reports

As part of the Ontario Influenza and Respiratory Infection Surveillance Program, PHO produces surveillance reports that are routinely distributed for the purpose of informing health care providers and public health partners at the local, provincial, and federal levels and contribute to national and global surveillance. The surveillance reports include:

Ontario Respiratory Pathogen Bulletin

Information reported by PHU and PHAC are collated, analyzed and published in the [Ontario Respiratory Pathogen Bulletin](#) (ORPB) by PHO. Bulletins from the 2011–2012 season and onwards are available on PHO's website. The instructions for accessing bulletins from earlier seasons are available on the [Ministry of Health and Long-Term Care](#) website.

As of April 2016, components of the ORPB have been available in an interactive format on the ORPB page of PHO's [website](#).

Laboratory-Based Respiratory Pathogen Surveillance Report

The [Laboratory-Based Respiratory Pathogen Surveillance Report](#) is available on PHO's website. This report is based on laboratory test results obtained at the Public Health Ontario Laboratories.

Information from the *Laboratory-Based Respiratory Pathogen Surveillance Report* is incorporated into *Ontario Respiratory Pathogen Bulletin* on a weekly basis.

Internet Access to Surveillance Package Materials:

The following surveillance package materials are available online. Click the hyperlink to go to the [Ontario Respiratory Pathogen Bulletin site](#). Scroll to the bottom of the page.

Materials available under the Provincial surveillance reporting section are as follows:

- Ontario Influenza and Respiratory Infection Surveillance Package 2016-17
- Appendix C: Ontario Influenza Activity Report
- 2016-17 Surveillance Weeks

Appendix B: Ontario Influenza Activity Level Assessment for Appendix C Reporting: Questions and Answers

As part of the national influenza surveillance strategy, Ontario, along with other provinces and territories, adheres to national FluWatch surveillance definitions. In an effort to clarify FluWatch definitions and their application to determining influenza activity level assessment in Ontario, these questions and answers have been developed based on the most common questions PHO receives about activity level assignments.

The process:

Influenza activity levels submitted by PHUs are used in the weekly *Ontario Respiratory Pathogen Bulletin* to describe influenza activity across Ontario. The PHU activity levels are also used to collate regional activity levels which are used by PHAC for their weekly FluWatch bulletin. More importantly, institutional staff, Medical Officers of Health, Communicable Disease Program Directors, Managers, and other PHU staff carefully monitor surveillance data from neighbouring PHUs as well as their own regional information during the influenza season. **Individual assessment levels contribute to and impact the local, provincial and national surveillance picture for influenza, therefore accuracy is important.**

The PHAC [FluWatch](#) definitions form the basis for our activity level reporting; see page 12 below for “PHAC *FluWatch* Definitions for the 2016-2017 Season” for more detail. To collect information on these activity levels in Ontario, PHO distributes an updated version of Appendix C annually. For the purposes of assessing influenza activity and reporting through Appendix C, the main indicators of weekly activity levels are laboratory-confirmed cases of influenza and laboratory-confirmed institutional influenza A and B outbreaks. Other non-influenza influenza-like illness (ILI) outbreaks are identified and reported in the *Ontario Respiratory Pathogen Bulletin*, but do not contribute to determining the influenza activity level.

There are four levels of activity that a PHU may assign to their area each week. A reporting week is defined as the preceding week from Sunday to Saturday inclusive. The descriptions of the activity levels listed here represent an Ontario-specific operationalization of PHAC’s *FluWatch* activity level definitions:

1. **No activity** – no laboratory-confirmed cases of influenza reported and no ongoing laboratory-confirmed institutional influenza outbreaks
2. **Sporadic** – at least one laboratory-confirmed case of influenza* with no ongoing laboratory-confirmed institutional influenza outbreaks
3. **Localized** – at least one ongoing laboratory-confirmed influenza outbreak in an institution
4. **Widespread** – multiple ongoing laboratory-confirmed influenza outbreaks in institutions separated by some geographic distance, in other words, non-adjacent areas. PHUs should also consider the numerator of outbreak institutions out of the denominator of all eligible (e.g., LTCHs, hospitals, retirement homes, etc.) institutions in their unit when assigning this activity level. For clarification refer to Q6 below.

*Confirmation of influenza within the surveillance area at any time within the surveillance week.

Note: Outbreaks in schools may be considered when assessing activity, see Q7 below.

To assist with the influenza activity level assessment, please complete the section of Appendix C entitled “Public health unit surveillance information” to determine 1) if the PHU entered any laboratory-confirmed cases into iPHIS for that surveillance week and 2) if there were any institutional influenza outbreaks occurring in the reporting period as entered in iPHIS with at least two outbreak-associated cases in total entered in the aggregate case count section as shown in Appendix A #3. This information can help guide the PHU in assigning the appropriate activity level.

Q1: How do I decide what date to use when I am assigning influenza activity levels based on laboratory-confirmed influenza cases/outbreaks?

A: To enhance data accuracy, PHUs are asked to use the date on which they received laboratory-confirmation of influenza (i.e. the date they received a report). Note that laboratory-confirmed cases used in the assessment of activity level should be entered into iPHIS in accordance with iPHIS Bulletin 17 – The Timely Entry of Cases. PHO has developed Cognos reports that will allow PHUs to review information regarding reported influenza cases and outbreaks and verify that sporadic influenza cases and aggregate case counts for influenza outbreaks have been entered in iPHIS (see Program Components 2 above). We recommend that PHUs use these reports to complete Appendix C: Ontario Influenza Activity Report for the 2016-17 Season. They allow PHUs to validate influenza activity prior to reporting to the province. The Cognos reports are located on the Custom Reporting site in the Public Folders Section: **Public Folders > CRN 2.0 > PHU and PHD Shared Reports > Ontario Respiratory Virus Bulletin reports**

To maintain the integrity of the original reports, users must copy them to their PHU’s folder before modifying, running, or saving outputs from the report.

Q2: Our PHU is reporting three ILI outbreaks, and no laboratory-confirmed community cases have been reported to our PHU. The etiologic agent is coronavirus for two and unknown for the other. How should I assign the activity level?

A: The correct level is “no activity”. Once there has been a laboratory-confirmed influenza case that is not part of an outbreak, the activity level increases to “sporadic”. When there is at least one laboratory-confirmed influenza outbreak, the activity level is deemed to be “localized”. In order for the level to be “sporadic” or “localized” there must be a **laboratory-confirmed case of influenza in that PHU area**. For “localized”, there **must be a laboratory-confirmed** institutional influenza outbreak with at least two cases entered into iPHIS under the iPHIS Outbreak Summary Counts screen in the “Cases” field.

Q3: There are two community cases of laboratory-confirmed influenza and one outbreak of RSV in a long term care home. However there are no laboratory-confirmed influenza outbreaks. What is the correct activity level for my PHU?

A: The correct activity level is “sporadic.”

When only community cases of influenza are reported which are not associated with an outbreak, the influenza activity level is considered “sporadic”. In this case, your PHU does not meet the definition of “localized” because a laboratory-confirmed influenza outbreak has not been declared. The distinguishing factor between “sporadic” and “localized” is the **presence of one or more laboratory-confirmed institutional influenza outbreaks**. Please see Appendix A #3 for a listing of facilities that fall under the category of “institutions” from which respiratory infection outbreaks must be reported.

Q4: Our PHU has reported and entered three influenza A outbreaks in long term care homes in iPHIS but did not enter aggregate case counts and we received a call from PHO to inform us that the outbreaks will be excluded from the *Ontario Respiratory Pathogen Bulletin*. Why?

A: PHO verifies that all institutional respiratory infection outbreaks meet the case definition for an outbreak in order to report them in the *Ontario Respiratory Pathogen Bulletin*. **An influenza outbreak with no aggregate case counts entered does not meet the provincial definition for a confirmed influenza outbreak** and would not be included in the *Bulletin*. PHO may contact the PHU to verify if cases are associated with the outbreak and request that aggregate case counts be entered in the aggregate case count field. Public health units are expected to enter outbreak information within **one business day of outbreak notification**; at a minimum this information should include **aggregate case count by role** (e.g., staff and residents), **causative organism** (if known) **and outbreak setting type**, in accordance with iPHIS Bulletin 17 – The Timely Entry of Cases. It is important to enter the setting type for the outbreak, as certain settings (e.g., correctional facilities) are not used at the provincial level to assess influenza activity level. Also, if an influenza outbreak is ongoing at any time during the surveillance week (e.g., even if it is declared over on the first day of the surveillance week), this will be considered an outbreak for that surveillance week and affect the activity level for the PHU.

Q5: During the previous reporting week, we reported two institutional influenza A outbreaks and four community cases of influenza B. We reported “localized” activity. For the current reporting week, the outbreaks are ongoing and no new community cases have been reported. What activity level should be reported for the current week?

A: As long as your outbreaks are ongoing (i.e. the outbreak has not been declared over), then the reporting level remains “localized” unless other criteria have been met that results in an upgrade to the activity level to “widespread”. For example, if your outbreak(s) remain ongoing for five weeks, then your reporting level is “localized” for five weeks (provided that there are no new reported outbreaks which may elevate your activity level to “widespread”). Once the outbreak is over, **please enter the “declared over” date as soon as possible—ideally within 1 business day**, otherwise this may affect the provincial activity level assessment for your PHU. Weekly activity levels for each PHU are validated provincially because of the potential impact on reporting for the national FluWatch program.

Q6: How do I decide when to designate “localized” as opposed to “widespread” influenza activity?

A: The key difference between these two categories in the PHAC definitions is that for “localized” activity, laboratory-confirmed influenza outbreaks occur in <50% of the influenza surveillance region, whereas for “widespread” activity, laboratory-confirmed influenza outbreaks occur in >50% of the influenza surveillance region. In practical terms at the PHU level this may be difficult to determine. While assigning an activity level of “widespread” activity in your PHU is somewhat subjective it should involve **multiple outbreaks** separated by some geographic distance. The following examples may help provide some guidance:

- “Localized” activity is the existence of a few influenza outbreaks in long-term care homes (there is no set number, as this is dependent on the total number of homes and other types of community institutions in your region).
- If your PHU has 40 long term care homes (LTCHs) and retirement homes, one influenza outbreak in each of two non-adjacent regions would not qualify for “widespread”.
- If there are **multiple outbreaks in non-adjacent regions** within the PHU area, the category of “widespread” activity should be considered.

Please contact Anne Winter, Epidemiologist Specialist at: (647-260-7188) or anne-luise.winter@oahpp.ca if you require further clarification or assistance when completing your assessment for the Appendix C: Influenza Activity Report.

Q7: My PHU has two schools that have reported greater than 10% absenteeism. We have been informed that at least one child is off with laboratory-confirmed influenza in one school. We have no other institutional outbreaks. Based on this information would the activity level be sporadic or localized?

A: It is preferred that localized activity levels reflect institutional influenza outbreak activity and influenza transmission within that facility. A single laboratory-confirmed case of influenza in a school along with higher ILI activity levels or absenteeism could be indicative of many respiratory viruses in circulation in the general community, and may not reflect influenza transmission in the school setting. However, if the PHU is of the belief that the elevated ILI/absenteeism level in the school is likely due to influenza and there is at least one laboratory-confirmed case in a student, then the PHU can classify the activity level as “localized” at their discretion. If assessing “localized” for this reason, please document in writing on Appendix C that the elevated ILI/absenteeism is in conjunction with laboratory-confirmed influenza in a student/s or school staff.

Q8: What does the PHO influenza surveillance team do with activity level assignments submitted by PHUs?

A: All activity levels submitted by PHUs are used to develop the map of influenza activity levels in the *Ontario Respiratory Pathogen Bulletin*. Public health unit level data is also aggregated into regional activity levels and submitted weekly to PHAC for inclusion in *FluWatch*. However, prior to inclusion in the *Bulletin* and *FluWatch*, activity level reports must first be validated. For example, if a PHU reports “sporadic” activity and there are no laboratory-confirmed influenza cases entered into iPHIS to support that category, then a member of PHO’s Communicable Diseases team will call the PHU to clarify, since sometimes the PHU is aware of a confirmed influenza case that has not yet been reported through iPHIS, or the activity has been inadvertently assigned under an incorrect surveillance week. Please note it is important to enter aggregate influenza cases associated with outbreaks within one business day in order to confirm reports of influenza activity levels. However, inconsistencies may occur since PHO extracts data from iPHIS on Wednesdays and activity levels are assigned by PHUs on Mondays or Tuesdays.

Q9: My PHU closed two laboratory-confirmed influenza outbreaks on the first day of the current reporting period and there are no other confirmed influenza cases in the PHU. How should we categorize our activity level?

A: Your PHU will be categorized as “localized” because the outbreaks were still ongoing during the current reporting period (note that a surveillance week is considered to be Sunday to Saturday, inclusive, of the preceding week), even if the outbreak was declared over on the first day of the reporting period. If there are no new laboratory-confirmed cases for the following reporting period, the PHU will then be categorized as having “no activity”.

Q10: Which outbreak-related deaths must be entered into iPHIS?

A: Please enter the number of outbreak-related deaths that are believed to be as a result of infection with the organism identified in the outbreak that occurred in cases who were line listed and met the case definition. If the cause of death is unclear, the PHU should follow up with the most responsible physician (e.g., attending

physician in the hospital or medical director of a long-term care home) to attempt to clarify if the death is related to infection from the outbreak.

PHAC FluWatch Definitions for the 2016-17 Season

Influenza-like-illness (ILI): Acute onset of respiratory illness with fever and cough and with one or more of the following - sore throat, arthralgia, myalgia, or prostration which is likely due to influenza. In children under 5, gastrointestinal symptoms may also be present. In patients under 5 or 65 and older, fever may not be prominent.

ILI/Influenza outbreaks

Schools: Greater than 10% absenteeism (or absenteeism that is higher (e.g. >5-10%) than expected level as determined by school or public health authority) which is likely due to ILI. Note: it is recommended that ILI school outbreaks be laboratory confirmed at the beginning of influenza season as it may be the first indication of community transmission in an area.

Hospitals and residential institutions: two or more cases of ILI within a seven-day period, including at least one laboratory confirmed case. Institutional outbreaks should be reported within 24 hours of identification. Residential institutions include but not limited to long-term care facilities (LTCF) and prisons.

Workplace: Greater than 10% absenteeism on any day which is most likely due to ILI.

Other settings: two or more cases of ILI within a seven-day period, including at least one laboratory confirmed case; i.e. closed communities.

Influenza/ILI Activity Levels

1 = No activity: no laboratory-confirmed influenza detections in the reporting week, however, sporadically occurring ILI may be reported

2 = Sporadic: sporadically occurring ILI and lab confirmed influenza detection(s) with no outbreaks detected within the influenza surveillance region†

3 = Localized:

- (1) evidence of increased ILI* and
- (2) lab confirmed influenza detection(s) together with
- (3) **outbreaks** in schools, hospitals, residential institutions and/or other types of facilities occurring in **less than 50% of the influenza surveillance region†**

4 = Widespread:

- (1) evidence of increased ILI* and
- (2) lab confirmed influenza detection(s) together with
- (3) **outbreaks** in schools, hospitals, residential institutions and/or other types of facilities occurring in **greater than or equal to 50% of the influenza surveillance region†**

Please note, in Ontario there is no set number of outbreaks which define “widespread”, as this is dependent on the total number of homes and other types of community institutions in your region. For example, if your PHU has 40 long term care homes (LTCHs) and retirement homes, one influenza outbreak in each of two non-adjacent regions (for a total of two outbreaks) would not qualify for “widespread”.

Note: ILI data may be reported through sentinel physicians, emergency room visits or health line telephone calls.

* More than just sporadic as determined by the provincial/territorial epidemiologist.

† Influenza surveillance regions within the province or territory as defined by the provincial/territorial epidemiologist.

Appendix C: Ontario Influenza Activity Report for the 2016–17 season

Public health Units: Please e-mail the "Activity Report" to: cd@oahpp.ca every Tuesday by 4:00 p.m. year round to ensure your PHU's data is included in the weekly *Ontario Respiratory Pathogen Bulletin* and accurate Ontario data is included in FluWatch. Please refer to the Q and A document for clarification in regards to influenza activity assignment.

Public Health Unit Name: _____ Public Health Unit Master No. _____

Individual responsible for report: First Name: _____ Last Name: _____

Contact Tel. No. _____ ext: _____

Reporting week* From: _____ To: _____

*Please note dates must correspond to surveillance weeks (Sunday to Saturday) in the *Ontario Respiratory Virus Bulletin*

PUBLIC HEALTH UNIT SURVEILLANCE INFORMATION

Have there been laboratory-confirmed cases of influenza reported during this week? Yes No

If yes, number of laboratory-confirmed influenza cases reported this week: _____

Have there been laboratory-confirmed influenza outbreaks declared or still active during this week? Yes No

If yes, number of new or ongoing laboratory-confirmed influenza outbreaks with two or more cases in total (based on aggregate case counts which include residents and staff): _____

Definitions Influenza Outbreak in an institution:

An institution (hospitals operating under the Public Hospitals Act, long-term care homes, facilities operating under the former *Developmental Services Act*, retirement homes etc.) with: Two cases of acute respiratory tract illness, one of which is laboratory-confirmed.

Note: Cases can include residents/patients and/or staff. Reporting by retirement homes is not required under the HPPA, although activity in these settings is used as an indicator of influenza activity and should be entered into iPHIS if information is available.

ACTIVITY THIS WEEK (Please mark most appropriate influenza activity level with an "X")

- 1= No activity:** no laboratory-confirmed cases of influenza reported and no ongoing laboratory-confirmed institutional influenza outbreaks
- 2= Sporadic:** at least one laboratory-confirmed case of influenza* with no ongoing laboratory-confirmed institutional influenza outbreaks
- 3= Localized:** at least one ongoing laboratory-confirmed influenza outbreak in an institution even if the outbreak was declared over on the first day of the surveillance period
- 4= Widespread:** multiple ongoing laboratory-confirmed influenza outbreaks in institutions separated by some geographic distance, i.e. non-adjacent areas. There is no set number of outbreaks which define "widespread", as this is dependent on the total number of homes and other types of community institutions in your region. For example, if your PHU has 40 long term care homes (LTCHs) and retirement homes, one influenza outbreak in each of two non-adjacent regions (for a total of two outbreaks) would not qualify for "widespread". **Note:** Outbreaks in schools may be considered when assessing activity, see Q7 in 'Appendix B: Ontario Influenza Activity Level Assessment for Appendix C Reporting: Questions and Answers'.

*Confirmation of influenza within the surveillance area at any time within the surveillance week.