

British Columbia's Pandemic Influenza Response Plan (2012)

Surveillance Plan

September 2012

TABLE OF CONTENTS

Ex	xecutive Summary	3
1	Introduction 1.1 Purpose 1.2 Objectives	••••••••••••••••••••••••••••••••••••••
2	Overview of Surveillance Activities 2.1 Disease Epidemiology. 2.2 Severe Outcomes. 2.3 Interventions 2.4 Health System Impacts 2.5 Special Populations or Circumstances.	6 6 7 8 8
3.	Frequently Asked Epidemiological Questions and Data Sources	9
4.	 Communication and Reporting	11 11 15 15
Ap	pendices Appendix A: Acronyms	 17

EXECUTIVE SUMMARY

Surveillance

Influenza surveillance in British Columbia is a multifaceted endeavor that ensures timely, systematic, and ongoing collection, analysis, interpretation and dissemination of information related to influenza disease. General objectives include monitoring the arrival, spread and impact of influenza viruses. The past introduction of the pandemic H1N1 virus prompted the Province to strengthen its existing surveillance systems and add further systems in preparation to answer pressing questions related to a pandemic virus.

This document provides an overview of these systems and how they are used to address the myriad information demands during both seasonal and pandemic influenza activity, such as the need to know trends, patterns and impacts for prevention and resource planning and evaluation of influenza control strategies.

The cornerstone of influenza disease surveillance in the province includes a network of sentinel physicians (general practitioners) who routinely provide epidemiological data and patient specimens, and in collaboration with the provincial virology laboratory, ensure monitoring, detection and characterization of influenza viruses, including antiviral resistance testing and gene sequencing of a subset of viruses.

A strong partnership between the provincial virology laboratory and epidemiology experts at the B.C. Centre for Disease Control, support by the Ministry of Health (MOH), and close communication between the regional health authorities and provincial epidemiologists are central to the success of influenza surveillance in B.C.

Surveillance is intended to provide an overall impression of emerging and evolving trends and to pick up signals of possible concern. Ongoing surveillance activities enable a record of baseline expected activity levels to be established against which new or changing trends can be compared. Surveillance is not intended to provide precise estimation of absolute disease burden or risk. Special investigations and studies supplement surveillance activities during outbreaks and pandemics to enable more in-depth understanding of the impact and who is at increased risk.

The various surveillance indicators used on provincial and regional levels are grouped into the following overlapping categories:

Disease Epidemiology – i.e., sentinel physician surveillance, school outbreaks, long term care facility outbreaks, medical service plan utilization, Children's Hospital emergency department presenting complaints, laboratory test results, serologic surveys

Serious Outcomes – Physician reporting of serious outcomes (i.e. hospitalizations, intensive care admissions, mortality) of influenza is important to monitor impact.

Interventions – i.e., program evaluation related to vaccine coverage, vaccine adverse events, vaccine effectiveness, antiviral use, antiviral resistance

Health system impacts – i.e., intensive care and emergency room use

Special Populations or Circumstances – i.e., disease activity in remote and First Nations communities

No one of these indicators is interpreted by itself; rather, the indicators are evaluated in combination, together forming a picture of influenza activity in the province.

This document is subject to change as surveillance strategies necessarily evolve. Influenza is a highly changeable virus, and as such, the approaches used to monitor its impact must be flexible.

1 INTRODUCTION

1.1 Purpose

The British Columbia Pandemic Influenza Surveillance Plan has been created to provide an overview of activites to monitor activity and impact of an influenza pandemic.

Five categories of indicators have been delineated: those that produce data related to disease epidemiology, serious outcomes, interventions, health service impact, and special populations or circumstances of interest.

Disease Epidemiology

Disease epidemiology indicators provide information on the timing, geographic scope, and intensity of influenza activity in the province. Early indication of disease activity in communities can be identified through the sentinel physician surveillance network, laboratory testing, Medical Services Plan claims for influenza illness, B.C. Children's Hospital emergency department presenting complaints, and outbreaks in schools and long-term care facilities (LCTF).

Serious Outcomes (i.e., hospitalizations and deaths)

Serious outcome indicators provide information on the seriousness of disease activity through measures of hospitalizations, ICU usage and mortality. This information helps to track impact of virus circulation, identify risk factors for severe disease and important changes in the severity of illness over time.

Physician reporting of serious outcomes due to pandemic influenza is important to monitor the impact of a pandemic.

As part of serious outcome surveillance during a pandemic, physicians will be required to report to their medical health officers cases of lab confirmed pandemic influenza respiratory infection:

- Whose illnesses are severe enough to require admission to hospital,
- Who die, regardless of whether admitted to hospital.

Interventions

Interventions (i.e., antivirals and vaccines) are monitored through program evaluation activities including vaccine distribution and use reports, reporting of adverse events following immunization, and the sentinel vaccine effectiveness protocol as well as antiviral distribution and prescriptions.

Health System Impact

In order to estimate the effects on health system utilization, health system impact indicators include data on ICU and emergency department usage.

Special Populations/Circumstances of Interest

Special populations or circumstances of interest include special investigations related to remote and isolated communities (mostly First Nations).

1.2 Objectives

The objectives of the B.C. Influenza Surveillance System are as follows:

Disease Epidemiology

- Characterization of geographic scope, timing and trends of influenza activity in B.C., in order to enable public health and health care resource utilization planning and appropriate risk communication to the public.
- Timely identification and detailed characterization of influenza viruses in circulation including sub-type/strain and new variant detection and characterization to inform public health decision making, such as vaccination and antiviral use.

Serious Outcomes

• Timely assessment of disease severity and associated characteristics of patients, in

order to identify possible risk groups/determinants for further assessment, prioritization and use of interventions; to identify trigger points for release of antivirals; and to communicate to the public.

Interventions

• Timely assessment of usage, adverse events and effectiveness of vaccines and usegae of antivirals.

Health System Impact

• Timely assessment of the impacts of influenza and prevention/control interventions on health system utilization, to plan for the optimum utilization of health care resources.

Special Populations or Circumstances

• Timely disease epidemiology information for special populations and circumstances/events of particular interest.

2 OVERVIEW OF SURVEILLANCE ACTIVITIES

Note: See Appendix A for a list of acronyms in following tables.

2.1 Disease Epidemiology

	Measures	Source of Data	Lowest Level of Data Available	Agencies Responsible for Collation
Disease Activity in Settings of	School outbreaks	Local health units (passive reporting)	Individual schools	BCCDC and RHAs
Public Health Interest	Facility outbreaks	Local health units (passive reporting)	Individual LCTFs, ACFs, and other facilities of interest (e.g., prisons)	BCCDC and RHAs
Disease Activity in Community	Influenza Illness (II*)	MSP billing claims from GPs	LHA	MHS
	Influenza Like Illness (ILI*)	Sentinel Physicians	Province	BCCDC
	Emergency department visits with presenting diagnosis of influenza or fever/cough	B.C. Children's Hospital Emergency Department	Emergency department aggregate	B.C. Children's Hospital
	Identification of circulating viruses	Laboratory	Individual	BCCDC
	Attack rates	Serosurveys	Province/Region	BCCDC

*The term "Influenza Illness" (II) refers to the ICD-9 code for influenza and is used for Medical Services Plan data. It is a clinical diagnosis (not laboratory-confirmed) and is distinct from the term Influenza-like Illness (ILI), which describes a clinical syndrome of fever and cough and one of sore throat, myalia, arthralgia, or headache. The ILI indicator is used by the sentinel physician surveillance system. While "Influenza Illness" is primarily influenza-like illness, this indicator is considered less specific than ILI.

2.2 Severe Outcomes

	Measures	Source of Data	Lowest Level of Data Available	Agency Responsible for Collation
Hospitalization	Various details on hospitalized, lab- confirmed influenza cases	Hospitalized Case Reports	Individual	BCCDC and RHAs
	Various details on hospitalized, lab- confirmed influenza cases	Canadian Nosocomial Infection Surveillance Program (CNISP)	Individual	BCCDC, CNISP, and RHAs

	Measures	Source of Data	Lowest Level of Data Available	Agency Responsible for Collation
	Lab-confirmed influenza in paediatric hospitals	Immunization Montoring Program, Active (IMPACT)	Individual	IMPACT (B.C. Children's & Women's Hospital)
Mortality	All-cause mortality Influenza-related mortality	Vital Statistics Agency Vital Statistics Agency	LHA	MHS MHS

2.3 Interventions

	Measures	Source of Data	Lowest Level of Data available	Agency Responsible for Collation
Antivirals	Antiviral dispensing	Pharmaceutical Division, Ministry Health Services	Health authority, Age groups	BCCDC
	Antiviral resistance	BCCDC or NML	Individual	BCCDC
	Antiviral adverse	Health Canada	Individual	BCCDC
Vaccination	Vaccination	Weekly reporting of number of persons immunized by public health and First Nations health workers; weekly estimates of same from MSP billings data	Health authority	BCCDC
	Vaccine adverse event	Weekly analysis of repored events from iPHIS, reporting by health care providers including IMPACT system to local public health	Individual	BCCDC
	Sentinel vaccine effectiveness (VE) monitoring	Sentinel physicians	Individual	BCCDC

2.4 Health System Impacts

	Measures	Source of Data	Lowest Level of Data available	Agency Responsible for Collation
ER Use	Measures vary by health authority	Emergency Department reporting from health authorities	Hospital	Health Authorities Division
ICU Use	Intensive care bed occupancy	ICU daily reporting	By ICU	Health Authorities Division
Health employee absenteeism	Absence rates	Health authority	Health authority	Health Authorities Division

2.5 Special Populations or Circumstances

Measures	Source of Data	Lowest Level of Data available	Agency Responsible for Collation
Disease activity in remote First Nations communities	Pandemic Influenza Update from FNIH B.C.	Community	First Nations and Inuit Health
Activity in First Nations communities	First Nations Chiefs and health paraprofessionals	Community	First Nations and Inuit Health
Special investigation of first wave of pandemic influenza outbreak in northern BC community	Household telephone survey	Individual	BCCDC
HealthLinkBC: Total call volumes, pandemic influenza calls, respiratory calls, nursing service call, BCbedline transfers, website activity	HealthLinkBC	Health Authority	HealthLinkBC

3. FREQUENTLY ASKED EPIDEMIOLOGICAL QUESTIONS AND DATA SOURCES

How will we know if disease activity is increasing?

Potential Indicators

- Proportion of patients presenting to sentinel physicians with ILI.
- Number of school or facility influenza outbreaks.
- Proportion of patients presenting to GPs with influenza illness, tracked through MSP.
- Percentage of respiratory specimens tested at B.C. provincial laboratory that test positive.
- Epidemic curve of ambulatory and hospitalized cases.
- Direct reports from concerned care providers related to severe illness or clusters

How will we assess severe outcomes due to influenza?

- Increase in all-cause mortality.
- Increase in pneumonia and influenza mortality.
- Increase in hospitalized cases.
- Number of ICU beds occupied by persons with influenza.
- Risk factors for severe outcomes.

How will we know who is at increased risk of developing severe influenza disease?

- Distribution of risk factors among reported pandemic influenza hospitalizations, ICU admissions, and deaths.
- Special investigations based on surveillance indicators (i.e. case-control studies)

Is the virus changing?

- Indicated by emergence of drug resistance or antigenic drift/shift from laboratory surveillance.
- Detailed characterization of virus isolates through sequencing and other techniques

How will we know if there is a higher incidence of bacterial coinfection?

- If rates of reportable pneumonias increase.
- If pneumonia and influenza mortality is on the rise.
- Increased prescription of antibiotics in Pharmanet.
- Individual case analysis.

Where do I go to monitor antiviral resistance?

Information on antiviral resistance:

- In Canada is published on Fridays in the Public Health Agency of Canada (PHAC) FluWatch <u>http://www.phac-aspc.gc.ca/fluwatch/index-eng.php</u>).
- In the United States is published on Fridays in the Centers for Disease Control and Prevention (CDC) FluView (<u>http://www.cdc.gov/flu/weekly/</u>).
- Internationally is published weekly (although only one entry for March 2009 is posted)(<u>http://www.who.int/csr/disease/influenza/h1n1_table/en/index.html</u>).
- In the Americas is published on Fridays in the Pan American Health Organization (PAHO) Regional Update (<u>http://new.paho.org/hq/index.php?option=com_content&task=blogcategory&id=814&Itemid=1</u> <u>206</u>).
- Regularly included in the influenza surveillance bulletins issued by the BC Centre for Disease Control Influenza and Emerging Respiratory Pathogens team, available at: www.bccdc.ca/discond/DiseaseStatsReports/influSurveillanceReports.htm.

How will we monitor how well the vaccine is working to protect us (vaccine effectiveness [VE])?

• Since 2004, sentinel physicians in British Columbia provide epidemiologic information alongside respiratory specimens submitted to the BCCDC to enable ongoing monitoring of vaccine protection, including during pandemics

How do influenza activity levels in my area compare with the rest of the province?

• Medical Services Plan claims at the LHA level.

These indicators are regularly included in the influenza surveillance bulletins issued by the BC Centre for Disease Control Influenza and Emerging Respiratory Pathogens team, available at: <u>www.bccdc.ca/dis-cond/DiseaseStatsReports/influSurveillanceReports.htm</u>.

What is the age breakdown of illness in my area?

• Medical Services Plan, hospitalized case reports, sentinel surveillance.

How is pandemic influenza affecting First Nations?

Data sources include:

Level of Disease Activity

- Point-of-care testing in communities.
- Medical Services Plan will provide information from all regions of the province, including urban setting.

- Pandemic influenza Update from FNIH B.C. will provide information from remote areas of the province.
- First Nations Chiefs Information Communication will provide timely information about influenza activity in First Nations communities.
- Special investigations based on surveillance signals of possible concern

Disease Severity

- CNISP data asks whether the individual is Inuit, Métis or First Nations, and, if First Nations, whether the person lives on reserve and whether the person is a Registered Indian.
- The BCCDC Pandemic Influenza Case Report Form asks whether the individual is Inuit, Métis or First Nations and, if First Nations, whether the individual spends most of his/her time on reserve. The same form also includes details about the severity of illness (i.e., whether admitted to ICU, oxygen therapy administered, ventilated, diagnosed with pneumonia or Acute Respiratory Distress Syndrome (ARDS).

What do we know about underlying conditions?

Provincially, underlying conditions will be presented in *BCCDC BC Pandemic Influenza Surveillance Updates*. PHAC will distribute *Epidemiologic Summary for Canadian Laboratory-Confirmed Cases*, which contains underlying conditions for individuals admitted to ICU and for individuals who have died.

Based on surveillance signals of possible concern, risk factors may be assessed during special investigations such as case-control studies rapidly implemented during a pandemic

4. COMMUNICATION AND REPORTING

4.1 Working Groups

- British Columbia Influenza Surveillance Working Group composed of representatives of the six health authorities, BCCDC and the Ministry of Health. The working group meets regularly to discuss the surveillance needs and projects for influenza.
- Vaccine Safety Working Group This working group of the B.C. Immunization Sub-Committee meets regularly to discuss vaccine safety issues and will teleconference more frequently during a pandemic adverse event surveillance period.

4.2 Communication from Other Jurisdictions and Organizations

The BC Centre for Disease Control Influenza and Emerging Respiratory Pathogens team is responsible for regularly summarizing and communicating surveillance information related to influenza to a broad range of stakeholders across the province during annual winter influenza as well as pandemic activity. The frequency of these bulletins depends upon the intensity of activity and whether any new or emerging trends of interest are observed. These bulletins are posted on the BC Centre for Disease Control website, available at: <u>www.bccdc.ca/dis-</u> <u>cond/DiseaseStatsReports/influSurveillanceReports.htm</u>.

Communication	Distributed	Contains	Distributed	Delay	Accessible from
Deaths Associated with pandemic influenza Flu Virus in Canada	РНАС	National updates on pandemic influenza- associated deaths. PHAC will also issue special reports on any unusual cases or clusters.	To be determined		To be determined
FluWatch	РНАС	 Detailed analysis of the impact of pandemic influenza virus in Canada. Antigenic Characterization Antiviral Resistance International updates 	Every Friday at 4 p.m	One week	http://www.phac- aspc.gc.ca/fluwatch/inde x-eng.php
Respiratory Virus Detections/Isolations in Canada (Respiratory Virus Detection Surveillance System)	РНАС	Information from selected laboratories on respiratory viruses in Canada (influenza, RSV, parainfluenza, and adenovirus)	Weekly	5 days	http://www.phac- aspc.gc.ca/bid-bmi/dsd- dsm/rvdi-divr/index- eng.php
Pandemic Influenza Flu Virus Outbreak Epidemiologic Summary for Canadian Laboratory-Confirmed Cases	РНАС	 Laboratory-confirmed cases Hospitalized cases Underlying conditions Aboriginal populations, pregnant women Antiviral resistance International summary 	As required		Limited distribution by PHAC
Pandemic Influenza Outbreak Epidemiological Update	РНАС		As required		Limited distribution by PHAC
Health Portfolio Situation Report	PHAC (Centre for Emergency Preparedness and Response)		As required		Limited distribution by PHAC
Pandemic Influenza – International Summary	PHAC	International updates	Every 3-4 weeks		Limited distribution by PHAC
Pandemic Influenza Antiviral and OTC Surveillance Weekly Report	RxCanada	Trends in antiviral and OTC distribution. B.C. data available, stratified by age and health authority			Limited distribution by PHAC

Federal/National Communication (will be updated in the event of a pandemic)

Communication	Distributed by	Contains	Distributed when	Delay	Accessible from
CIOSC-Public Health Alerts	CIOSC	 Confirmed/suspected outbreaks/events under investigation Nationwide communicable disease event activity 	As required	Immedi ate	Limited distribution Apply to register at: <u>https://www.cnphi-</u> rcrsp.ca/cnphi/MessageB usActions?pageAction=lo ad&appname=CNPHI% 20Root&appnum=97&pa ge=login&url=/cnphi_ro ot/&Load=Load&src=C NPHI&linkId=2702&en key=ENGLISH

Provincial Communication (will be updated in the event of a pandemic)

Communication	Distributed	Contains	Distributed	Delay	Accessible from
	by		When		
Pandemic Influenza	Alberta				
Virus Surveillance	Health and				
	Wellness				
Pandemic Flu Virus	Saskatchewan				
Surveillance Results	Health				
Manitoba Influenza	Manitoba				
Reports	Health				
Ontario Influenza	Ministry of		Every Friday	One week for	
Bulletins	Health and			case counts,	
	Long Term			two days for	
	Care			deaths and	
	0.1			hospitalization	
Quebec	Quebec	No surveillance data			http://www.pandemiequ
					ebec.gouv.qc.ca/en/news
) T		XX77 1 1		/news.shtml
New Brunswick Flu	New		Weekly	One week	http://www.gnb.ca/0053
Reports	Brunswick				/influenza/surveillance-
	Health				<u>e.asp</u>
Nova Scotia	Nova Scotia		Weekly	One week	http://www.gov.ns.ca/hp
Respiratory Watch	Health				p/cdpc/influenza.asp
Newfoundland and	Health and		Weekly		
Laborador	Community		Mondays by		
	Services		3:00 pm NL		
			time		
Prince Edward Island		No surveillance data			http://www.gov.pe.ca/he
					alth/index.php3?number
					<u>=1021139</u>
Yukon		No surveillance data			http://www.hss.gov.yk.ca
					<u>/flu.php</u>
Northwest Territories		No surveillance data			
Nunavut			Weekly on		
			Wednesdays		

International Communication (will be updated in the event of a pandemic)

Communication	Distributed by	Contains	Distributed When	Delay	Accessible from
Morbidity and Mortality Weekly Report	CDC		Weekly on Tuesdays		http://www.cdc.gov/m mwr/
FluView	CDC Influenza Division	 Virologic surveillance Antigenic characterization Antiviral resistance Pneumonia and influenza mortality Influenza-associated pediatric mortality 	Weekly on Fridays		http://www.cdc.gov/flu /weekly/
Australian Influenza Report 2009	Australian Department of Health and Ageing				http://www.health.gov.a u/internet/main/publis hing.nsf/Content/cda- surveil-ozflu-flucurr.htm
EuroSurveillance	European Centre for Disease Prevention and Control	Infectious disease surveillance prevention and control in Europe	Weekly on Thursdays		http://www.eurosurveill ance.org/
EuroFlu – Weekly Electronic Bulletin	WHO/ Europe	EuroFlu Bulletin presents and comments on influenza activity in the 53 countries of the WHO European Region	Weekly	One Week	http://www.euroflu.org /index.php
Weekly electronic bulletin	European Influenza Surveillance Network	Contains epidemiological situation, virology situation,	Weekly	5 days	http://ecdc.europa.eu/e n/healthtopics/seasonal _influenza/epidemiologi cal_data/Pages/Weekly_ Influenza_Surveillance_ Overview.aspx
	Global Influenza Surveillance Network				
Daily Update – Pandemic Influenza	European Centre for Disease Prevention and Control				
WHO Situation Updates – Pandemic Influenza					
Regional Update	РАНО				http://new.paho.org/hq /index.php?option=com content&task=blogcate gory&id=814&Itemid=1 206

Communication	Distributed	Contains	Distributed	Delay	Accessible from
	by		When		
ProMED Mail	International	An Internet-based reporting	Instant,	From	Email distribution list –
	Society for	system dedicated to rapid	Daily or	0 to 5	Subscribe
	Infectious	global dissemination of	Weekly	days	at: <u>http://www.promed</u>
	Diseases	information on outbreaks of			<u>mail.org/pls/otn/f?p=2</u>
		infectious diseases and acute			<u>400:1000:860991559341</u>
		exposures to toxins that			<u>7839</u>
		affect human health			

4.3 Reporting to Other Jurisdictions

Which information is being sent to the federal government?

The following information is being sent to FluWatch:

- A sub-set of B.C. sentinel physicians report weekly to FluWatch.
- Number of school ILI outbreaks and lab-confirmed ACF and LTCF influenza outbreaks are reported by week to FluWatch.
- A sample of influenza isolates are forwarded to the National Microbiology Laboratory for strain characterization. Virus detections, including influenza (by type and sub-type), RSV, parainfluenza, adenovirus, and HMPV, are reported weekly to FluWatch.
- CNISP data are to be routinely sent to provinces/territories and to PHAC.
- IMPACT data are reported weekly in FluWatch.
- Data on adverse events following immunization will be reported to the Canadian Adverse Event Following Immunization Surveillance System
- An abbreviated and de-identified listing of lab-confirmed pandemic influenza cases who have died or have been hospitalized will be sent weekly to PHAC. This listing will include age, sex, underlying conditions, pregnancy status, and outcomes of the B.C. cases.
- A weekly report will be provided to PHAC with the number of pregnant women, health care workers, people with chronic conditions, and others who have been vaccinated for pandemic influenza. The later two categories will be broken down into 4 age groups. BCCDC will also report on First Nations status determined by location vaccine was administered.

4.4 Reporting to the Media and Other Organizations

A comprehensive communications plan has been developed. The plan discusses the various triggers that would result in communiation on this issue, along with the potential action, timing, organizational lead, and the focus of the key message. The plan also outlines the communication mechanisms for influenza activity in First Nations communities

Additional reporting and communications pertinent to surveillance are outlined in the following table.

Communication	Distributed by	Distributed to	Distributed when	Contains
Consolidated Situation Reports	Emergency Management	Various audiences	As required	
Information Bulletin	MHS PAB	Public	Weekly Tuesdays at noon	Weekly update – including severe numbers

Communication	Distributed	Distributed	Distributed	Contains
	by	to	when	
Public Health Updates	VCHA	A broad range of partners within and outside B.C.	Monthly	ILI surveillance and pandemic influenza
B.C. Influenza Surveillance Bulletins	BCCDC	Sent out to a broad audience http://www.b ccdc.ca/dis- cond/Disease StatsReports/i nfluSurveillanc eReports	Frequency depends upon the intensity of influenza activity: Weekly during heightened periods	 Information from: Sentinel physician network MSP Laboratory Hospitalized case reports School and LTCF outbreaks
B.C. pandemic influenza Surveillance Updates		http://www.b ccdc.ca/dis- cond/Disease StatsReports/i nfluSurveillanc eReports	Weekly or more frequently as required	 Cumulative counts of hospitalizations and deaths, by health authority Description of hospitalized cases and deaths, including age category, Aboriginal status, underlying conditions, and severity Additional presentation of trends related to severe pandemic influenza disease, as is relevant

APPENDICES

Appendix A: Acronyms

ACF	Acute Care Facility
ACH	Tertiary/Quaternary Acute Care Hospitals
ARDS	Acute Respiratory Distress Syndrome
ARI	Acute Respiratory Illness
BCCDC	British Columbia Centre for Disease Control
BCPHL	British Columbia Public Health Microbiology & Reference Laboratory
CAEFISS	Canadian Adverse Events Following Immunization Surveillance System
CDC	Centers for Disease Control and Prevention (US)
CIOSC	Canadian Integrated Outbreak Surveillance Centre
CNISP	Canadian Nosocomial Infection Surveillance Program
ER	Emergency Room
FHA	Fraser Health Authority
FNIH	First Nations and Inuit Health, Health Canada
GCPE	Government Communications and Public Engagement
GP	General Practitioner
HSDA	Health Service Delivery Area
IHA	Interior Health Authority
II	Influenza Illness (term used by MSP surveillance system)
ILI	Influenza-like Illness (term used by sentinel physician system)
IMPACT	Immunization Monitoring Program, Active
LCTF	Long-term Care Facilities
LHA	Local Health Area
МОН	Ministry of Health
MSP	Medical Services Plan
NHA	Northern Health Authority
NML	National Microbiology Lab

OTC	Over-the-Counter
РАНО	Pan American Health Organization
pH1N1	Pandemic H1N1 virus
РНАС	Public Health Agency of Canada
РНО	Provincial Health Officer
PHSA	Provincial Health Services Authority
RHA	Regional Health Authority
RSV	Respiratory Syncytial Virus
VCHA	Vancouver Coastal Health Authority
VE	Vaccine Effectiveness
VIHA	Vancouver Island Health Authority
WHO	World Health Organization