

BRITISH COLUMBIA INFLUENZA SURVEILLANCE BULLETIN

2012-13: Number 1, Weeks 37-43
September 9 to October 27, 2012



BC Centre for Disease Control
An agency of the Provincial Health Services Authority

Prepared by BCCDC Influenza &
Emerging Respiratory Pathogens Team

Low-level influenza activity in BC

Contents:

<u>British Columbia:</u>		NML Antiviral Resistance	Page 4
Sentinel Physicians	Page 2		
Children's Hospital ER	Page 2	<u>International:</u>	Page 5
Laboratory Surveillance	Page 3		
ILI Outbreaks	Page 4	<u>Other:</u>	
		List of Acronyms	Page 6
<u>Canada:</u>		Web Sites	Page 6
FluWatch Activity levels	Page 4	Outbreak Report Form	Page 7
NML Strain Characterization	Page 4		

Summary

During weeks 37-43 (September 9 to October 27, 2012), which includes the beginning of the new 2012-2013 influenza reporting period, influenza activity in BC remained at a low level. The proportion of patients with influenza-like illness among those presenting to sentinel physicians by week was 0.2% or less, within the expected level of this time of year. No lab-confirmed influenza outbreaks were reported. Among the 548 specimens tested at the BC Public Health Microbiology & Reference Laboratory, PHSA, rhino/enteroviruses continue to predominate (202/548, 37%). Influenza virus was identified in four (4/548, 0.7%) specimens, including two A/H3N2 (weeks 39 and 41), one influenza B (week 43), and one unsubtype influenza A (week 43). Other respiratory viruses were also sporadically detected.

Report disseminated November 2, 2012

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BRITISH COLUMBIA INFLUENZA SURVEILLANCE BULLETIN

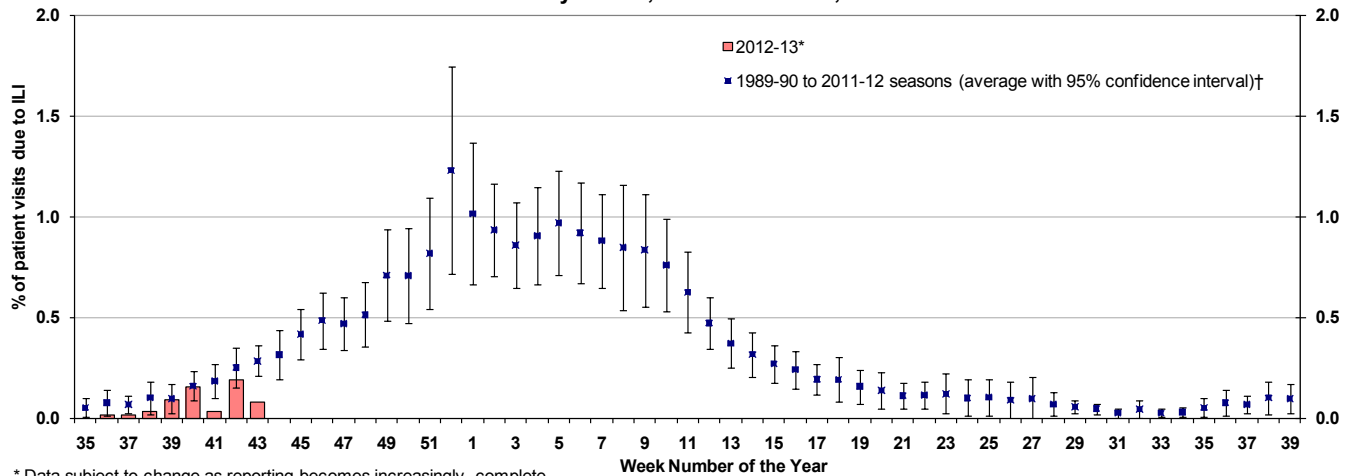
2012-13: Number 1, Weeks 37-43
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British Columbia

Sentinel Physicians

In weeks 37-43, the proportion of patients with ILI among those presenting to sentinel physicians was low, ranging from 0.02% to 0.2%, within the expected range for this time of year. The proportion of sentinel sites reporting during this period varied from 73% to 83% by week.

Percentage of Patient Visits due to Influenza Like Illness (ILI) per Week Compared to Average Percentage of ILI Visits for the Past 20 Seasons Sentinel Physicians, British Columbia, 2012-2013

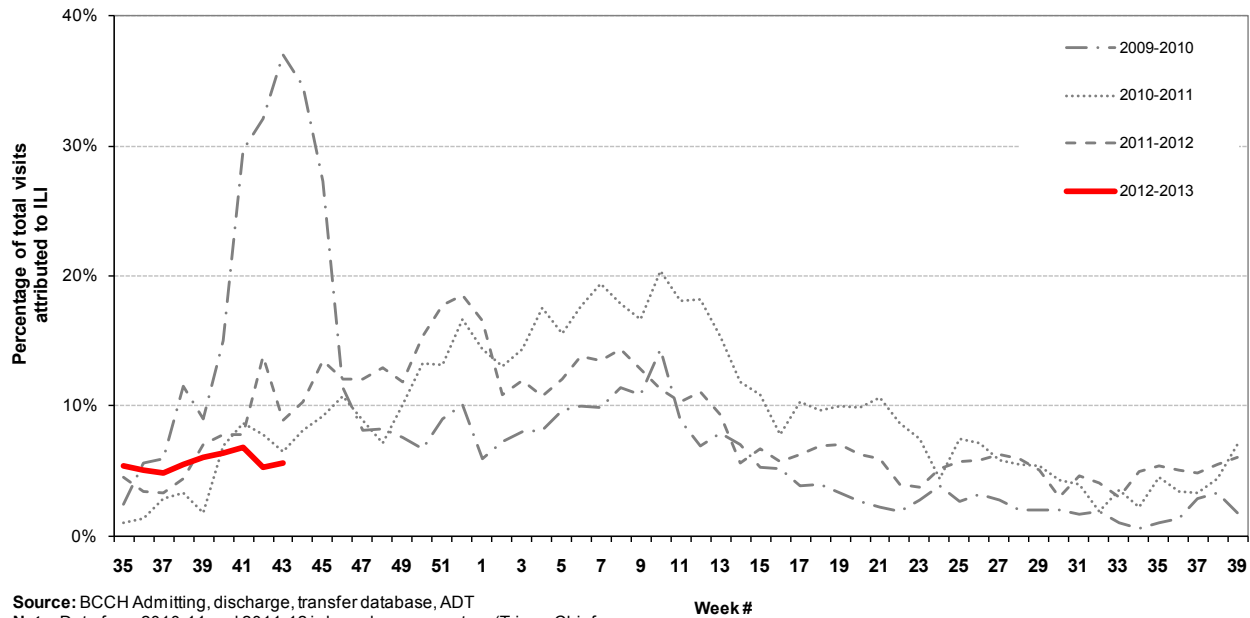


* Data subject to change as reporting becomes increasingly complete.
† Historical values exclude 2008-09 and 2009-10 seasons due to atypical seasonality.

BC Children's Hospital Emergency Room

The percentage of BC Children's Hospital ER visits attributed to "fever and cough" or flu-like illness ranged from 4.9% to 6.9% during weeks 37 through 43, within the expected level for this time of year.

Percentage of Patients Presenting to BC Children's Hospital ER with Presenting Complaint (Triage Chief Complaint) of "Flu," "Influenza," or "Fever/Cough", by Week



Source: BCCH Admitting, discharge, transfer database, ADT
Note: Data from 2010-11 and 2011-12 is based on new system (Triage Chief Complaint) not directly comparable to data for 2009-10. In bulletins before week 9 of 2011-12 season, data is based on old system.

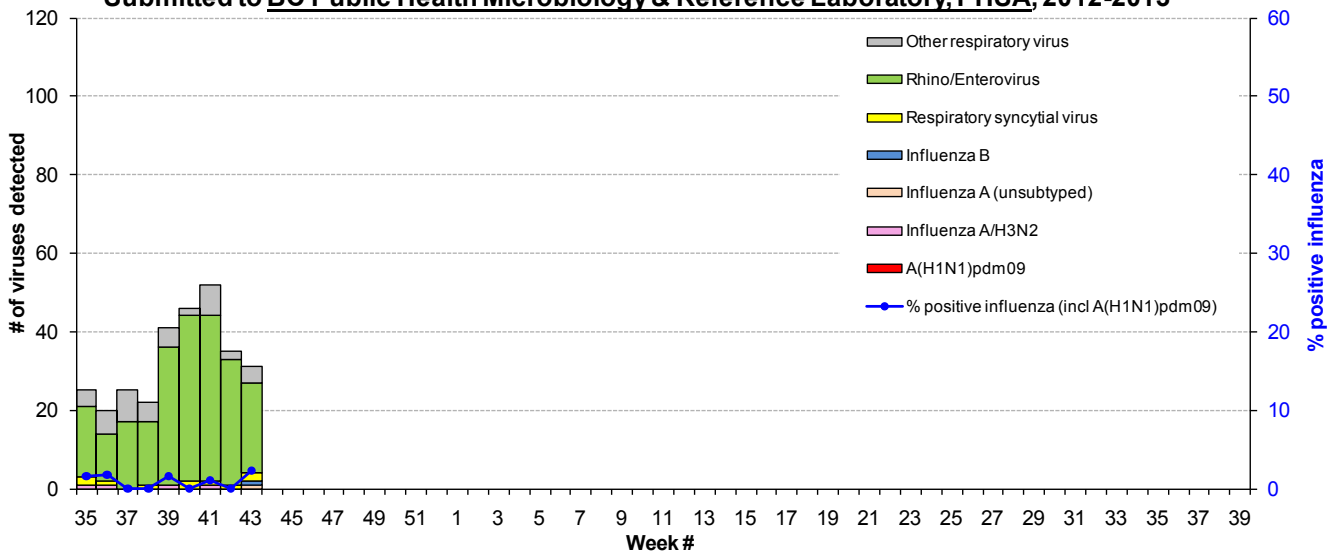
BRITISH COLUMBIA INFLUENZA SURVEILLANCE BULLETIN

2012-13: Number 1, Weeks 37-43
September 9 to October 27, 2012

Laboratory Reports

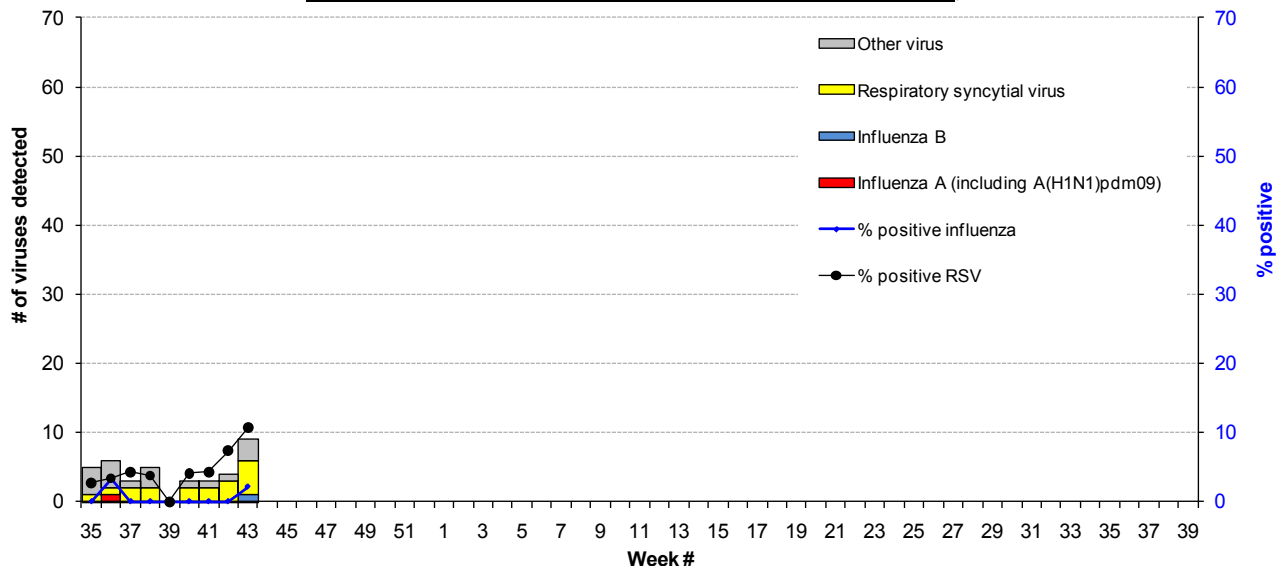
In weeks 37-43, five hundred and forty-eight specimens were tested for influenza viruses at the BC Public Health Microbiology & Reference Laboratory, PHSA. Among them, four influenza viruses were detected (4/548, 0.7%), including two influenza A/H3N2 (a senior in week 39; an adult in week 41), one influenza B from an adult in week 43, and one influenza A (unsubtyped) from a senior in week 43; all were reported from Vancouver Coastal Health Authority. Rhinovirus/enterovirus continued to be the most common detections (202/548, 37%) during this period. Other respiratory viruses were also detected sporadically.

Influenza and Other Virus Detections Among Respiratory Specimens Submitted to BC Public Health Microbiology & Reference Laboratory, PHSA, 2012-2013



In weeks 37-43, BC Children's and Women's Health Centre Laboratory tested 331 respiratory specimens. Among them, one (0.3%) was positive for influenza B in week 43. RSV (16/331, 4.8%) continued to be the most commonly detected virus among the specimens submitted. Other respiratory viruses were also detected sporadically.

Influenza and Other Virus Detections Among Respiratory Specimens Submitted to BC Children's and Women's Health Centre Laboratory, 2012-2013



Data provided by Virology Department at Children's & Women's Health Centre of BC

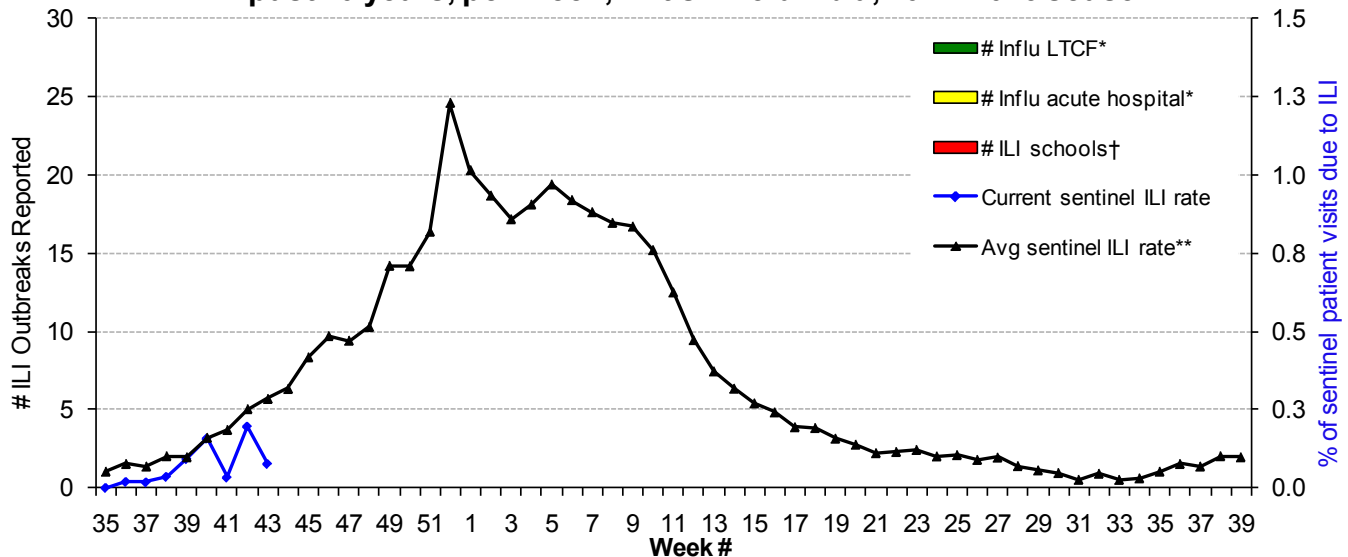
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ILI Outbreaks

In weeks 37-43, no ILI outbreak reports were received.

Number of Influenza and Influenza-Like Illness (ILI) Outbreaks Reported, Compared to Current Sentinel ILI Rate and Average Sentinel ILI Rate for past 20 years, per Week, British Columbia, 2012-2013 season



* Facility influenza outbreak defined as 2 or more ILI cases within 7-day period, with at least one case laboratory-confirmed as influenza.

† School ILI outbreak defined as >10% absenteeism on any day, most likely due to ILI.

** Historical values exclude 2008-09 and 2009-10 seasons due to atypical seasonality.

CANADA

FluWatch

In weeks 37-42 (September 9 to October 20, 2012), influenza activity in Canada remained low, though a slight increase was observed around week 39 as two regions reported localized influenza activity. Influenza virus was detected at low levels. The majority of influenza viruses detected were influenza A including A/H3N2, A(H1N1)pdm09, and unsubtype influenza A; influenza type B was detected only sporadically. The ILI consultation rate remained within the expected level for this time of year. For details: www.phac-aspc.gc.ca/fluwatch/

National Microbiology Laboratory (NML): Strain Characterization

From September 1 to October 24, 2012, 3 isolates were collected from provincial and hospital labs and characterized at the NML as follows:

1 A/Victoria/361/2011-like (H3N2)[¶] from BC;

2 B/Wisconsin/01/2010-like[†] from QUE and ONT;

[¶] indicates a strain match to the recommended H3N2 component for the 2012-2013 influenza vaccine

[†] belongs to the B Yamagata lineage, and is the recommended influenza B component for the 2012-2013 influenza vaccine.

NML: Antiviral Resistance

From September 1 to October 25, 2012, drug susceptibility testing was performed at the NML for influenza A/H3N2 (oseltamivir: 1; zanamivir: 1; amantadine: 6), and influenza B isolates (oseltamivir: 2; zanamivir: 2). The results indicated that all isolates were sensitive to oseltamivir and zanamivir, while all influenza A/H3N2 isolates were resistant to amantadine.

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2012-13: Number 1, Weeks 37-43
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INTERNATIONAL

USA: during week 42 (October 14-20, 2012), influenza activity remained low. 178 (6.2%) out of the 2,891 submitted specimens were positive for influenza, including 58% influenza A [69 A/H3N2, 2 A(H1N1)pdm09, and 33 A unsubtype] and 42% influenza B. No cases of variant swine origin influenza (A/H3N2v) were reported. www.cdc.gov/flu/weekly

Temperate areas of northern hemisphere: many countries are reporting increasing sporadic detections of influenza viruses but numbers are still low and none have crossed their seasonal threshold.

Tropical areas: a few countries have experienced active transmission of influenza in recent weeks. Most notable are Nicaragua and Costa Rica in the Americas, where influenza type B has been the most commonly detected virus in recent weeks, and Sri Lanka, Nepal, and Thailand in Asia, where influenza A(H1N1)pdm09 has been slightly more common than influenza type B. In Sub-Saharan Africa, countries of West (Senegal and Côte d'Ivoire) and Central Africa (Cameroon) have reported increasing detections of influenza virus, primarily A/H3N2. **Temperate areas of southern hemisphere:** influenza activity is at inter-seasonal levels in most countries.

www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/index.html

Avian Influenza:

There were no new reports of human cases of avian influenza after 10 August 2012. The cumulative number of confirmed human cases of avian influenza A/H5N1 reported to the WHO in the 2012 calendar year reached 30, of which 19 (63%) were fatal. www.who.int/influenza/human_animal_interface/en/

WHO Recommendations for 2012-13 Northern Hemisphere Influenza Vaccine

On 23 February, 2012 the WHO announced the recommended strain components for the 2012-13 northern hemisphere vaccine:

A/California/7/2009 (H1N1)pdm09 virus

A/Victoria/361/2011 (H3N2)-like virus*

B/Wisconsin/1/2010 (Yamagata lineage)-like virus*

* these two of the three recommended components are different from the northern hemisphere seasonal TIV vaccines produced and administered in 2010-11 and 2011-2012. For further details, see:

www.who.int/influenza/vaccines/virus/recommendations/2012_13_north/en/index.html

BRITISH COLUMBIA INFLUENZA SURVEILLANCE BULLETIN

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Contact Us:

Communicable Disease Prevention and Control (CDPACS):
BC Centre for Disease Control (BCCDC)

List of Acronyms

ACF: Acute Care Facility

AI: Avian influenza

FHA: Fraser Health Authority

HBoV: Human bocavirus

HMPV: Human metapneumovirus

HSDA: Health Service Delivery Area

IHA: Interior Health Authority

ILI: Influenza-Like Illness

LTCF: Long-Term Care Facility

MSP: BC Medical Services Plan

NHA: Northern Health Authority

NML: National Microbiological Laboratory

pH1N1: Pandemic H1N1 influenza

RSV: Respiratory syncytial virus

VCHA: Vancouver Coastal Health Authority

VIHA: Vancouver Island Health Authority

WHO: World Health Organization

Web Sites

1. Influenza Web Sites

Canada – Flu Watch: www.phac-aspc.gc.ca/fluwatch/

Washington State Flu Updates: www.doh.wa.gov/FLUNews/

USA Weekly Surveillance reports: www.cdc.gov/flu/weekly/

European Influenza Surveillance Scheme: www.ecdc.europa.eu

WHO – Global Influenza Programme: www.who.int/csr/disease/influenza/mission/

WHO – Weekly Epidemiological Record: www.who.int/wer/en/

Influenza Centre (Australia): www.influenzacentre.org/

Australian Influenza Report: www.health.gov.au/internet/main/publishing.nsf/content/cda-surveil-ozflu-flucurr.htm

New Zealand Influenza Surveillance Reports: www.surv.esr.cri.nz/virology/influenza_weekly_update.php

2. Avian Influenza Web Sites

World Health Organization – Avian Influenza: www.who.int/csr/disease/avian_influenza/en/

World Organization for Animal Health: www.oie.int/eng/en_index.htm

3. This Report On-line: www.bccdc.ca/dis-cond/DiseaseStatsReports/influSurveillanceReports.htm

Influenza-Like Illness (ILI) Outbreak Summary Report Form

Please complete and email to ilioutbreak@bccdc.ca

**Note: This form is for provincial surveillance purposes.
Please notify your local health unit per local guidelines/requirements.**

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 *could* be due to influenza virus. In children under 5, gastrointestinal symptoms may also be present. In patients under 5 or 65 and older, fever may not be prominent.

Schools and work site outbreak: greater than 10% absenteeism on any day, most likely due to ILI.

Residential institutions (facilities) outbreak: two or more cases of ILI within a seven-day period.

A	Reporting Information	Health unit/medical health officer notified? <input type="checkbox"/> Yes <input type="checkbox"/> No
	Person Reporting: _____	Title: _____
	Contact Phone: _____	Email: _____
	Health Authority: _____	HSDA: _____
	Full Facility Name: _____	
	Is this report:	<input type="checkbox"/> First Notification (<i>complete section B below; Section D if available</i>) <input type="checkbox"/> Update (<i>complete section C below; Section D if available</i>) <input type="checkbox"/> Outbreak Over (<i>complete section C below; Section D if available</i>)

B	First Notification
	Type of facility: <input type="checkbox"/> LTCF <input type="checkbox"/> Acute Care Hospital <input type="checkbox"/> Senior's Residence (if ward or wing, please specify name/number: _____)
	<input type="checkbox"/> Workplace <input type="checkbox"/> School (grades: _____) <input type="checkbox"/> Other (_____)
	Date of onset of first case of ILI (dd/mm/yyyy): <u>DD</u> / <u>MMM</u> / <u>YYYY</u>

Numbers to date	Residents/Students	Staff
Total		
With ILI		
Hospitalized		
Died		

C	Update AND Outbreak Declared Over
	Date of onset for most recent case of ILI (dd/mm/yyyy): <u>DD</u> / <u>MMM</u> / <u>YYYY</u>
	If over, date outbreak declared over (dd/mm/yyyy): <u>DD</u> / <u>MMM</u> / <u>YYYY</u>

Numbers to date	Residents/Students	Staff
Total		
With ILI		
Hospitalized		
Died		

D	Laboratory Information
	Specimen(s) submitted? <input type="checkbox"/> Yes (location: _____) <input type="checkbox"/> No <input type="checkbox"/> Don't know If yes, organism identified? <input type="checkbox"/> Yes (specify: _____) <input type="checkbox"/> No <input type="checkbox"/> Don't know