

Blood Borne Pathogens

~Surveillance~

Hepatitis C

Lookback



HIV / AIDS

Hepatitis B

Traceback



Health Promotion
and Protection

What is Surveillance?

“...the ongoing systematic **collection**,
collation, **analysis** and
interpretation of data, and the
dissemination of resulting
information to those who need to
know, so that **action** can be taken.”



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Uses for Surveillance

- Estimate magnitude of a health problem
- Detect outbreaks or epidemics
- Document distribution and spread of illness
- Identify natural history of infectious agents
- Set priorities for health programs
- Evaluate prevention and control strategies
- Detect changes in health practices
- Respond to emerging health threats



Key Elements

1. Detection and notification of health event
2. Investigation and confirmation (clinical, epidemiological, laboratory)
3. Collection of data
4. Analysis and interpretation of data
5. Feedback and dissemination of results
6. Response



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Surveillance in Nova Scotia

- Enteric, Food and Waterborne Diseases
- Diseases Transmitted by Direct Contact and Respiratory Routes
- Sexually Transmitted and **Bloodborne Pathogens**
- Vectorborne and Other Zoonotic Diseases
- Other Diseases (e.g., MRSA, VRE)
- Adverse Events Following Immunization



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Data Collection

Timeliness



Interpretation



Data Collection

- Representativeness
- Consistency
- Completeness



Data Quality



Case Report Form

Part 1

Date reported to region: ____ / ____ / ____ (y/m/d) Date investigation initiated: _____ (y/m/d)

Birth Date: _____ (y/m/d) Gender: M F HC#: _____

Surname: _____ First Name: _____ Middle Initial: _____

Former name (e.g. maiden name) if needed: _____

If < 16 years, mothers name: _____ fathers name: _____

Street/Apt: _____ Postal Code: _____

City/Town: _____ County: _____ Telephone: _____

Reporting Physician: _____ Telephone: _____

Family Physician: _____ Telephone: _____

Specialist: _____ Telephone: _____

Initial Diagnosis: _____ Source of referral: _____

Signing Off

Case: clinical laboratory

Final diagnosis: _____

Date Final Diagnosis: _____

Hepatitis B cases only (check one):

Acute

Chronic

Waiting further information

Retest date: _____

Retest results: _____

Case completed by: _____

Date investigation completed: _____

Case reviewed by: _____

Date reviewed: _____



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Symptoms

Part 2

Laboratory Information

(Attach lab reports to back of form)

Part 3

Clinical Information

Symptomatic: Yes **Onset date of initial symptoms** _____ No

Symptoms (HBV & HCV; Health Canada form is completed for HIV)	Yes	No	Comments
Fever			
Nausea or Vomiting			
Abdominal Cramps			
Fatigue			
Jaundice			
Anorexia			
Other			
Current Clinical Status			

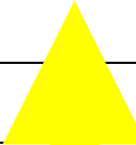
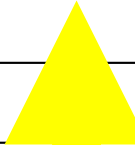
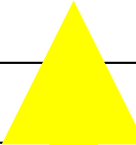
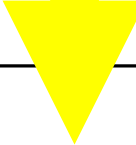
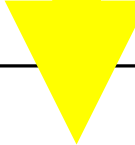
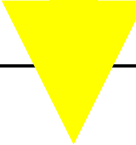
Hospitalized: Yes (Dates of admission/discharge) _____ No

Comments:

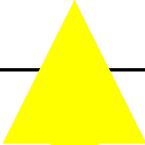
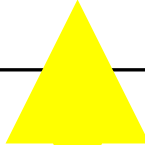
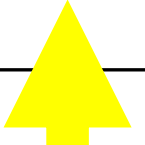
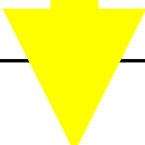
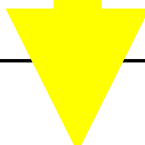
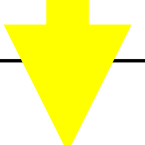
Medical Risks

Part 4

Risk Factor Information

Medical Risks	Yes	No	U/K	Provide details	Where (Place & Facility)	When
Hemophiliac or requiring coagulation products						
Received Immune Globulin						
Dental Care (in past 6-12 months)						
Diagnostic/Surgical Procedure						
Received donation: <input type="checkbox"/> Tissue <input type="checkbox"/> Organ <input type="checkbox"/> Blood <input type="checkbox"/> Blood Products <input type="checkbox"/> Semen <input type="checkbox"/> None <input type="checkbox"/> Unknown						
Renal Dialysis						
Has case donated blood, organs, tissue or sperm? (Provide specific information.)						

Personal Risks

Personal Risks	Yes	No	U/K	Provide details	Where (Place & Facility)	When
Injection drug user						
Shared IDU equipment						
Sex trade worker (may not always be appropriate to ask this question)						
Snorts drugs						
Acupuncture						
Tattoo						
Ear or body piercing						
Electrolysis (ask if disposable needles)						
Percutaneous exposure						

Medical Officer Comments

Outcome

HbsAg in 6 months? (HBV only)	<input type="checkbox"/> Yes (attach reports) <input type="checkbox"/> No	<input type="checkbox"/> Chronic <input type="checkbox"/> Acute
Suspected source identified?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Source:
Medical Officer of Health Comments:		
Referral to CBS?		

CBS Follow-up

Surname: (All possible surnames):	First Name:	Initial:
Date of birth:	dd/mm/yyyy	
Current address:	City	Province
		Country
	<input type="checkbox"/> unknown	
Laboratory results:	EIA <input type="checkbox"/> positive <input type="checkbox"/> negative	Date dd/mm/yyyy
	RIBA <input type="checkbox"/> positive <input type="checkbox"/> negative	Date dd/mm/yyyy
	RNA <input type="checkbox"/> positive <input type="checkbox"/> negative	Date dd/mm/yyyy
Risk factor:	Blood donation <input type="checkbox"/>	Date dd/mm/yyyy
	Blood transfusion <input type="checkbox"/>	Date dd/mm/yyyy
		<input type="checkbox"/> unknown
		<input type="checkbox"/> unknown
Location of blood donation / transfusion (clinic, hospital):*	City	Province
		Country
		<input type="checkbox"/> unknown
Case's address at time of blood donation /transfusion:	City	Province
		Country
		<input type="checkbox"/> unknown



*If blood donation or transfusion occurred in the US, please provide case's US social security number.



Incomplete Follow-up

• *If client is lost to follow, please consider other sources*

- *Family Physician*
- *Correctional Facility*
- *Clinics (Hep C Clinic, Direction 180, etc.)*

Out of Province

- ***Previously diagnosed outside of Nova Scotia***

- ***Lab report and note indicating***
 - ***Where and when diagnosed***

- ***New case resides out of province***

- ***Lab report and note indicating***
 - ***Place of residence***
 - ***Contact information if available***
 - ***Circumstances***



HPP Review Process

- **Cases reviewed to determine status**

- **Previously reported**

- ✓ Any additional information provided will be updated

- **New case**

- ✓ Entered into enhanced database

- ✓ Aggregate data (age group, sex and month of diagnosis) forward to Public Health Agency of Canada. Integrated with data from across the country to support national surveillance activities.

- **Out of Province**

- ✓ Referral made to CMOH in the appropriate province

- **Referral to Canadian Blood Services**

- ✓ Performed in conjunction with Canadian Blood Services



Lookback / Traceback

It's all in the detail.



Lookback / Traceback

Lookback – process of identifying and contacting recipients of blood components of a donor who is confirmed positive with the presence of an infectious agent.

Traceback - the process of investigating a report of a transfusion-associated infection to identify the associated/implicated donors and to retrieve untransfused blood components related to this donor.

THE HISTORY THAT IS COMPILED BY PUBLIC HEALTH, IS ALL THAT CANADIAN BLOOD SERVICES HAS TO WORK WITH.



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What Qualifies?

- Any transfusion communicable disease

Canadian Blood Services does mostly

- » Hepatitis B DNA Positive
- » Hepatitis C Positive
- » HIV Positive



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CBS Records

1970's

Year of birth, first and last name and phone number.

1980's

Full date of birth, first and last name and the date of their previous donation and a full address.

1989 forward

Full name and any other name they may have given under, date of birth, full address and work phone number if available and a list of all previous donation numbers and dates.



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WHAT DOES CBS NEED ?

Full name –again all the possible names

Where were they transfused ?

When were they transfused ?

Why were they transfused ?

The more detail the better.!!!



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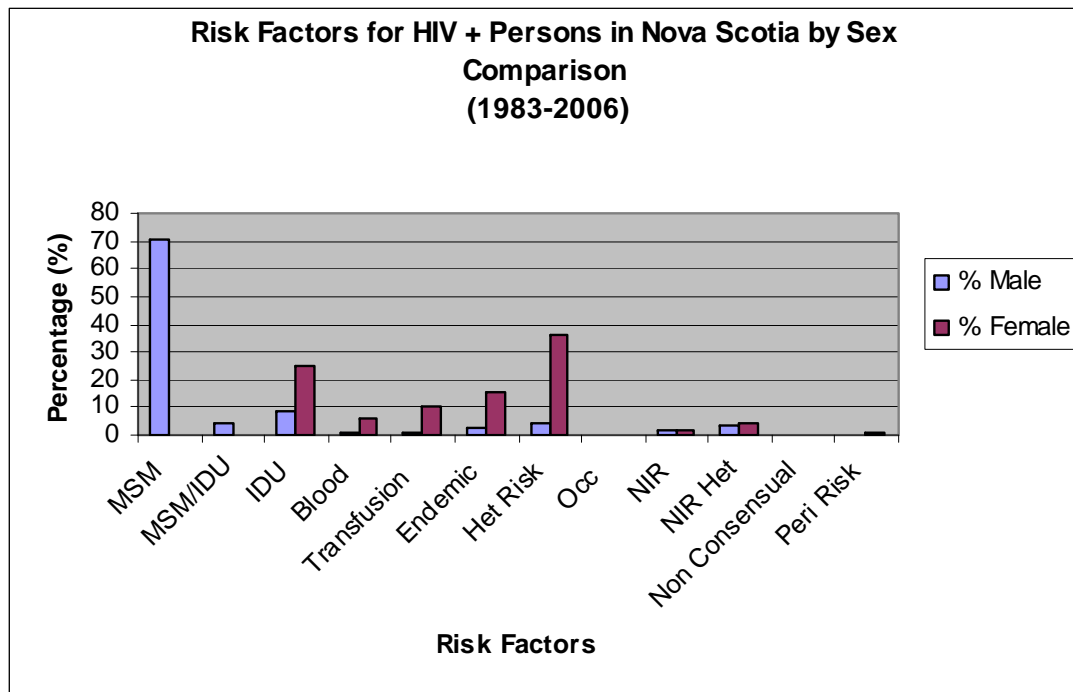
What do we know?



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HIV Risk Factors

- Between 1984 and 2007, there were 703 new HIV-positive tests reported in Nova Scotia
- In 2007, 17 new positive tests were reported of HIV and 3 new reported cases of AIDS. The mean age was 38.7 years, and 88% were male.



Hepatitis C Risk Factors

- Between 1998 and 2007 - 2,664 cases of HCV were reported.
- Risk factor information was available for 1,712.
 - 1,105 (64.5%) cases identified injection drug use
 - 43.2% receipt of tattoos
 - 40.2% sharing needles
 - 37.9% ear piercing
 - 15.5% blood transfusion

*Risk factors are not mutually exclusive and many cases reported more than one risk factor.



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Thank You!

Without your diligence in reporting, surveillance would not be possible



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