



Influenza in the News

The influenza virus has arrived in the Saskatoon Health Region. To date, there have been five cases of Influenza confirmed in the Region. These cases include four Influenza type B and one Influenza type A. All cases have been detected in ambulatory care settings. Influenza A viruses have also been identified among cases in other parts of Saskatchewan. The majority of influenza A specimens that had been sub-typed so far in SK, have shown the A/H3N2 subtype, which is sensitive to oseltamivir. A single case of the A/H1N1 sub-type was detected in an outpatient in southern Saskatchewan. This case was associated with travel outside of the province.

PHAC reports that early surveillance data for the 2008-09 influenza season suggests a high rate of oseltamivir resistance in A/H1N1 viruses and a continued high rate of amantadine resistance in A/H3N2 viruses. Health care providers considering the use of antivirals should consult surveillance updates to stay informed about influenza activity and antiviral resistance patterns in Saskatchewan at the Ministry of health website.

Public Health's recent advisory on treatment of influenza is available at: <http://www.health.gov.sk.ca/Default.aspx?DN=1b48afac-7b31-48bb-b794-8009f0f9b2e8>

The proportion of influenza A (H1N1) viruses among all influenza A and B viruses that will circulate during the 2008-09 season cannot be predicted, and will likely vary over the course of the season and geographically. The A/H1N1 component of the 2008-09 vaccine is a good antigenic match to current oseltamivir-resistant A/H1N1 viruses.

The increased resistance of influenza A isolates to antiviral medications highlights the **importance of continuing to vaccinate** patients throughout the flu season to protect as many individuals from influenza infection and its complications as possible.

Influenza vaccination is recommended for anyone who wants to avoid being sick from flu, especially those who are at high risk of complications from influenza or are in close contact with those at high risk.

During the Influenza Season to protect everyone from germs, colds and the flu, Public Health recommends the following advise to be shared with your patients and staff



Advise for Ambulatory Care Practices



Wash hands often



Cover coughs and sneezes



When sick stay home

PUBLIC HEALTH SERVICES

OFFICE OF THE MEDICAL HEALTH OFFICER

101—310 Idylwyld Drive North
Saskatoon, SK, S7L 0Z2

Phone: 655-4338

Fax: 655-4414

Chief Medical Health Officer

Dr. Cory Neudorf

Population Health Promotion

Deputy Medical Health Officers

Dr. Johnmark Opondo

Disease Control

Healthy Growth and Development

Dr. Stephen Whitehead

Public Health Observatory

Dr. Ross Findlater

Safe Communities

Disease Control Contact Number

(306) 655-4683

Sexual Health Contact Number

(306) 655-4643

Contents:

SHR Influenza Update - page 1

Over the Counter cough and cold medications page - 2

Agranulocytosis in Cocaine Users page - 2

Medications for Treatment Infection and Other Specifics page - 2

What's New in SHR? - New Deputy Medical Health Officer page - 2

STD Annual Reports page - 3

Lead and Water page - 3

What is Bisphenol A Page - 4

Agranulocytosis in Cocaine Users

A new potentially lethal agranulocytosis side effect has been noticed as complication of injecting illicit drugs that have been contaminated (cut) with Levamisole (a de-worming drug used in vet medicine). This condition has been detected in neighboring provinces and in some of the U.S. states. The neutropenia caused is acute and profound, associated commonly with a neutrophil count of zero.

The total white blood cell count may only be slightly below normal as the lymphocytes and other white blood cells are often normal. In a cocaine user or suspected



cocaine user, any symptoms of infection including fevers **warrant an urgent CBC and differential** to look for neutropenia. Urine toxicology should also be sent simultaneously looking for cocaine and levamisole. If the neutrophil count is less than 1 and the patient is febrile or has an active infection, an urgent referral to an on-call Hematologist should be made. The patient will require admission to hospital immediately, an infectious disease workup including blood cultures should be undertaken and broad-spectrum intravenous antibiotics (i.e. Piperacillin/Tazobactam, Imipenem or Ceftazidime) administered.

HEALTH CANADA WARNING ON PEDIATRIC USE OF OVER THE COUNTER COUGH AND COLD MEDICATIONS

Health Canada is advising consumers of the outcome of its review of cough and cold medicines for children under the age of 12 years.

Health Canada is requiring manufacturers to re-label over-the-counter cough and cold medicines that have dosing information for children to indicate that these medicines should not be used in children under 6. The products affected are those containing some specific active ingredients and are given orally (a complete list that can be found at the health Canada website below).

For more information about non-medicinal ways to provide temporary relief for cough and cold symptoms and the list of ingredients to watch for; call 1-866-558-2946 or go to [http:// www.healthcanada.gc.ca/coughandcold](http://www.healthcanada.gc.ca/coughandcold)

Saskatoon Health Region's New Deputy Medical Health Officer



Dr. Ross Findlater
MD CM, DTM &H, MSc, FRCPC:

Dr. Findlater joined the SHR in January as Deputy Medical Health Officer in a position which is joint with the University of Saskatchewan, with time split evenly between the two organizations.

Within the health region, his responsibilities will include immunization issues, environmental health, injury prevention and general emergency

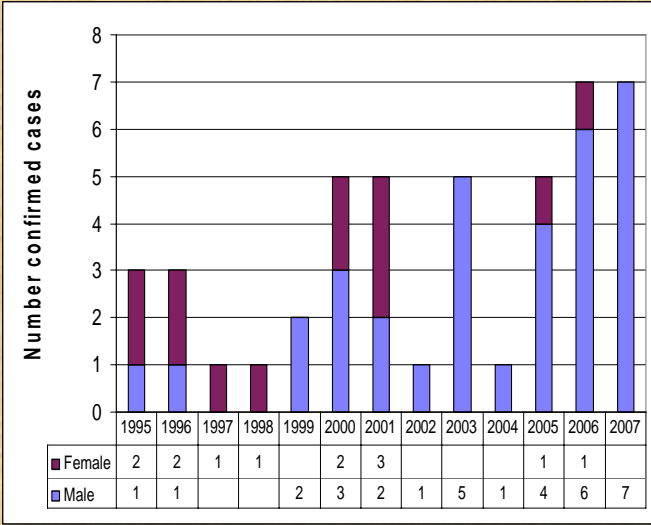
planning.

He is a specialist in Community Medicine who has worked extensively in Saskatchewan: first, from 1996 to with the regional health authority in Regina as either Medical Health Officer or Deputy Medical Health Officer, and then, from 2002 to 2008 as Chief Medical Health Officer with the Saskatchewan Ministry of Health. Most recently he spent three months doing work on polio eradication in India.

Prior to undertaking a Community Medicine residency at the University of Ottawa, Dr Findlater practiced emergency medicines or family medicine over 16 years in a variety of settings in Saskatchewan, Nepal, Thailand, Ontario and Quebec. He grew up in Quebec and graduated from McGill University medical school in 1975.

Surveillance of Sexually Transmitted Infections (STIs)

Syphilis cases reported, SHR, 1995-2007



Blow the dust bunnies off your old disease control manuals; Syphilis is making a comeback!

Within the past 6 months, it has become increasingly apparent that not only is syphilis on the rise here in Saskatoon Health Region, but that the typical face of syphilis as reported in this newsletter last year may be changing. Two new primary, and 2 new secondary cases, have been identified thus far, along with a cluster of remaining sexual contacts requiring either testing and/or treatment.

Once believed to be an infection only prevalent within the homosexual population, syphilis has now shifted, and is being detected in individuals who only report heterosexual risk factors.

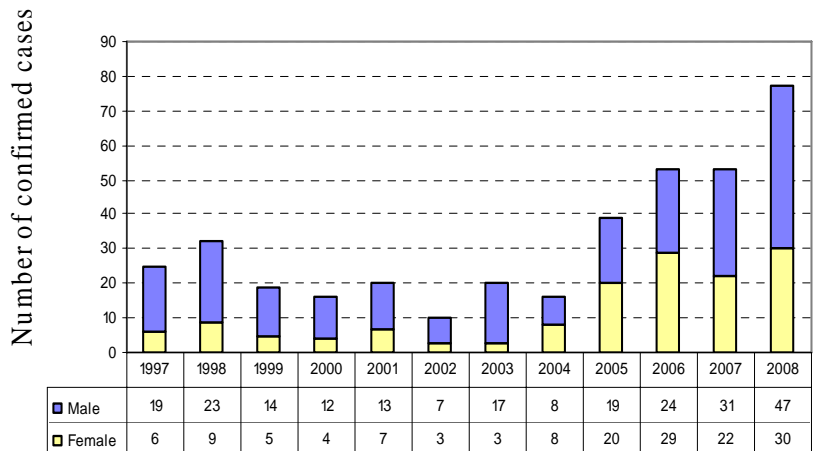
Thus far, syphilis appears to be infecting both heterosexual females (and males) of childbearing age, as well as males who have sex with males.

In light of this new trend, it is imperative to offer routine syphilis testing as part of all STI check-ups, and to familiarize oneself with both the symptomology and related staging of syphilis infection.

The Continuing Rise in HIV Cases Remains a Major Concern

Newly diagnosed cases of HIV in SHR jumped by 45 % in 2008 when compared to 2007, preliminary figures have shown. Between 2004 and March 2007 injection drug use was indicated for as a risk factor in 80 % of cases, while 9 % of new cases only indicated heterosexual contact with no other risk factor. Since 2004 two neonatal cases have been reported, the result of Mother-to-child transmission of HIV during the perinatal period. One of the few success stories in the history of HIV infection is the use of medication to successfully reduce HIV perinatal transmission. It is important to remind all prenatal care providers that prenatal HIV testing is standard for quality obstetric care in Canada according to the SOGC.

HIV/AIDS cases reported, SHR 1995-2008



Lead in Drinking Water - Should we be Concerned?

Concern about levels of lead in water have recently surfaced in Saskatoon with reports that residents in some of the older neighbourhoods in the City had discovered levels of lead in their tap water that exceeded Canadian standards. The City council responded by sending out an advisory to around 6800 homes in the City suggesting that if people had concerns they could get their tap water tested, run the taps for approximately 5 minutes to flush lead out of the system or filter their water.

So is this problem one of great public health concern? Current Canadian standards for lead in drinking water mirror those of the WHO at 10ug / litre. Interestingly the standard in the European Union is currently 25ug/

litre, two and a half times greater than the Canadian standard. The Europeans aim to reach the Canadian standard by 2013.

It is also important to set lead ingestion from water in the context of other sources of lead exposure. In 2008 a Canadian National survey measured blood lead levels across the country. It discovered that the average blood lead level was 1.37ug/100mls. The blood lead level at which clinicians would be expected to get concerned is 10ug/ 100 mls. Less than 1% of the population had blood lead levels above this. Compare this with 1978 the last time blood lead levels were tested across the country. In that year, 25% of people exceeded the 10ug/100mls standard. These results attest

Lead in Drinking Water – Should we be Concerned? Continuation from p.3

to the fact that there is now a lot less lead in the environment and this is primarily due to reduction of lead in gasoline and in house paints.

In conclusion – is lead in water an important public health problem?

Evidence suggests it is unlikely to have a major impact on blood lead levels and cause problems, unless people are exposed to some other significant source of lead. However as there is some theoretical risk to contributing to raised blood lead levels and it is possible to reduce levels of lead in water, it makes sense to raise awareness about the issue and let people who are potentially exposed make informed choices about how they want to handle the risk

What can the homeowner do about it?

As a precautionary measure it is recommended that **residents flush the water system by running the cold water faucet for approximately 5 minutes** if the drinking water has been sitting in the lines for six hours or more. If you wish to take further precautionary measures, **children under the age of six and pregnant women** could consider alternate sources of drinking water or use an approved filter attached to the tap. Boiling water does not remove the lead.

The City of Saskatoon will continue to replace its portion of the lead service connections when they fail or when sewer connections are being replaced. When the City's public works department are completing this replacement work, homeowners will have the option to replace their portion of the connection at cost.

What is Bisphenol A (BPA)

It is a chemical used as a hardener in the making of some plastic (polycarbonate), and in the epoxy resin used as a protective coating on the inside of metal food and drink cans. The concerns about it are related to the question of whether it has oestrogen like effects which could lead to developmental and reproductive problems at very low levels of exposure in infants or young children.

It made the news in Canada in the fall of 2007 when Mountain Equipment Coop pulled products (most notably Nalgene water bottles) made with bisphenol A off its shelves after the release of a preliminary toxicology assessment in the US.

In Canada, the federal government has announced an intention to ban the importation, sale and advertising of polycarbonate baby bottles, and recommends the use of safe alternatives which are already available. It also announced the intention to limit environmental release of BPA in the future. It concluded that there was no risk to the general public from BPA in food or food containers.

The Environment Protection Agency (EPA) in the US and the European food Safety Authority have reviewed the same evidence since Health Canada's announcement and concluded that there is no risk, even for infants at present levels of exposure.

What types of plastic contain BPA?

For the purposes of recycling, polycarbonates are a type of category 7 plastic. So if there is a recycling symbol with the number 7 on the container, it may contain polycarbonate. Other recycling categories will not. If there is no recycling symbol, however, the only way to find out would be to contact the manufacturer.

How can you decrease exposure to it?

Parents and caregivers, can make the personal choice to reduce exposures of their infants and children to BPA a

number of different ways:

- Don't microwave polycarbonate plastic food containers. Polycarbonate is strong and durable, but over time it may break down from over use at high temperatures.



OTHER

- Don't put hot food or liquid into polycarbonate containers.
- Polycarbonate containers that contain BPA usually have a [#7 on the bottom](http://www.recyclenow.org/r_plastics.html) http://www.recyclenow.org/r_plastics.html
- Reduce your use of canned foods.
- When possible, opt for glass, porcelain or stainless steel containers, particularly for hot food or liquids.
- Use baby bottles that are BPA free.

So what should I advise my patients to do?

Limit exposure of newborns and infants to BPA for now.

Keep informed as more evidence becomes available over the next few years. Don't put hot food or liquids into polycarbonate containers as a general rule.



Sources of Information: Health Canada

www.chemicalsubstanceschimiques.gc.ca/challenge-defi/bisphenol-a_e.html