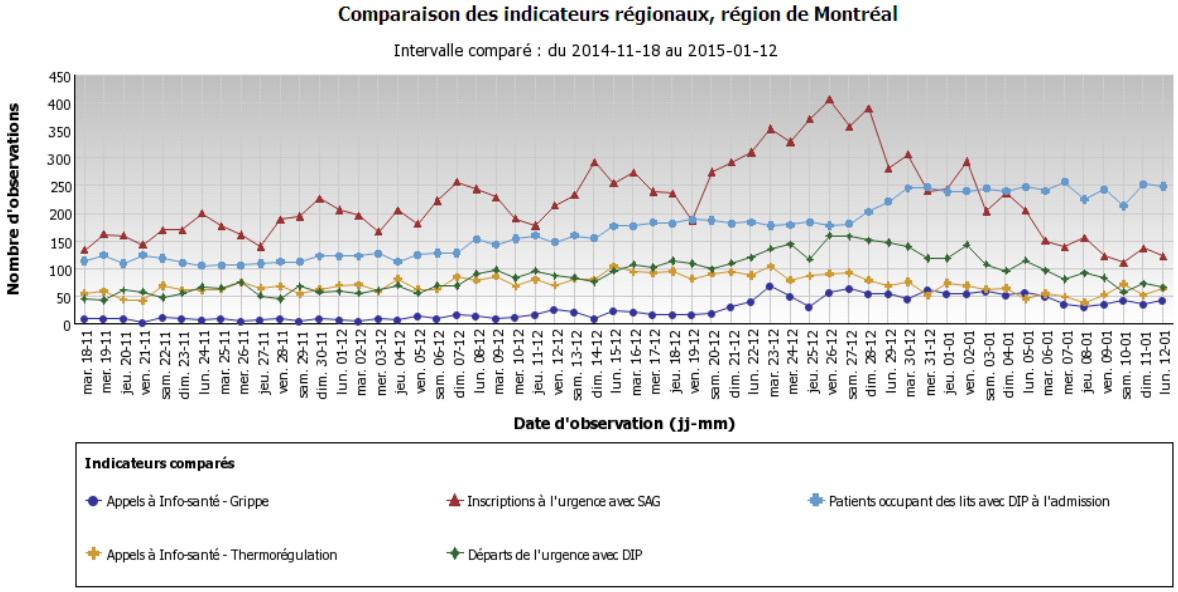
Highlights
Statistics for reportable diseases (MADO) and
other infectious diseases under surveillance
Period 13 – 2014 (30 November 2014 to 3 January 2015)*

Influenza A : Transmission Has Slowed

Over the past four weeks, the proportion of positive influenza tests performed at LSPQ has decreased, as have several regional indicators. This suggests that transmission in the population is slowing:



In addition, fewer outbreaks of influenza or influenza-like illness have been reported daily. At the end of November 2014, the number of cases started rising and remained above the numbers for the past two years. The severity of the illness is evident in the number of influenza-related hospitalizations and deaths during outbreaks in residential and long-term care facilities.

Two Deaths Due to Pertussis

Two babies recently died of pertussis in a Montréal hospital. One had been given the first dose of pertussis vaccine; the other was still too young to be vaccinated. These unfortunate events are a reminder that good vaccination coverage protects not only the persons vaccinated, but also those who are too young to be immunized. Children under a year old are at greatest risk of severe illness. The hospital involved has reported 8 cases of pertussis since last July 1; several other cases have also been reported outside of Montréal, in the region where one of the babies lived. Currently, there is an outbreak involving more than 120 cases in Alberta. There is also an ongoing outbreak in California, which began in 2013 and has affected more than 10,000 people. This is their worst pertussis outbreak since 1946 and it has caused 4 deaths.

Ebola Virus Disease (EVD): Monitoring Travellers At Risk

As of 22 January, 180 travellers possibly exposed to EVD had been reported to DSP de l'Agence de Montréal; the DSP is still monitoring 48 of them. However, none had to be referred to a hospital due to clinical manifestations compatible with EVD.

***2014 CDC year: a week longer**

Exceptionally, period 13 of 2014 includes 5 weeks. This occurs every 6 or 7 years to correct the accumulated discrepancy between the CDC year and the regular calendar year, as the CDC year only has 364 days. Readers should take note, when reading the number of cases reported, that period 13 is 25% longer than a regular period and the year 2014 is 2% longer than a regular year.

Robert Allard, MD, MSc, FRCPC
Lucie Bédard, MSc. Inf., MPH
Epidemiological surveillance and monitoring team
Health Protection Sector, Direction de santé publique
Agence de la santé et des services sociaux de Montréal

vivre une île en santé

Highlights
Statistics for reportable diseases (MADO) and other infectious diseases under surveillance
Period 12 – 2014 (2 to 29 November)

Early Influenza A Season

There is a marked increase in influenza A activity in Montréal, which began a few weeks earlier than usual. Among the influenza samples from Montréal that have tested positive, 94% are type A (predominantly H3N2) and 6% type B. The trend is similar in all of Canada and is reminiscent of the 2012-2013 season. The elderly account for a higher proportion of cases than usual. To date, all strains have been sensitive to oseltamivir and zanamivir.

There have been 22 outbreaks of influenza A in Montréal, no outbreaks of influenza B and 18 outbreaks of influenza-like illness in health care institutions since the season began.

Health professionals must take preventive action to limit the consequences of influenza. This includes good hygiene practices and immunization, of professionals and of patients. The vaccination campaign began on 1 November; it is still recommended and possible to get vaccinated. Since it can take up to 14 days before an immune response develops, early onset of the flu season could mean that some vaccinated patients are still unprotected. www.vaccinationmontreal.ca

Sources: LSPQ, MSSS, PHAC

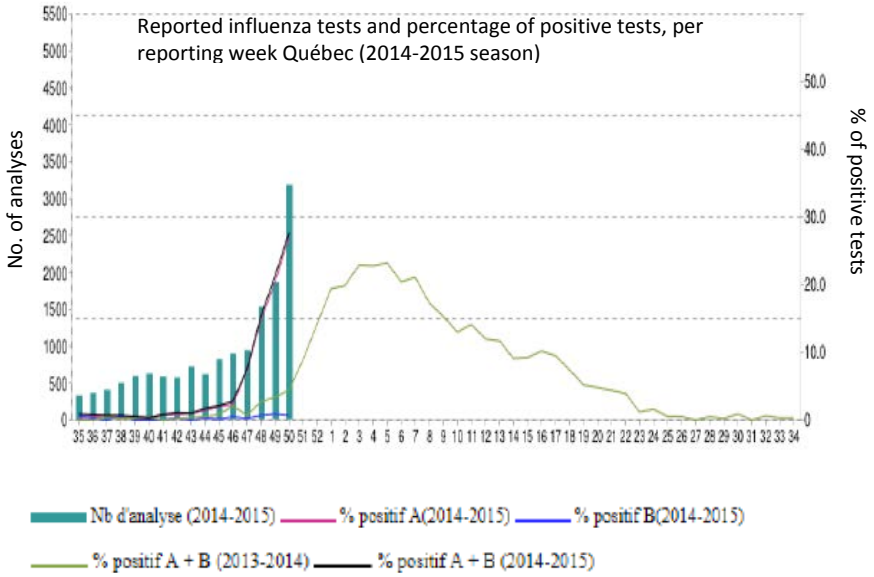


Image modifiée du http://www.inspq.qc.ca/Data/Sites/1/SharedFiles/influenza/20142015/2014-50.pdf

Ebola Virus Disease (EVD): Travellers continue to be monitored

Since 12 November, regional public health departments have been actively monitoring all travellers arriving in Québec from countries affected by EVD (**Guinea, Liberia, Sierra Leone**). Monitoring is carried out according to travellers' risk of exposure. The list of countries to be monitored is likely to change as long as the epidemic keeps evolving. At this time, Mali is **not** a country to consider for triage, although there is very localized transmission in the city of **Bamako.** The outbreak in the Democratic Republic of the Congo has been over since November 21.

Health service corridors have been set up in case someone arrives in Canada with symptoms or develops symptoms consistent with EVD during the 21-day monitoring period. We recommend that persons returning from affected regions voluntarily limit non-urgent medical visits and travel during this period. If anyone else presents with symptoms consistent with EVD and a history of possible exposure to the virus, triage and infection prevention and control measures remain essential.

Go to www.dsp.santemontreal.qc.ca/ebola.html for more information. The physician on call for infectious diseases at the *DSP de l'Agence de Montréal* can also be reached 24/7 at 514-528-2400. In case of emergency, call the Ebola line at 514-668-2774.

Colleen Fuller, MD
Robert Allard, MD, MSc, FRCPC
Lucie Bédard, MSc. Inf., MPH
Epidemiological surveillance and monitoring team
Health Protection Sector, Direction de santé publique
Agence de la santé et des services sociaux de Montréal

vivre une île en santé

Agence de la santé et des services sociaux de Montréal
Québec

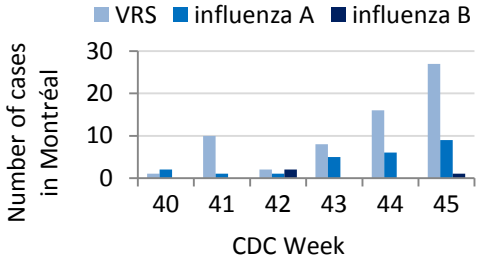
Highlights
Statistics for reportable diseases (MADO) and other infectious diseases under surveillance
Period 11 – 2014 (5 October to 1 November)

Ebola Virus Disease (EVD): Monitoring Travellers

Since 12 November, regional public health departments have been actively monitoring all travellers arriving in Québec from countries affected by EVD. Triage and infection prevention and control (IPC) measures are still required for anyone who shows symptoms consistent with EVD and a history of possible exposure to the virus. The list of countries to consider at triage includes **Guinea, Liberia, Sierra Leone and Democratic Republic of Congo** (Équateur province). Go to www.dsp.santemontreal.qc.ca/ebola.html for more information.

Influenza A and Respiratory Syncytial Virus (RSV) are Circulating

Cases of influenza A and RSV are on the rise in Montréal. Influenza B remains rare and no influenza outbreaks in health care institutions have been confirmed. The annual vaccination campaign began on November 1 (www.vaccinationmontreal.ca). *Source: LSPQ*



Methoxphenidine (MXP): First Case of Poisoning in Québec

Montréal's first case of MXP poisoning was reported in November 2014. The person arrived in a hospital emergency department in a dissociative state. This person reported having taken a higher dose of the drug than recommended. The individual recovered with no sequelae after spending the night on supportive treatment.

MXP is a new synthetic NMDA receptor antagonist similar to phencyclidine (PCP). It is a recreational drug used for its dissociative, euphoric and stimulating effects. The drug is unregulated in Canada. It is sold online as a "research chemical", but little research has been done on its health effects.

The availability and variety of synthetic dissociative drugs are on the rise. Clinicians should be watchful for overdoses of these drugs, which can present one or more of the following signs: confusion, agitation, amnesia, tachycardia, hypertension, hyperthermia, seizures, or elevated creatine kinase. It is important to report to public health any possible overdose clusters or unusual situations.

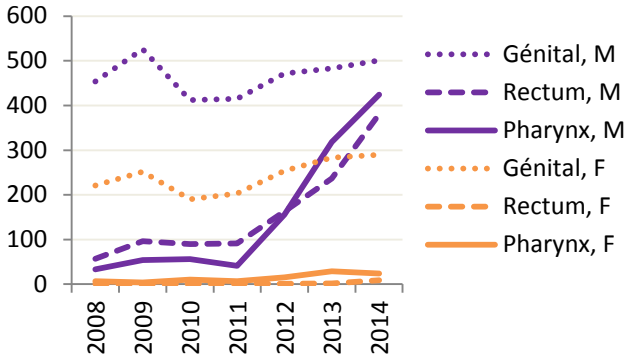
We wish to thank Anne-Ericka Vermette from the MUHC for the information provided.

Gonorrhoea: Better Detection of Rectal and Pharyngeal Infections

Reports of gonorrhoea in men have been rising since 2012 (see the *Highlights* for Period 7, 2014). Further investigation shows that 80% of the increase is due to rectal and pharyngeal infections, detected with nucleic acid amplification technique, which was approved in 2012 for rectal and pharyngeal screening. This suggests that the increase can be mostly explained by better identification of these reservoirs of infection.

In Montréal, 7% of gonorrhoea isolates are now resistant to azithromycin, with pharyngeal infections more likely to be resistant. Since the recommended treatment for pharyngeal infections differs from that for genital or rectal infections, better detection of pharyngeal gonorrhoea should help control resistance. Resistance of gonorrhoea to cefixime and ceftriaxone remains rare.

Number of gonorrhoea cases reported in Montréal, by year, sex and site



Andrew Gray, MD
Robert Allard, MD, MSc, FRCPC
Lucie Bédard, MSc. Inf., MPH
Epidemiological surveillance and monitoring team
Health Protection Sector, Direction de santé publique
Agence de la santé et des services sociaux de Montréal

vivre une île en santé

Agence de la santé et des services sociaux de Montréal
Québec

Highlights
Statistics for reportable diseases (MADO) and other infectious diseases under surveillance
Period 10 – 2014 (7 September to 4 October)

Ebola virus disease (EVD): Update

Ebola virus continues to spread in West Africa. However, no cases of EVD have been detected in Canada. As of October 16th, 2014, 23 possible cases of EVD had been reported in Montréal, all of which were ultimately ruled out. Among them, 16 had recently travelled to a country where Ebola transmission was occurring, but none reported a history of known exposure. The most common diagnosis is still malaria.

Triage and infection prevention and control (IPC) measures remain essential for anyone with a fever who either has returned from an affected county in the previous 21 days and for whom exposure to the virus cannot be excluded, or who has been in direct contact with a confirmed case of EVD. An up-to-date list of countries to consider at triage is available at www.msss.gouv.qc.ca/professionnels/ebola/index.php. At this time it includes **Guinea, Liberia, Sierra Leone and the Democratic Republic of the Congo** (Equateur province only). In addition, a few cases have been diagnosed in the United States (3 cases in Dallas), Spain (2 cases in Madrid) and Senegal (1 case). Information for health professionals is available at www.dsp.santemontreal.qc.ca/ebola.html.

Enterovirus D68 (EV-D68): 6 cases detected in Montréal

Enteroviruses commonly circulate in summer and fall. This year, as of October 16th, 796 cases due to the D68 strain have been detected in 46 American states. Reports of new cases are beginning to decline. In September in Montréal, CHU Sainte-Justine identified six cases of EV-D68 in children. These cases were from several different regions of the province, including two from Montréal. Tests were requested during a peak in admissions for bronchospasm, but this has now passed. All six cases had difficulty breathing and/or pneumonia and most had a history of asthma. Only one case required admission to intensive care. All six have recovered and been released from hospital.

EV-D68 is related to rhinovirus. It causes a respiratory infection that can occasionally be severe, especially in asthmatic children. A few cases of acute flaccid paralysis have been reported in the United States and Canada in patients with EV-D68, but a causal link has not been confirmed. Virus identification requires genotyping, which is performed at the National Microbiology Laboratory in Winnipeg and takes 21 days. The test is rarely requested since the results do not affect clinical intervention. It is useful primarily for surveillance. Treatment is supportive, and the recommended prevention and control measures are the same as for other seasonal respiratory viruses. *Acute flaccid paralysis with no apparent cause in a child under 15 years old is a reportable disease in Québec.* More information for health professionals is available at www.nccid.ca/disease-debrief-ev-d68.

Influenza: Early start this year

Since mid-September, sentinel laboratories have detected five cases of influenza A in Montréal. Reports of invasive *Streptococcus pneumoniae* infection, often a complication of influenza, have also increased. In Québec, just like elsewhere in the world, influenza season appears to be starting earlier than usual this year. For the moment, the 13 outbreaks of flu-like illness in health establishments reported since early September—twice as many as last year at the same date—are caused by respiratory viruses other than influenza. IPC measures for hospitals remain essential. Go to www.inspq.qc.ca/infectionsnosocomiales/publications-du-cinq to see the most recent recommendations.

The influenza vaccination campaign begins November 1st, 2014. To order vaccines and for information about the campaign, go to the director of public health's website (www.dsp.santemontreal.qc.ca), *Vaccination contre l'influenza et le pneumocoque* section, under *Documentation*.

Andrew Gray, MD
Robert Allard, MD, MSc, FRCPC
Lucie Bédard, MSc. Inf., MPH
Epidemiological surveillance and monitoring
Health Protection Sector, Direction de santé publique
Agence de la santé et des services sociaux de Montréal

Highlights
Statistics for reportable diseases (MADO) and other infectious diseases under surveillance
Period 9 – 2014 (10 August to 6 September)

Tuberculosis (TB): Severe case and multidrug-resistance

Twelve cases of TB were reported in the past month, which corresponds to the number expected in Montréal. However, one of these cases was a young adult who had been symptomatic for several months before consulting a doctor. This person had advanced TB and died of the illness. Young people rarely die of TB. This situation highlights the importance of informing communities at risk—such as those from countries where TB is endemic—of the seriousness of the illness and the importance of consulting as soon as symptoms appear. It was also discovered that a case reported during the preceding month had multidrug-resistant TB. Usually one or two cases of TB resistant to isoniazid and rifampin are reported in Montréal each year. It is crucial that these patients be identified and taken care of rapidly to limit transmission of TB in general and particularly its multidrug-resistant form, for which treatment options are limited.

West Nile Virus (WNV): First cases of the season

In Québec, the first probable WNV cases of 2014 were reported during the second half of August. In Montréal, we are awaiting confirmation of three cases (average age of 56) reported since August. Two had a neurological syndrome. Two might have acquired the infection in Montréal. For now, the season appears to be similar to that of 2013 and less serious than in 2012 (N=10). The end of summer is the time of year where the disease is most likely to strike http://www.dsp.santemontreal.qc.ca/dossiers_thematiques/infections_et_intoxications/thematiques/virus_du_nil_occidental_vno/documentation.html

Ebola virus disease (EVD): Situation in Montréal

Between April and September 23, 2014, 21 suspected cases of EVD were reported in Montréal, the latest one on September 12. The diagnosis of EVD was rejected in all cases. Among them, 15 had travelled to a country where the virus was known to be transmitted, and none had documented exposure to a risk factor. Most of these individuals were diagnosed with other infectious diseases, the most common of which was malaria (6 cases).

Although the risk of EVD occurring in Montréal is low, triage and infection prevention and control (IPC) measures are essential for anyone presenting with fever and coming from a country at risk for the disease. The Ministère de la Santé et des Services sociaux (MSSS) has identified the countries to consider for triage purposes: Guinea, Liberia and Sierra Leone (where there is active transmission of the virus), Nigeria (where there was limited transmission) and Democratic Republic of the Congo (Équateur province only, where there is a separate Ebola virus outbreak). Moreover, an isolated case was diagnosed in Senegal, but no secondary cases were identified following the incubation period. The MSSS's list is updated regularly at http://www.msss.gouv.qc.ca/professionnels/ebola/index.php. The Comité sur les infections nosocomiales du Québec has issued recommendations for triage and medical assessment of suspected cases of EVD http://www.inspq.qc.ca/pdf/publications/1890_Ebola_Prevention_Control_Hospitals.pdf and the Laboratoire national de santé publique has a publication on the procedures to follow when requesting laboratory tests http://www.inspq.qc.ca/lspq/fichesPDF/guide_pratique_laboratoire_ebola.pdf.

Triage and IPC are also essential to prevent transmission of other serious infectious diseases that can be contracted while travelling, including MERS-CoV (Middle East), influenza H7N9 (China, including Hong Kong) and influenza H5N1 (Egypt, China and Southeast Asia). The MSSS maintains epidemiological surveillance of severe respiratory infectious diseases: http://www.msss.gouv.qc.ca/professionnels/.

Noémie Savard, MD, MSc, FRCPC
Lucie Bédard, MSc. Inf., MPH
Epidemiological surveillance and monitoring
Health Protection Sector, Direction de santé publique
Agence de la santé et des services sociaux de Montréal

vivre une île en santé

Agence de la santé et des services sociaux de Montréal
Québec

Highlights
Statistics for reportable diseases (MADO) and other infectious diseases under surveillance
Period 8 – 2014 (13 July to 9 August)

Cyclosporiasis: Investigation results

In light of the current excess of cases in Montréal, those reported since the beginning of July have been investigated. The 8 cases—6 women and 2 men—are middle-aged. A food questionnaire revealed no common exposure to a food item such as, for instance, fresh fruit bought at the same place, but 3 cases had acquired the infection outside Canada. Some individuals around 3 of the cases presented undiagnosed gastrointestinal symptoms, but these were generally less severe than symptoms presented by the cases.

Verotoxigenic *E. coli* infection: Modes of acquisition

After two months during which there were no reported cases, since 1 April, 9 cases have been reported among Montrealers: 3 are linked to exposures during journeys to the Caribbean; 1 to a trip to Virginia; and 1 to the local consumption of raw milk. None is attributable to local consumption of undercooked ground beef. However, the indication to cook this meat thoroughly still stands.

Chikungunya virus infection

Cases are not included in the statistics since this is not a reportable disease. However, investigations into the 20 reported cases are ongoing. Of the 12 cases contacted, 9 were imported from Haiti, and one each from the Philippines, Guadeloupe and St. Lucia. To date no cases have been imported from Florida, which is the only American state where there has been local transmission of the infection.

Ebola virus disease (EVD): Situation in Montréal

The 7 reported suspected cases in Montréal have all tested negative. For 5 of these individuals, confirmed or probable diagnoses are available: malaria, tuberculosis, acute leukaemia, gastroenteritis and ischiorectal abscess.

Québec's nosocomial infections committee has just published a guide for the management of patients with confirmed or suspected EVD. In particular, so as to avoid unnecessary tests, the guide includes the epidemiological and clinical characteristics to assess in a patient before requesting an Ebola virus test. See [http://www.inspq.qc.ca/pdf/publications/1875-SurveillanceSouchesNeisseria.pdf]

The *DSP de l'Agence de la santé et des services sociaux de Montréal* has issued a call for vigilance regarding EVD:

http://www.dsp.santemontreal.qc.ca/fileadmin/documents/1_Espace_du_directeur/0_Voix_du_directeur/Appels_vigilance/2014/AV_-_Ebola__et_documents__2014-08-21_.pdf

Pertussis: Unimmunized cases

There is no excess of cases of pertussis at this time in Montréal. However, one notes that of the 7 cases reported between 22 June and 9 August and for whom investigations have been completed, 6 involved young people (between the ages of 1 and 15) who had not received *any* doses of pertussis vaccine. There have been a number of outbreaks both in Canada and the United States in 2014. In the U.S., incidence (9964 cases reported as of 16 June) is 24% higher than in 2013. Clearly, non-vaccination cannot be justified under the pretext that the disease is under control.

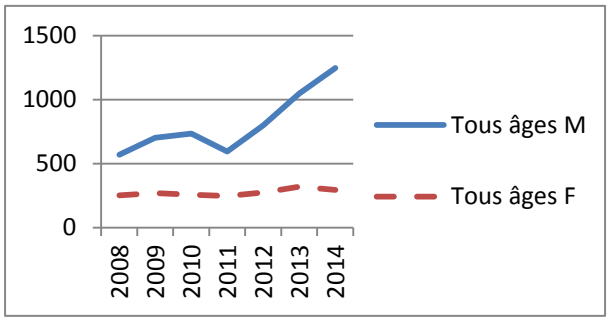
Source: http://www.cdc.gov/pertussis/outbreaks/trends.html

Robert Allard, MD, MSc, FRCPC
Lucie Bédard, MSc. Inf., MPH
Epidemiological surveillance and monitoring
Health Protection Sector, Direction de santé publique
Agence de la santé et des services sociaux de Montréal

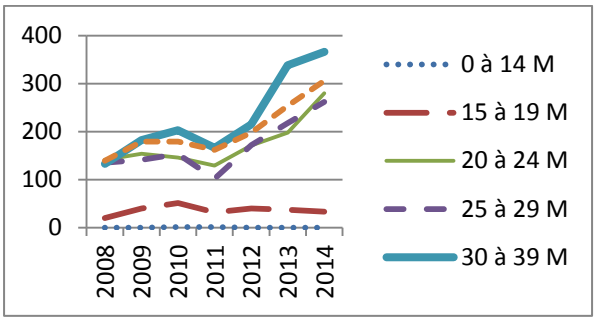
Highlights
Statistics for reportable diseases (MADO) and other infectious diseases under surveillance
Period 7 – 2014 (15 June to 12 July)

Gonococcal infection: On the increase over the past few years

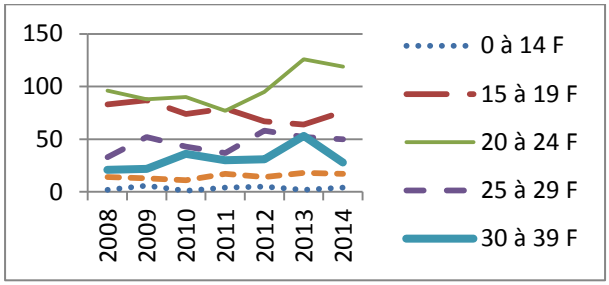
Gonorrhoea rates have been rising in Montréal since 2012. The following figures show the **numbers of reported cases**, by age, sex and year. Numbers for 2014 have been annualized.



Numbers of cases reported per year



Numbers of male cases reported per year



Numbers of cases female cases reported per year

The number of cases is much higher among men for the entire period 2008-2014, except in the 0 to 14-year-old age group, where there have been more cases among girls (23 cases; boys: 1 case). Since 2012, the numbers have been rising continuously among men, and about equally in all age groups except 30 to 39-year-olds, where the increase seems to been more pronounced. Among women, the number of cases has risen only among those aged 20 to 24, and lightly among these.

Greater use of nucleic acid amplification tests may have improved the capacity to detect the infection but this would not explain why the increase is so much higher among men than women. We do not know the cases' sexual orientation, but the marked increase among men with no corresponding rise among women suggests that male-to-male transmission may be playing a significant role. Higher gonorrhoea incidence in MSM has been observed in England since 2009. It is attributed to ongoing risky behaviours and to more extra-genital testing. Data analyses by type of test, site of sample collection and resistance profile (because of the significant growth in resistance) will be carried out.

Chikungunya virus infections: first reports

The LSPQ reports 10 cases among Montrealers. The virus causes dengue-like symptoms: fever, skin rash and joint pain. It spreads through the bite of infected Aedes aegypti and Aedes albopictus mosquitos, which are not found in Canada but are common in the Caribbean and other regions. Of the three cases investigated to date, two had been to Haiti and one to St. Lucia. There is no specific treatment for this infection but the best prevention is avoidance of mosquito bites when travelling to infested areas. For more information, see the Call for vigilance on the Director of Public Health's Website
http://www.dsp.santemontreal.qc.ca/dossiers_thematiques/infections_et_intoxications/appels_alertes.html

Robert Allard, MD, MSc, FRCPC
Lucie Bédard, MSc. Inf., MPH
Surveillance épidémiologique et vigie
Secteur Vigie et protection, Direction de santé publique
Agence de la santé et des services sociaux de Montréal

vivre une île en santé

Agence de la santé et des services sociaux de Montréal
Québec

Agence de la santé et des services sociaux de Montréal
Québec

Highlights
Statistics for reportable diseases (MADO) and other infectious diseases under surveillance
Period 6, Year 2014
(weeks 21 to 24, 18 May to 14 June)

Very little influenza circulation

Influenza activity is now at inter-seasonal levels. Moreover, there are no outbreaks in hospitals or long-term care centres.
Source: LSPQ

Overdoses among street-drug users: Preliminary results of investigations

As of 7 July, 140 overdoses had been reported to the DSP de l'Agence de Montréal, most of them by Urgences-Santé (68) and first responders (42). Of the 58 severe overdoses linked to a drug other than alcohol, 14 were reported in May, 39 in June and 3 in July. The overdoses involved 44 men and 12 women aged 20 to 61, with a median age of 39 years. There were 21 confirmed deaths: 14 in May, 6 in June and 1 in July.

At least 33 patients were admitted to emergency and 12 were hospitalized, 9 in intensive care. Among patients for whom at least partial lab test results are available, cocaine was identified in 18 cases, benzodiazepine in 8, cannabinoid in 6 and heroin in 5. Results of other substances—including fentanyl—are still too preliminary to report. Documented consumption methods include 28 by injection, 8 by inhalation, 6 by ingestion and 4 by intranasal use. Loss of consciousness was reported for 43 subjects, respiratory distress for 24 individuals and cardiopulmonary arrest for 20.

Naloxone was administered to 18 patients, 4 of whom received it in emergency prehospital care and 13 in hospital;* 6 of these patients were given one dose, 6 were given two, 3 were given three, and 2 were given four.* Naloxone administration is associated with survival: 14 of the 24 patients who did not receive naloxone died; of the 16 who did get it, only 1 died.* This statistically significant association ($p<0.01$) is compatible with the hypothesis that access to naloxone improves chances of survival; but it is also compatible with other hypotheses, which will be studied once investigations have been completed. The results are all preliminary and should be interpreted with caution.

We wish to thank everyone who has been sending us information. The situation continues to be monitored, and reporting of street-drug overdoses that *stand out either because of their number or their effects* continues to be relevant. Call 514-528-2400 and ask for the STBBI nurse on call or, if it is after 4:30 p.m., ask for the physician on-call for environmental health.
**Because of missing information and to shorten the text, the sum of the detailed numbers may be smaller than the grand total.*

MADO non-reporting

During the summer, staff members often have to be replaced. To avoid reporting omissions and delays, we would appreciate your checking that all individuals concerned are familiar with reporting procedures.

Robert Allard, MD, MSc, FRCPC
Lucie Bédard, MSc inf, MPH
Epidemiological surveillance and monitoring
Health Protection Sector, Direction de santé publique
Agence de la santé et des services sociaux de Montréal

Agence de la santé et des services sociaux de Montréal
Québec

Highlights
Statistics for reportable diseases (MADO) and other infectious diseases under surveillance
Period 5, Year 2014
(weeks 17 to 20, 20 April to 17 May)

Influenza B continues to circulate

Based on the percentage of positive flu tests, influenza type B infections have been declining over the past three weeks (19 to 21), but only very slowly. However, there are currently no outbreaks of influenza or influenza-like illness in hospitals or residential and long-term care centres in Montréal.
Source: LSPQ

Campylobacteriosis: Unexplained excess

There has been an excess number of reported cases of campylobacteriosis since Period 3 (see Figure 1). Their distribution by age, sex or area of residence does not differ from what it was before this situation arose. Although we do not routinely investigate reported cases of campylobacteriosis, at the end of April we looked at three cases of *C. jejuni* because their proximity in space and time suggested a possible common source. Investigations showed the three cases were in men of varying ages, with very different medical histories and for whom no common exposure could be identified. Two were hospitalized—one for *delirium tremens* and diarrhoea, the other for dehydration.

Overdoses among street-drug users: Recent reports

A call for vigilance and a media release were issued on 24 May and 26 May, respectively. This was in response to reports of 14 overdoses, either severe (including 9 deaths) or with unusual clinical presentations : allergic reaction, anoxia, sudden respiratory arrest, rhabdomyolysis or coma. Laboratory analyses and public health investigations are not yet completed, but different types of drugs and consumption methods appear to be involved. It is estimated that in Montréal, between 2000 and 2009, there were 643 unintentional deaths linked to use of illicit drugs, attributed about evenly to heroin, cocaine and other opioids; a quarter of the drugs had been injected.

Posters have been prepared for distribution in at-risk milieux. Health workers can obtain more information at
http://www.dsp.santemontreal.qc.ca/fileadmin/documents/1_Espace_du_directeur/0_Voix_du_directeur/Appels_vigilance/2014/AV_surdose_drogues_rue_20140524.pdf

It would be appreciated and helpful to receive reports of street-drug overdoses *that are unusual either because of their number or their manifestations*. Call 514-528-2400 and ask for the physician on-call for infectious diseases.

Robert Allard, MD, MSc, FRCPC
Lucie Bédard, MSc inf, MPH
Epidemiological surveillance and monitoring
Health Protection Sector, Direction de santé publique
Agence de la santé et des services sociaux de Montréal

Agence de la santé et des services sociaux de Montréal
Québec

Highlights
Statistics for reportable diseases (MADO) and other infectious diseases under surveillance
Period 4, Year 2014
(weeks 13 to 16, 23 March to 19 April)

Influenza : type B still circulating

Based on the percentage of positive flu tests, influenza A activity is now minimal; however, influenza B has been slower to decrease since reaching its peak 7 weeks ago. Currently, there is only one outbreak, in a residential and long-term care centre.
Source: LSPQ

Risk of importation of serious infections: Rising, but varies by disease

Internationally and in Canada, particular attention must be paid to the risk of importation of four infections. At this time, there is no local transmission of any of these infections in Montréal.

Human cases of **influenza** H5N1 and H7N9 have occurred in 6 countries, all in Asia.

Middle East Respiratory Syndrome (MERS) has caused over 100 cases in Asia, which has led to more than 10 cases being imported into five European countries. Two cases in health care workers were recently imported from Saudi Arabia into the United States: one in Indiana and the other in Florida. There are no known secondary cases linked to these two individuals.

Currently, there are many outbreaks of **measles** around the world. In Canada, cases, mostly imported from Asia and sometimes leading to local transmission, have been reported in five provinces, including Ontario (and the city of Ottawa). Recently, 70 Québec children, 40 of whom live in Montréal, were exposed to a case in Ontario during a sports event, but none was infected.

Ebola virus disease (EVD) has caused about 250 cases, but these have been limited to Liberia and Guinea (Conakry). To date, no cases have been exported outside West Africa. Three suspected cases were reported in Montréal, but none was confirmed.

For now, it is measles that has been linked to cases imported to North America, followed far behind by MERS. However, for any given case, the probability that it is imported depends on 1) clinical presentation, and 2) history of either travel to an affected country or contact with a confirmed case acquired abroad. It is recommended to report cases immediately to the *DSP de l'Agence de Montréal*, once the measures outlined in the following document have been applied:
http://www.inspq.qc.ca/pdf/publications/1742_MesPrevContrInfectUrgence.pdf

Other information about MERS and influenza:
http://www.dsp.santemontreal.qc.ca/fileadmin/documents/1_Espace_du_directeur/0_Voix_du_directeur/Appels_vigilance/2014/Appel_vigilance_-_MERS_CoV_MRSI_2014-05-08.pdf and
http://www.who.int/csr/disease/coronavirus_infections/MERS_CoV_Update_27_March_2014.pdf?ua=1
Measles:
http://www.dsp.santemontreal.qc.ca/fileadmin/documents/1_Espace_du_directeur/0_Voix_du_directeur/Appels_vigilance/2014/Appel_vigilance_rougeole__2014-04-04_.pdf and
http://www.who.int/immunization/monitoring_surveillance/burden/vpd/surveillance_type/active/big_measlesreportedcases6months_PDF.pdf
Ebola virus disease: http://www.cdc.gov/vhf/ebola/outbreaks/guinea/

Robert Allard, MD, MSc, FRCPC
Lucie Bédard, MSc. inf., MPH
Epidemiological surveillance and monitoring
Health Protection Sector, Direction de santé publique
Agence de la santé et des services sociaux de Montréal

Agence de la santé et des services sociaux de Montréal
Québec

Highlights
Statistics for reportable diseases (MADO) and other infectious diseases under surveillance
Period 3, Year 2014
(weeks 9 to 12, 23 February to 22 March)

Influenza: Situation stable

Overall, as of April 1 and based on the percentage of positive influenza tests, influenza transmission in Québec is stable (weeks 12 and 13); a slight decrease in transmission of influenza A is counterbalanced by a slight increase in influenza B transmission. The number of ongoing outbreaks in Montréal health care facilities is also stable: there are currently 3 outbreaks of influenza-like illness and 1 of influenza B.
Source: LSPQ

Creutzfeldt-Jakob Disease (CJD)

The reported case is in a 60-year old individual, who died of the disease. The case was confirmed by histology and immunohistochemistry, suggesting furthermore that it is neither a case of variant CJD, which causes bovine spongiform encephalopathy (BSE or mad cow disease), nor of familial CJD. It remains possible, however, that this is iatrogenic CJD or a sporadic form of the disease, which is much more common but whose causes are not well known.

The Public Health Agency of Canada's (PHAC) Creutzfeldt-Jakob Disease Surveillance System investigates all cases of CJD occurring in Canada. Since 1998, PHAC has recorded 676 cases of CJD, including 162 in Québec. Of these, 90% were sporadic and 7% familial. Only 4 cases, which all occurred before 2003, were iatrogenic (due, for example to cornea transplants or dura-mater grafts, or to human grown hormone injections), and 2 were BSE cases.
Source: PHAC
Contributor: Jérôme Latreille

***Lymphogranuloma venereum*: Usual and unusual cases**

One of the three cases reported during the period was mentioned in the Highlights for Period 2; the case is in a young woman who acquired the disease through heterosexual transmission, the first instance documented in Montréal. The two other cases fit the usual model: middle-aged men who had had sexual relations with men, one of them in a bathhouse. Both are drug users and have histories of multiple STBBI that include chlamydia, gonorrhoea, syphilis, hepatitis B and HIV infection.
Contributors: Geneviève Boily, Anna Urbanek and Christine Leblanc.

Robert Allard, MD, MSc, FRCPC
Lucie Bédard, MSc inf, MPH
Epidemiological surveillance and monitoring
Health Protection Sector, Direction de santé publique
Agence de la santé et des services sociaux de Montréal

lbedard@santepub-mtl.qc.ca
514-528-2400

Agence de la santé et des services sociaux de Montréal
Québec

Highlights
Statistics for reportable diseases (MADO) and other infectious diseases under surveillance
Period 2, Year 2014
(weeks 5 to 8, 26 January to 22 February 2014)

Influenza: Transmission declining but outbreaks in health care facilities continue.

Based on the percentage of positive influenza tests, transmission of influenza is now declining in Québec: influenza A transmission has dropped markedly, while influenza B has risen moderately. Nonetheless, three outbreaks of influenza-like illness are ongoing in general and specialized hospital centres and rehabilitation hospitals, and five in long-term care facilities. Four of the outbreaks are due to influenza B, one to influenza A and one to respiratory syncytial virus, which continues to circulate widely. Seasonal flu vaccination is still recommended for unimmunized new patients in long-term care facilities.

Source: LSPQ and MSSS.

Contributors: Guy Lapierre and Pierre Pilon.

Lymphogranuloma venereum (LGV): First documented occurrence of heterosexual transmission in Montréal since the beginning of the outbreak.

A case meeting the definition of probable case has been reported in a man in his twenties who had had sexual relations with women only. The case was diagnosed through serologic testing for LGV because of a penile lesion and swollen inguinal lymph node, the most common presentation in heterosexuals.

The patient (index case) reported having had sexual relations with four women over the three-month period before his symptoms appeared. The source is most probably an anonymous casual partner he met in Missouri, where LGV cases are not investigated and incidence of the disease is unknown. Contact with this person occurred about a month before onset of symptoms, which is consistent with the usual incubation period. Two of the other partners were assessed and tested negative. The infection seems to have been transmitted to the fourth person, his stable partner, who developed signs consistent with chlamydial infection at the same time as the index case's signs appeared. Results of serologic testing showed that she had LGV antibodies, which means she is also a probable case. She cannot be the source case, because the index case was her only partner ever.

An important point is that both cases are "probable", based on serological test results, rather than "confirmed", which would require DNA sequencing because cross-reactivity may cause difficulties when interpreting LGV serology. Therefore, it is recommended that *LGV be mentioned and DNA sequencing requested*, along with a *C. trachomatis* culture or PCR, when LGV is suspected. Male and female partners of persons with LGV should be informed, assessed, tested and treated, as recommended:
http://www.phac-aspc.gc.ca/std-mts/sti-its/cgsti-ldcits/section-5-9-eng.php.

Recently in Europe, there have been cases of LGV reported in women whose partners were bisexual or of unknown sexual orientation. For more information about the LGV outbreak in Montréal, see the Call for vigilance issued on 12 August 2013 by *Direction de santé publique de l'Agence de la santé et des services sociaux de Montréal*.
http://www.dsp.santemontreal.qc.ca/fileadmin/documents/1_Espace_du_directeur/0_Voix_du_directeur/Appels_vigilance/2013/AV_LGV_2013-08-12.pdf

Contributors: Geneviève Boily, Gilles Lambert and Anna Urbanek

Robert Allard, MD, MSc, FRCPC
Lucie Bédard, MSc inf, MPH
Epidemiological surveillance and monitoring
Health Protection Sector, Direction de santé publique
Agence de la santé et des services sociaux de Montréal

Agence de la santé et des services sociaux de Montréal
Québec

Highlights
Statistics for reportable diseases (MADO) and other infectious diseases under surveillance
Period 1, 2014
(weeks 1 to 4, 29 December 2013 to 25 January 2014)

Influenza

Based on the percentage of positive influenza tests, transmission of influenza A is now declining in Québec, while influenza B transmission continues to rise. Among other respiratory viruses, respiratory syncytial virus is clearly predominant.
Source: LSPQ

Leprosy: An instructive case

The case included in the statistics is the first in Montréal since November 2011, and presents a few possibly unexpected characteristics that can serve as useful reminders. The patient is around 20 years old and from an endemic country, but has had no known contact with someone with the disease. The first signs and symptoms appeared in early January, about two years after arrival in Canada. A vancomycin-resistant cellulitis of the hand was followed by ulnar neuritis and then by cutaneous lesions on several parts of the body. A skin biopsy confirmed the diagnosis made by an astute microbiologist.
We wish to thank Andrew Gray and Michèle Bier for the information provided.

Recent calls for vigilance: *Acinetobacter baumanii* nosocomial infections and imported measles

Last 19 December, a call for vigilance and an information sheet were issued following a nosocomial outbreak of extremely drug resistant *Acinetobacter baumanii* infections:
http://www.dsp.santemontreal.qc.ca/fileadmin/documents/1_Espace_du_directeur/0_Voix_du_directeur/Appels_vigilance/2013/A_v_Acinetobacter_baumannii_XDR__19122013.pdf

In response to a few cases of measles imported into Canada from the Philippines, a call for vigilance was issued last 31 January.
http://www.dsp.santemontreal.qc.ca/fileadmin/documents/1_Espace_du_directeur/0_Voix_du_directeur/Appels_vigilance/2014/A_v_Rougeole_31012014.pdf
We wish to thank Chloé Healy and Jérôme Latreille for the information provided.

Robert Allard, MD, MSc, FRCPC
Lucie Bédard, MSc inf, MPH
Epidemiological surveillance and monitoring
Health Protection Sector, Direction de santé publique
Agence de la santé et des services sociaux de Montréal