Reportable diseases in the summer of 2017

Sexually Transmitted Diseases

The number of cases of gonorrhoea, syphilis and HIV infection has continued to increase so far during 2017 and the number of chlamydia cases is similar to that of previous years.

Syphilis

Syphilis, however, stands out as the number of diagnosed cases this year far exceeds that of preceding years, cf. Fig. 1. So far during 2017, 18 men and ten women have been diagnosed with syphilis while the proportion of men diagnosed with the disease is similar to the years before. The mean age of those infected is 33 years (age range 20–59). Women were also diagnosed with the disease and two of them were diagnosed in the maternity care. This indicates that the disease, which has mainly been associated with men who have sex with men, is now starting to spread to women, among them those of childbearing age. This serious disease can among other things cause foetal damage.

Contents:
Reportable diseases in the summer of 2017 ............................................. p. 1
Outbreaks in the summer of 2017 .......... p. 3
Preparedness for radionuclear dangers..... p. 5

Editorial board
Thorolfur Gudnason, Chief Epidemiologist
Asa St. Atladottir
Gudrun Sigmundsdottir
Hrafnhildur B. Stefansdottir
Iris Marelsdottir
Juliana Hedinsdottir
Kamilla S. Josefsdottir
Editor
Haraldur Briem, Special Advisor

The contents of the newsletter may be reproduced provided that the source is quoted.

Volume 10. Issue 4. October 2017

Editorial board
Thorolfur Gudnason, Chief Epidemiologist
Asa St. Atladottir
Gudrun Sigmundsdottir
Hrafnhildur B. Stefansdottir
Iris Marelsdottir
Juliana Hedinsdottir
Kamilla S. Josefsdottir
Editor
Haraldur Briem, Special Advisor

Directorate of Health
Chief Epidemiologist for Iceland
Barónsstíg 47
101 Reykjavík
Tel: +354 5101900
Fax: +354 5101920
E-mail: mottaka@landlaeknir.is
www.landlaeknir.is
HIV-infection
As of September, 19 individuals have been diagnosed with HIV infection this year, cf. Fig. 2. The average age of those infected is 36 years (age range 16–59). Among those diagnosed this year, there is one woman and 11 foreigners (58%). Risk behavior is associated with the infection of homosexuals in seven cases, with drug users in five cases and heterosexuals in four cases. There are uncertain risk factors in three cases.

Mumps
A mumps epidemic that began in April 2015 peaked in June of that year and expired in the spring of 2016. No cases have been reported since then until one person was diagnosed in May this year and four other cases in July. Those who were diagnosed this summer were 30–37 years of age, a similar age to those diagnosed in the 2015–2016 epidemic. Four of the five patients diagnosed this summer were unvaccinated and one of them had received one vaccination. All of those born after 1980 have been encouraged to get vaccinated against the disease.

Hepatitis A
Nowadays, Hepatitis A has become a rare disease in Iceland. This disease was very common in Iceland up until the mid-20th century, but since then its incidence has been greatly reduced. In the last four years, no-one has been diagnosed with hepatitis A in Iceland, while this year, four people have been diagnosed with the disease, three of whom are men who have had sex with other men. These cases were related to an epidemic of Hepatitis A ongoing in Europe, especially among men who have sex with other men.

Hepatitis A is transmitted by faecal contamination of foods or liquids and no treatment is available for the disease. The best prophylaxis of hepatitis A is vaccination, as well as taking care of general hygiene in food and fluid intake. The Chief Epidemiologist encourages all those travelling abroad, and especially men who have sex with men, to get vaccinated. Hepatitis A is usually a self-limiting disease but may occasionally cause severe liver damage.

Vaccination against hepatitis A is available for example at primary health care clinics. For best protection two vaccinations at 6 months’ interval are recommended. Vaccination provides protection for life.

Tuberculosis
A total of six individuals have been diagnosed with tuberculosis so far in 2017. The Chief Epidemiologist was notified last August of contagious lung tuberculosis diagnosed at the Department of Infectious Diseases at the Landspitali University Hospital. The patient in question is a woman in her forties who lives in Southeast Iceland and has not been travelling abroad. The source of infection is unclear and the Department of Disease Prevention and the Regional Epidemiologist of South-
east Iceland have the matter under examination. It is unusual to diagnose open lung tuberculosis among young Icelanders without any known risk factors. Last September, another Icelander was reported with closed tuberculosis that appears to be related to an infection occurring decades ago.

Outbreak of gastroenteritis due to norovirus among scouts

On 10 August 2017, an outbreak of gastroenteritis occurred among foreign scouts and guides camping at the Outdoor and Scout Centre at Úlfjótsvatn in South Iceland, affecting 181 individuals. Of these, 81 got gastroenteritis with symptoms of vomiting, stomach aches and diarrhoea. They were all moved to a mass aid station in the nearby village of Hveragerði for shelter, care and treatment. This outbreak lasted for a week. Two days before the outbreak started one of the scouts had symptoms of gastroenteritis.

Laboratory analysis of stool samples from the infected showed that the illness was caused by norovirus infection.

Analysis of the water supply in the Scout Centre at Úlfjótsvatn did not show any sign of the virus or other pathogens. The most likely explanation of the outbreak is that an infected person brought the disease to the Scout Centre two days prior to the outbreak. The rapid spread of the disease may be explained by the crowded conditions at the Scout Centre.

Outbreak of gastroenteritis due to Aeromonas hydrophilia

Nearly 130 employees of two primary schools in the capital area became ill with gastroenteritis in late August this year, an infection believed to be caused by the bacterium Aeromonas hydrophilia. The bacteria grew in large quantities in leaf salad bought by the school kitchens from the supplier MATA. The salad, however, was imported from Italy and labeled “unwashed”.

The same kind of salad was bought by 35 other customers but did not seem to have caused illness anywhere except in these two schools. The Reykjavik Health Inspection Authority believed that the leaf salad had not been sufficiently washed in the affected schools and issued a special press release to that effect. Consultation between the persons concerned was increased due to this incident and the emphasis was placed on the importance of extensive sharing of information.
Outbreak of gastroenteritis due to *Salmonella typhimurium*

From 10 to 24 August this year, eight individuals were diagnosed with gastroenteritis caused by the bacterium *Salmonella typhimurium*, which is a higher incidence of such cases than expected. In addition, two more individuals have been diagnosed in September. Most of these cases seem to be of domestic origin. Outbreaks due to *S. typhimurium* have also occurred in Norway and Sweden in August and September this year. It is important to investigate whether these infections in the Nordic countries are related. The origin of the domestic cases in Iceland has not yet been identified. Infections of this type are usually food borne, but in Sweden they have been traced to a salami sausage.

Outbreaks due to *Listeria monocytogenes*

Listeriosis is caused by the bacterium *Listeria monocytogenes*. The bacterium can be found in non-pasteurised milk and raw-milk products, salads, and in raw fish. The infection may cause serious symptoms in those with impaired immune system, neonates and older people. The first case of listeriosis was described in Iceland in 1978. In 1997, listeria infection was made reportable to the Chief Epidemiologist. The number of cases in the years 1997–2016 was 19, or about one case per year on average, although the distribution was uneven. In the years 2015 and 2016, no one was diagnosed with listeriosis. This year, however, six individuals have been diagnosed with *Listeria monocytogenes* infection, including a newborn and its mother. Of these, two individuals were diagnosed in May and two in August this year. Two older individuals with underlying serious illness died in May and June this year and the newborn died in August. An investigation into the causes of these infections is ongoing.

Influenza at the Landspitali University Hospital

According to information from the Department of Infection Control and the Department of Microbiology at the Landspitali University Hospital (LUH), nine patients were diagnosed with influenza last August and September. Of these patients, three were passengers on a cruise line, all of whom had influenza B, one was in a Danish warship with influenza A(H3), and four belonged to a cluster of influenza A(H3) infections in one of the hospital’s departments. In addition, influenza of the same kind was diagnosed in a child admitted to the hospital.

At about the same time last year, several people with influenza A(H3) were diagnosed at the LUH, but the seasonal influenza epidemic did not hit the society until at the end of the year 2016. The number of cases with influenza-like symptoms in the winter of 2016–2017 was slightly smaller than in previous years while admissions to the hospital caused by the disease were more numerous than before. One measure of the burden of influenza is the need for hospitalisation because of the disease. This measure does not always reflect the number of influenza-like symptoms in society, cf. Fig. 5.

Yet another indicator of the burden of an epidemic is the proportion of those admitted who are in need of treatment in an intensive care unit. There is a significantly greater likelihood that influenza patients in the seasonal epidemics caused by swine flu A(H1)pdm09 require intensive care than it is if the influenza epidemic is dominantly caused by influenza A(H3). Swine flu can therefore prove to be dangerous for some people.

![Number of admission to LUH due to influenza and number of patients diagnosed with influenza-like illness in Primary Health Care](Fig. 5)
Preparedness for radionuclear dangers

Last summer, the Norwegian Radiation Protection Agency warned that the traffic of nuclear-powered warships and submarines along the coasts of the country was increasing. For this reason, Norway has examined whether it is appropriate to distribute iodine tablets to the country’s coastal regions in order to increase their availability in case of radiation pollution, since the iodine tablets could prevent thyroid cancer in children and young people if taken in time. In this connection, some discussions came up about preparedness for such incidences in Iceland.

Following the nuclear accident in Fukushima in Japan in 2011, the Chief Epidemiologist decided to keep a stock of iodine tablets in Iceland, as it was found that tens of Icelanders who were stationed in Japan at this time could have needed such a treatment for prophylactic purposes. Although Iceland is far away from all nuclear power plants, a threat can be caused by radiation from ships and submarines around the country. In Iceland, the supply of iodine tablets is centralised and will be distributed if required by the Chief Epidemiologist.

In 2008, the nuclear-powered warship Peter the Great was placed northeast of the coast of Iceland and heading into the Icelandic economic zone. The ship was built at the close of last century.

Picture: CYPLiv

The Russian nuclear powerboat Dmitrij Donskoj was on its way along Norway’s coast this summer after participating in a military exercise in the Baltic Sea. Built in the 1970’s, the submarine is the largest in the world.

Picture taken in Denmark: NRK-Norwegian state television.