An advance-purchase agreement for pandemic influenza vaccine

On 10 September 2018, the Chief Epidemiologist, on behalf of Icelandic Government, signed an advance purchase agreement with GlaxoSmithKline (GSK) on the purchase of 300,000 doses of pandemic influenza vaccine. This agreement is based on a similar agreement with GSK made by Denmark and is valid for four years with the possibility of extension for a maximum of 10 years. The agreement is part of the Icelandic government preparedness plan for pandemic influenza, and its implementation is carried out by the Chief Epidemiologist.

The agreement ensures that Icelanders will receive the vaccine as soon as possible after a pandemic has been declared. Since the vaccine production cannot be started until a pandemic has been declared, there will be about four to six months from the start of the epidemic until the vaccine is delivered. Experience shows that a pandemic vaccination campaign can be expected to cover approximately half of the nation, and if it becomes necessary to vaccinate twice in order to get a satisfactory response, the amount of vaccine should be sufficient.

New guidelines on response to microbial contamination of drinking water and guidance for the public about boiling drinking water

Local Health Inspection Authorities, the Food and Veterinary Authority, the Chief Epidemiologist and the Environment Agency of Iceland have issued guidelines on response to microbial contamination of drinking water. Their aim is to ensure good cooperation between the authorities concerned and to coordinate response and high-quality information to the general public. If microorganisms are detected in samples above allowed maximum levels, the necessary measures must be taken to restore water quality. The remedies required are the responsibility of water distribution companies if microbiological contamination is detected in a distribution system or a water basin.

The Chief Epidemiologist, Þórólfur Guðnason, signs the advance-purchase agreement for influenza pandemic vaccine.
while homeowners are responsible if the problem is caused by the house plumbing system.

When certain types of microorganisms are detected in drinking water, the Health Inspection Authority, in consultation with the local health authorities, issues an advisory to consumers that all water intended for consumption or cooking needs to be boiled. These instructions will be accessible on the websites of the Local Health Inspection Authorities, the Food and Veterinary Authority and the Chief Epidemiologist for information to the public.

Listeria in European vegetables

Frozen maize beans from COOP and maize and mixed vegetables from Greenyard were recently recalled in Iceland after a warning from the European Rapid Alert System for Food and Feed (RASFF). The vegetables were processed and frozen in a factory in Hungary but packed elsewhere. In some EU member states, it has been possible to trace at least 47 cases of infection due to Listeria monocytogenes to maize and frozen vegetables produced in the above-mentioned factory in Hungary. Frozen, lightly heated vegetables are considered a finished product, which means that they are consumed without further heating, for instance in salads.

The Food and Veterinary Authority and the Chief Epidemiologist urged consumers on their web pages last July to follow the food handling instructions that appear on the packaging of frozen vegetables and maize and ensure that cross-contamination does not occur. This year, two individuals have been diagnosed with Listeria monocytogenes infection in Iceland. The cases in Iceland could not be linked to the consumption of frozen vegetables. Those in danger of becoming infected are mostly young children, the elderly, pregnant women and people with an impaired immune system.

Measles on board airplanes

Since 2016, measles cases have repeatedly occurred on board aircraft passing through Iceland. The first such case occurred on board an Icelandair plane in August 2016 in a child in transit in Iceland on its way from Canada to England. One unvaccinated Icelander on the same plane became ill of measles. In the spring of 2017, a nine-month-old child became ill after returning to Iceland from Thailand. The baby’s twin brother became ill of measles two weeks later in Iceland. The brothers were unvaccinated because of their young age. By the end of October 2017, an Icelandic resident who had been staying in Bangladesh became ill with mild symptoms after returning to Iceland. He had a history of adequate vaccination against measles and the antibody response was potent, leading to mild non-characteristic morbidity syndrome. In May of this year, a case of measles was confirmed on board an Icelandair plane flying from Germany to Canada with a transit in Iceland and again, in July, in an individual travelling from England to the United States with WOW air, also transiting in Iceland. No Icelanders became infected in these airplanes.

The alert systems of the European Union and the World Health Organization are very powerful tools for monitoring travel-related events due to infectious diseases. This facilitates the Chief Epidemiologist’s providing information to passengers and monitoring the consequences of possible infections. In none of the above events was there a spread of infection in this country, thanks to good protection from herd immunity provided by a high level of participation in vaccinations. Events similar to those just described can be expected as long as measles are ongoing in countries east and west of Iceland.

Photo: Icelandair
Prophylactic treatment of HIV-infection because of sexual intercourse

At its meeting on 25 June 2018, the Icelandic Medicine Pricing and Reimbursement Committee (MPRC) approved the generic drug Emtricitabine/Tenofovir disoproxil Krka for use in pre-exposure prophylaxis against HIV (PrEP treatment).

Requirements for the licensing were that only physicians at the Landspitali University Hospital (LUH) specialized in infectious diseases could prescribe the product and that the treatment would be granted according to the clinical guidelines of the LUH Department of Infectious Diseases. These guidelines provide for giving information on HIV and other sexually transmitted diseases to those who receive the drug, as well as information on the prevention of sexually transmitted diseases in general. Also, individuals who receive the drug must undergo a specific check for a few months. The license of the Committee is valid for one year and will be reassessed with respect to cost and the number of people treated with this medicine. The Chief Epidemiologist believes that this decision of the MPRC is a milestone in the fight against HIV and other sexually transmitted diseases as the Chief Epidemiologist and the ministerial working group for prevention of sexually transmitted diseases have previously identified the importance of this arrangement.

Men who have sex with men (MSM) and blood donations

Last summer, the discussion on whether homosexual men (MSM) should be permitted to give blood was once again raised. The Chief Epidemiologist has evaluated the situation at the request of the Ministry of Health, and has expressed his opinion, while taking into account the experience and risk assessment of other nations, that allowing MSM to give blood if they have abstained from sexual intercourse during the past 6 months should be considered. With careful blood screening, there should be little or almost no risk of blood-borne infection by such an arrangement. It should be kept in mind that no blood transfusion is completely safe, and all actions taken must be focused on minimising the risk. Therefore, screening for blood-borne diseases must apply to all blood donors.

According to Regulation No. 441/2006 on the Collection, Treatment, Preservation and Distribution of Blood, the Blood Bank shall take the initiative in this decision-making process in cooperation with its Statutory Advisory Committee on Blood Transfusions. It is natural that the Advisory Committee on Communicable Diseases, the Chief Epidemiologist, and the Ministry of Health should also have an opportunity to comment on this issue.

The prerequisites for allowing MSM to give blood after 6 months of abstinence from sexual intercourse is, in the opinion of Chief Epidemiologist, as follows:

- Questions to the blood donor must be elaborate and the utmost confidentiality must be kept regarding the answers.
- Research methods for screening all blood for HIV, hepatitis B and C and syphilis must be reliable and cost-effective. Only the Blood Bank, in collaboration with the Department of Microbiology at the LUH and foreign blood banks, can answer which research methods are the most cost-effective and what the cost of screening would be.
Use of antimicrobials in 2017

The annual report on antibiotic use and the prevalence of antimicrobial resistance in Iceland in humans and animals in 2017 has been published. The report is a collaboration between the Chief Epidemiologist, the LUH Department of Microbiology, the Food and Veterinary Authority, and the Icelandic Medicines Agency.

The report states that antimicrobial use in humans increased by over 3% in 2017 compared to 2016, while antimicrobial use in animals in Iceland remained one of the lowest compared with other European countries. This causes some disappointment since, at the same time, antimicrobial consumption was reduced in humans in the other Nordic countries. Attention is given to decreasing use of antimicrobials in children under 5 years of age while on the other hand, use increased among people 65 years and over.

Antimicrobial resistance is still fairly low in Iceland relative to neighbouring countries and it was largely unchanged compared with 2016.

In April 2017, a working group appointed by the Minister of Health submitted a report on action against the spread of antimicrobial resistance. The working group proposed ten recommendations that were deemed necessary in the fight against antimicrobial resistance. These included recommendations on how to reduce antimicrobial use in humans and recommendations on monitoring of antimicrobial resistance in foreign and domestic foodstuffs.

In 2018, work was started among physicians with the aim of raising their awareness of improving their prescription habits regarding antimicrobials, which will hopefully lead to decreased use. There was also increased control of antimicrobial resistant bacteria in food and research into the nature of the spread of antimicrobial resistance was increased. Hopefully, all these factors will prove useful in combating antimicrobial resistance, which is considered one of the main health threats of our time.