BIOMEDICAL TECHNOLOGY, EPIDEMIOLOGY AND FOOD SAFETY SHARING INFORMATION AND PROMOTING COOPERATION AMONG NETWORK MEMBERS AND THE WORLD



CENTAUR GLOBAL NETWORK

2013-04-20-031 Foodborne illness, 2011 - Europe

(03) Food-borne, water-borne and air-borne diseases;

FOODBORNE ILLNESS. 2011 - EUROPE

A ProMED-mail post http://www.promedmail.org>

ProMED-mail is a program of the International Society for Infectious Diseases < http://www.isid.org>

Date: Thu 9 Apr 2013

Source: European Food Safety Authority (EFSA) [edited] http://www.efsa.europa.eu/en/press/news/130409.htm

Rise in human infections from _Campylobacter_ and _E. coli_, whilst _Salmonella_ cases continue to

fall: EFSA and ECDC 2011 zoonoses report

Campylobacteriosis remains the most reported zoonotic disease in humans [in Europe], with a continuous increase in reported cases over the last 5 years. The trend in reported human cases of enterohemorrhagic _Escherichia coli_ (EHEC) has also been increasing since 2008 and was further strengthened due to the outbreak in the summer of 2011. Salmonellosis cases in humans have continued to fall, marking a decrease for the 7th consecutive year. These are some of the main findings of the annual report on zoonoses and foodborne outbreaks in the European Union for 2011 produced jointly by the European Food Safety Authority and the European Centre for Disease Prevention and Control (ECDC).

The report supports the European Commission and EU Member States in monitoring risks related to zoonotic diseases. These diseases can be transmitted directly or indirectly between animals and humans, for instance by consuming contaminated foodstuffs or through contact with infected animals.

"The good news is that the positive trend in reduction of salmonellosis in humans and poultry is continuing. However, the increase in _Campylobacter_ and EHEC cases highlights the continued need to monitor and control the presence of these bacteria in the food chain in order to reduce the risk of human exposure," said Pia Makela, Head of EFSA's Biological Monitoring Unit.

Johan Giesecke, Chief Scientist at ECDC, added: "We need to remain vigilant and continue to strengthen our collaboration with all important partners involved in the prevention and control of zoonotic diseases. Although the results of the report show a sustained decrease in salmonellosis cases in humans, _Campylobacter_, and EHEC cases are still increasing. We can't lower our guard."

In 2011, a total of 220 209 _Campylobacter_ cases were reported in humans, 2.2 percent more than in 2010. This bacterium can cause diarrhea and fever, and the most common foodstuff in which _Campylobacter_ was found was chicken meat.

EHEC bacteria accounted for 9485 human disease cases in 2011. The strong increase observed in 2011 was primarily due to the large outbreak of the rare strain O104:H4 in Germany and France associated with sprouted seeds; however, an increasing trend had already been reported in previous years. Infection with EHEC strains can lead to bloody diarrhea and haemolytic uremic syndrome, a serious complication that can be fatal. With respect to the presence of this bacterium in animals and foodstuffs, EHEC was most often reported in bovine meat products and cattle. [The chimeric O104:H4 strain is not clearly zoonotic - Mod.LL]

Although salmonellosis has declined significantly in the last years, in 2011 it was still the 2nd most frequently reported zoonotic disease in humans, accounting for 95 548 reported cases. The continued decrease in human cases reflects the results of the _Salmonella_ control programs put in place by EU Member States and the European Commission which have led to a decline in salmonellosis in poultry populations, particularly laying hens (and hence eggs) and chickens.

Salmonella, which can cause fever, diarrhea and abdominal cramps, was most often found in fresh chicken meat, as well as minced chicken meat and chicken meat preparations.

BIOMEDICAL TECHNOLOGY, EPIDEMIOLOGY AND FOOD SAFET

SHARING INFORMATION AND PROMOTING COOPERATION AMONG NETWORK MEMBERS AND THE WORLD



The report also shows a total of 5648 foodborne outbreaks recorded across the EU in 2011. Foodborne outbreaks include 2 or more human cases in which the same contaminated food has been consumed. These affected 69 553 people and caused 93 deaths. Salmonella continued to be the most frequently reported cause of the outbreaks with known origin (26.6 percent of all outbreaks), followed by bacterial toxins

(12.9 percent), and _Campylobacter_ (10.6 percent). Even though _Campylobacter_ is the most often reported cause of zoonotic diseases overall, it is less often reported as a cause of foodborne

The most common food sources of the outbreaks were eggs and egg products, mixed food, fish, and fish products.

The report covers 10 zoonotic diseases in total, including also listeriosis, echinococcosis, yersiniosis, brucellosis, tuberculosis due to _Mycobacterium bovis_, trichinellosis, and rabies. It supports the European Commission and EU Member States in monitoring and reducing risks related to zoonotic diseases.

The disease alveolar echinococcosis in man, which is caused by the larval form of _Echinococcus multilocularis parasite, has increased in humans over the last 5 years. In several central European countries, this parasite was commonly reported in foxes, which are the main source of human infection. Echinococcosis is a serious disease which develops gradually over several years and, if untreated, may be fatal.

Communicated by:

ProMED-mail

cpromed@promedmail.org>

[The full report, EFSA/ECDC: The European Union Summary Report on Trends and Sources of Zoonoses, Zoonotic Agents and Food-borne Outbreaks in 2011. EFSA Journal 2013, 11(4): 3129 [250

doi:10.2903/j.efsa.2013.3129, can be found at

http://www.efsa.europa.eu/en/efsajournal/pub/3129.htm. - Mod.LL

A HealthMap/ProMED-mail map can be accessed at:

http://healthmap.org/r/1-q1>.]

[see also:

Salmonellosis - Spain: (CI) nursery school 20130322.1599133 Salmonellosis - UK (02): (England) food festival 20130312.1583339 Salmonellosis - UK: (England) food festival 20130311.1581524 E. coli EHEC - Ireland: (CK) day care center 20130225.1559374 E. coli EHEC - Sweden: ground beef, kebabs ex Netherlands

20130217.1546409

E. coli EHEC - Denmark: O157, increased virulence: 20130111.1491238 2012

Salmonellosis, serotype Mikawashima - Norway 20121127.1424956 Salmonellosis, serotype Enteritidis PT1 - UK: pasteurized egg whites

20121019.1351067

Salmonellosis, serotype Newport - UK: (Scotland) watermelon susp.

20120202.1029457

Salmonellosis, serotype Agona - Finland (02): (US) backgr.

20120727.1217662

Salmonellosis, serotype Agona - Finland: (US) 20120725.1213581 E. coli EHEC - Finland: (southwest), unpasteurized milk

20120627.1182388

E. coli EHEC - Europe (02): Germany (HH) 20120229.1056769 E. coli EHEC - Europe: (France, Germany, Denmark) O104

20120126.1022870

Salmonellosis, serotype Typhimurium DT193 - UK 20120123.1017854 2011

BIOMEDICAL TECHNOLOGY, EPIDEMIOLOGY AND FOOD SAFETY SHARING INFORMATION AND PROMOTING COOPERATION AMONG NETWORK MEMBERS AND THE WORLD



CENTAUR GLOBAL NETWORK

Campylobacteriosis - UK (02): (England), hotel guests 20111201.3499 Campylobacteriosis - UK: (IW) schoolchildren 20111022.3149 Salmonellosis, serotype enteritidis PT14b - UK (02): England ex Spain 20110817.2491

E. coli O104 - EU (36): intervention strategies 20110827.2617 Salmonellosis, serotype Enteritidis PT14b - UK: ex Spain, eggs

20110729.2280

E. coli O104 - EU (30): update, fenugreek susp 20110707.2052 E. coli O104 - EU (20): secondary cases 20110618.1862 E. coli O104 - EU (10): USA commentary 20110605.1718 E. coli O104 - EU: (Germany, Denmark, Sweden) Spanish cucumbers 20110526.1611

2009

Echinococcosis - Kazakhstan: (AM) 20090902.3091

200

Echinococcosis, human, canine - Kazakhstan 20070128.0371 Echinococcosis, human, canine - Kazakhstan (Zhambylskiy) 20070127.0360]