IN BELGIUM

Campylobacter
Campylobacter is a gram-negative bacterium. It’s one of the most common causes of diarrhoeal illness. Virtually all human Campylobacter infections (99%) are caused by one species, Campylobacter jejuni. Most people who become ill with campylobacteriosis get diarrhoea, cramping, abdominal pain, and fever within 2 to 5 days after exposure to the organism. The diarrhoea may be bloody and can be accompanied by nausea and vomiting. The illness typically lasts 1 week. The disease can be asymptomatic as well. Campylobacter can cause life-threatening sepsis in immunocompromised persons. Contamination occurs by eating contaminated food (particularly poultry), water, unpasteurised milk, shellfish or contact with infected animals or humans.

In Belgium 7473 cases were reported to the I.P.H. by the sentinel labs in 2000, 7357 in 2001, 7354 in 2002 and 4200 in 2003 (up to august). Campylobacter in Belgium is most frequent during the summer months (see figure 1).

Figure 1: Number of cases of Campylobacter per month reported by the sentinel labs, 2000-2002.

Virtually all persons infected with Campylobacter will recover without any specific treatment but sometimes antibiotics have to be used. Rarely, some long-term consequences can result from a Campylobacter infection. Some people may develop reactive arthritis, others may develop the Guillain-Barré syndrome (GBS) which can lead to paralysis that lasts several weeks and usually requires intensive care. It is estimated that approximately 1 in every 1000 reported campylobacteriosis cases leads to GBS. The age-specific incidence of GBS increases with age from 1.5/100,000 in persons <15 years to 8.6/100,000 in persons from 70 to 79 years.
The most affected age group by Campylobacter used to be patients from 0 to 14 years old. Actual trends show that age group from 15 and above is getting more and more affected by Campylobacter (see table 1 and figure 2).

Table 1: Evolution of the number of Campylobacter cases in the age categories < 15 years and 15 and more, 1995-2002.

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</thead>
<tbody>
<tr>
<td>&lt; 15 YEARS</td>
<td>2611</td>
<td>2646</td>
<td>2886</td>
<td>3291</td>
<td>3161</td>
<td>3545</td>
<td>3539</td>
<td>3365</td>
</tr>
<tr>
<td>15 AND &gt;</td>
<td>2168</td>
<td>2345</td>
<td>2731</td>
<td>3319</td>
<td>3353</td>
<td>3928</td>
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<td>3989</td>
</tr>
<tr>
<td>Total</td>
<td>4779</td>
<td>4991</td>
<td>5617</td>
<td>6610</td>
<td>6514</td>
<td>7473</td>
<td>7357</td>
<td>7354</td>
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Figure 2: Evolution of the age distribution < 15 years and 15 and > in percentages, 1995-2002.

As more and more adults present campylobacteriosis, it’s very important to respect preventive measures, especially changing dishcloths on a regular basis, as dishcloths are an excellent source of cross-contamination.

Sources:
http://www.cdc.gov/ncidod/dbmd/diseaseinfo/campylobacter_t.htm,
http://www.iph.fgov.be/epidemio/epinl/index8.htm,

ELSEWHERE IN EUROPE

Botulism in France
In France, 4 cases of botulism, of whom 3 belonged to the same family, have been linked to the consumption of contaminated hallal sausage made of beef and poultry. All four cases had relatively mild symptoms, with onset on the 25th August, and were hospitalised. All recovered. Botulinum toxine B was confirmed in serum specimens of all 4 cases and in a leftover of the sausage eaten by one of the cases. An investigation by the food safety agency is carried out at the production plant. Products from the implicated producer are known to have been distributed throughout France and exported to Italy and the Comores islands, but no other cases have so far been reported. Botulism incidence in France has been stable since 1990, with an annual average of 15 outbreaks and 28 cases. Type B toxin is the most frequent cause and is involved in 87% of cases. Transmission is predominantly foodborne, and at present no case of wound botulism has been identified. The most frequent food sources are home
preserved ham or other pork products, and home bottled vegetables. Since 1990, commercial products have been implicated in 23 of 137 outbreaks with a confirmed or suspected food source. Botulism is a muscle-paralyzing disease caused by a toxin made by a bacterium called Clostridium botulinum. There are three main kinds of botulism: food born botulism occurs when a person ingests pre-formed toxin that leads to illness within a few hours to days. Food borne botulism is a public health emergency because the contaminated food may still be available to other persons besides the patient, infant botulism occurs in a small number of susceptible infants who harbor C. botulinum in their intestinal tract and wound botulism occurs when wounds are infected with C. botulinum that secretes the toxin. With food borne botulism, symptoms begin within 6 hours to 2 weeks (most commonly between 12 and 36 hours) after eating toxin-containing food. Symptoms of botulism include double vision, blurred vision, drooping eyelids, slurred speech, difficulty swallowing, dry mouth, muscle weakness that always descends through the body: first shoulders are affected, then upper arms, lower arms, thighs, calves, etc. Paralysis of breathing muscles can cause a person to stop breathing and die, unless mechanical ventilation is provided. Botulism is not spread from one person to another. Food borne botulism can occur in all age groups. An antitoxin exists. The antitoxin is effective in reducing the severity of symptoms if administered early in the course of the disease. Most patients eventually recover after weeks to months of supportive therapy.


Increase in HIV diagnoses in the Republic of Ireland, 2002
Figures for newly diagnosed HIV infections in Ireland in 2002 were released last week by the National Disease Surveillance Centre. There were 364 newly diagnosed HIV infections in Ireland in 2002, compared with 299 cases diagnosed in 2001, representing an increase of 22%. This brings the total cumulative number of HIV cases reported in Ireland to December 2002 to 3009. Of the 364 cases diagnosed in 2002, 198 (54%) were female and 165 (45%) were male. During 2002, over 80% of the diagnoses were in patients between 20 and 40 years of age (mean age 30.8 years). During 2002, 63.5% of newly diagnosed HIV infections had been acquired heterosexually. Diagnosed HIV infections among heterosexuals increased by 34% between 2001 and 2002. Since 1994, the number of infections reported for the heterosexual category has increased each year and between 1994 and 2002, there was an increase of almost five-fold. In the heterosexual category, 77% of the diagnoses during 2002 were born in sub-Saharan Africa and 10% were born in Ireland.


E. coli O157 infects nine children in Northern Ireland
Nine children have been diagnosed with the potentially fatal Escherichia coli O157 infection at a nursery in Antrim, Northern Ireland. The infection is a serious form of food poisoning. 60 children and staff are being screened for the illness, and the Northern Health Board is running further checks on children who had initially tested negative. It has the potential to be a serious infection. The primary source of the infection is from cattle, then people acquire the infection, either through direct contact with the animals or through the food chain, and it also readily passes from person to person. In the UK, the number of cases has tripled in the last decade, jumping from 361 cases in 1991 to over 1000 cases in 1997. About 15 per cent of cattle are now
thought to carry it in their gut. E. coli O157:H7 infection often causes severe bloody diarrhoea and abdominal cramps; sometimes the infection causes non bloody diarrhoea or no symptoms. Usually little or no fever is present, and the illness resolves in 5 to 10 days. In some persons, particularly children under 5 years of age and the elderly, the infection can also cause a complication called hemolytic uremic syndrome, in which the red blood cells are destroyed and the kidneys fail. About 2% to 7% of infections lead to this complication. In the United States, hemolytic uremic syndrome is the principal cause of acute kidney failure in children, and most cases of hemolytic uremic syndrome are caused by E. coli O157:H7. How to prevent infections? Cook all ground beef and hamburger thoroughly. Avoid spreading harmful bacteria in your kitchen. Keep raw meat separate from ready to eat foods. Wash hands, counters, and utensils with hot soapy water after they touch raw meat. Wash fruits and vegetables thoroughly, especially those that will not be cooked. Drink municipal water that has been treated with chlorine or other effective disinfectants. Make sure that persons with diarrhoea, especially children, wash their hands carefully with soap after bowel movements to reduce the risk of spreading infection, and that persons wash hands after changing soiled diapers. Anyone with a diarrhoeal illness should avoid swimming in public pools or lakes, sharing baths with others, and preparing food for others. Sources: [http://www.promedmail.org](http://www.promedmail.org), [http://www.cdc.gov/ncidod/dbmd/diseaseinfo/escherichiacoli_g.htm](http://www.cdc.gov/ncidod/dbmd/diseaseinfo/escherichiacoli_g.htm).

**IN THE REST OF THE WORLD**

**Plague in the US**
A deer found in southwestern Montana was diagnosed with plague, state officials said on 9 September. While the discovery means hunters should take precautions, it should not alter their hunting plans this fall. Hunters can protect themselves by wearing gloves when butchering their game, making sure the meat is cooked thoroughly to kill any bacteria, and washing hands after handling wild game. Plague, caused by Yersinia pestis is enzootic in the south and western parts of the US, including Colorado, New Mexico, Arizona, and California. The usual infected rodent in the USA is the prairie dog, and less often, squirrels. There are about 10 to 15 cases each year in humans in the USA, who usually become infected when bitten by the flea vector or, less commonly, by direct contact with the infected rodent. Human to human spread of the disease is extremely uncommon. The flea vector of Y. pestis preferentially feeds on its rodent host but will occasionally feed on a human. Infection in the flea leads to obstruction of its gastrointestinal tract, causing it to regurgitate the bacilli while attempting to feed. Cats and other mammals occasionally become infected via the same mechanism as humans. Sources: [http://www.promedmail.org](http://www.promedmail.org), [http://www.bt.cdc.gov/agent/plague/index.asp](http://www.bt.cdc.gov/agent/plague/index.asp).

**Rabies in Mordovia, Russia**
The central region of the European part of Russia is endemic for fox rabies. Although human cases were not registered in Mordovia since 1985, they were registered regularly in surrounding territories. In 2000, 22 human cases of rabies were reported in the Russian federation, 22 in 2001 as well. Rabies in Russia (as well as in most other states of the FSU) after World War II has been maintained by small canids. The increase in human cases in 2001 and 2002 was related to the activation of wildlife epizootics, by the lack of public health services (reduced availability of anti-rabies
biologicals), and by common social issues. Rabies can be prevented by vaccination. If you would be exposed to rabies, one of the most effective methods to decrease the chances for infection involves thorough washing of the wound with soap and water. Specific urgent medical attention for someone exposed to rabies is called post exposure prophylaxis or PEP (=immunoglobulin and vaccination). Once symptoms appear mortality will be 100%. The national reference centre for rabies in Belgium is the Institute Louis Pasteur. Foxes are immunised in Belgium.

Leptospirosis claims 27 lives in Gujarat, India
At least 27 people in south Gujarat have lost their lives to leptospirosis, a disease spread by rodents, in less than a week. With the death of 2 farm labourers on Friday, 13 September 2003, the official toll reached 27 for the last 4 days even as 25 new patients were admitted to the hospital. Officials said 177 victims of the disease from 131 villages are under treatment. The disease has spread in Surat, Navasari, and Valsad districts. Unconfirmed reports put the toll higher and the affected patients at over 500. The disease is common during the monsoon. It is caused when barefoot walkers come in contact with the urine of rats affected by the disease. Most of the patients are farmhands belonging to rural regions where people usually walk barefoot. Surat Medical College has initiated various steps to contain the outbreak and send medicines to affected villages. They started an awareness campaign in rural areas to make people aware of the causes of the disease. Leptospirosis is a fairly common disease, usually transmitted to humans through contact with water contaminated with rodent urine. The illness is extremely variable in degree, ranging from asymptomatic or very mild to severe liver and kidney failure (Weil’s disease). Leptospirosis is treated with antibiotics, such as doxycycline or penicillin, which should be given early in the course of the disease. Intravenous antibiotics may be required for persons with more severe symptoms. Sources: http://www.promedmail.com, http://www.cdc.gov/ncidod/dbmd/diseaseinfo/leptospirosis_g.htm#How%20is%20lep tospirosis%20treated.