IN BELGIUM

LISTERIOSIS

Introduction
Listeriosis is considered as a “food borne illness” because most people are infected after eating food contaminated by Listeria monocytogenes (See below for prevention measures). These bacteria can be carried by many animals and has been found in soil, water, and sewage. Unlike most other bacteria, L. monocytogenes does not stop growing when food is in refrigerator—its growth is merely slowed. Fortunately, typical cooking temperatures and the pasteurization process do kill these bacteria.

Symptoms
Symptoms of infection may appear anywhere from 3-70 days later after the infected meal. Most people do not get any noticeable symptoms (flu-like symptoms or slight intestinal disorders). Persons at risk to have serious problems with L. monocytogenes are the YOPI group: Young, Old, Pregnant, Immunocompromised individuals. L. monocytogenes can cause meningoencephalitis and/or septicemia in newborns, elderly, immunocompromised patients and abortion in pregnant women.

Diagnosis
The only way to diagnose listeriosis is to isolate L. monocytogenes from blood, cerebrospinal fluid, and stools or from any sterile sites of the body. Serology is not recommended.

Treatment
Listeriosis is treated with antibiotics and when infection occurs during pregnancy, antibiotics given promptly to pregnant woman can often prevent infection of her fetus or newborn.

Occurrence
Although food contamination rate by L. monocytogenes is high in Belgium (20% of minced pork samples and 23% of smoked salmon samples were contaminated in 2002*), few cases were diagnosed even if an increasing for 2003 is registered. Reasons of this low incidence have to be studied:

• Either clinicians do not systematically seek for L. monocytogenes in YOPI patients with fever
• Stools of patients with gastroenteritis are not systematically analyzed for L. monocytogenes
• Either incidence is really low
Table 1: Number of registered cases, 2000-2003 (sentinel laboratories network and reference laboratory)

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003 January to August</th>
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<tbody>
<tr>
<td></td>
<td>48</td>
<td>57</td>
<td>44</td>
<td>52</td>
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</table>

This disease is mainly diagnosed in the male group age from 65 and above. Women from 15 to 44 years of age do not represent an important part of confirmed cases. In 2000, no case was reported in this age group but in 2003, five cases were reported in this age group (figures 1,2). Reasons of this under-representation have to be analysed.

Fig 1: Distribution by age and age group

Fig 2: Distribution by age and age group

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2003</th>
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<tbody>
<tr>
<td>N. confirmed cases</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;1</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>5-14</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>45-64</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>65+</td>
<td>4</td>
<td>5</td>
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M= Male, F = female

Seasonality
No seasonal variation is observed.

RECOMMENDATIONS
As few cases are reported in Belgium, especially in female age group 15-44 years, and due to the serious consequences of listeriosis in YOPI patients (abortion, death), screening for L. monocytogenes should be realized for all YOPI patients with unexplained fever (=38°).

Prevention
For all people, taking these precautions can reduce the risk of listeriosis:

- Completely cook all meats and eggs
- Carefully wash raw vegetables before eating. Carrots and tomatoes are never contaminated by Listeria monocytogenes
- Keep raw meat away from raw vegetables and prepared foods. After cutting raw meat, wash the cutting board with detergent before using it for vegetables
- Avoid drinking unpasteurized milk or foods made from such milk (butter, ice cream, soft cheese)
- Wash hands thoroughly after handling raw meat
- Follow the instructions on food labels. Observe food expiration dates and storage conditions
High-risk persons (YOPI) should:

- Avoid soft cheeses, smoked fish
- Thoroughly cook leftovers
- Avoid foods from delicatessen shop
- Avoid pate, cooked ham, salami, cooked meat in jelly, “rillettes”
- Avoid raw minced meat from beef and poultry
- Avoid preparations with filet American
- Avoid raw fish and raw shellfish (oysters, mussels, shrimps)
- Avoid fish salads, meat salads, surimi salads

Source:
- IPH sentinel laboratories; Follow up G. Marchant and G. Ducoffre
- Reference Laboratory for Listeria, Dr Marc Yde IPH Brussels http://www.iph.fgov.be/Bacterio/lis.htm
- Department of food sciences Microbiology, Prof G. Daube, http://mda04.fmv.ulg.ac.be/

**ELSEWHERE IN EUROPE**

**Norovirus or Norwalk Virus in Germany**

Norwalk-like virus (NLV or Small Round Structured Virus, renamed Norovirus in 2002) is increasingly recognised as a cause of sporadic and epidemic viral gastroenteritis. The Norwalk-like virus is distributed widely in nature; its only known reservoir is human. The virus causes a relatively typical illness characterised by sudden-onset, forceful vomiting and nausea with variable amounts of mild diarrhoea. These gastrointestinal symptoms may be associated with fever, myalgia and headache. The incubation period varies from 15 to 50 hours and the mean duration is between 12 and 60 hours. Transmission has been demonstrated through food (in particular raw shellfish), through water, ice, by person-to-person transmission, and through aerosolisation of viral particles.

Outbreaks are reported from USA, Canada, Netherlands, UK and Ireland. In Germany, Norovirus are searched on routine. In 2003, The Robert Koch Institute registered an increasing of norovirus cases, on the opposite of other enteric pathogens (table 1).

<table>
<thead>
<tr>
<th></th>
<th>Salmonella</th>
<th>Campylobacter</th>
<th>Yersinia enter.</th>
<th>Norovirus</th>
<th>Rotavirus</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002 1-37 week</td>
<td>49 582</td>
<td>40 053</td>
<td>5 324</td>
<td>14 324</td>
<td>47 182</td>
</tr>
<tr>
<td>2003 1-37 week</td>
<td>43 679</td>
<td>32 595</td>
<td>4 599</td>
<td>35 442</td>
<td>41 762</td>
</tr>
</tbody>
</table>

Source: http://www.rki.de/INFEKT/EPIBULL/2003/40_03.PDF
http://www.eurosurveillance.org/em/v08n01/0801-221.asp?langue=02&
Ireland’s influenza season 2003/2004 begins with outbreak in Dublin
At the end of the second week of September a secondary school in Dublin reported that several students were ill with an influenza-like illness. In total, 81 pupils and one staff member were ill. The student attack rate was 26%.

Influenza A (H3N2) has been identified by the National Virus Reference Laboratory in four of the specimens. Investigations are ongoing to determine if the virus strain identified is similar to that in the 2003/2004 influenza vaccine. These are the first confirmed cases of influenza in Ireland this season.

Until now, only isolated cases of influenza, in two countries, have been reported to the European Influenza Surveillance Scheme (EISS, http://www.eiss.org). The report from Ireland is the first report of an influenza outbreak (that is, the occurrence of a localized cluster of cases) in Europe this season.


IN THE REST OF THE WORLD

Hong Kong SARS Expert Committee publishes its report
Hong Kong’s SARS Expert Committee (http://www.sars-expertcom.gov.hk/), which was set up by Hong Kong’s Chief Executive at the end of May to review the management and control of the severe acute respiratory syndrome (SARS) outbreak in Hong Kong, has today published a 279 page report and a 63 page summary report, both of which are entitled SARS in Hong Kong: from Experience to Action and are available at http://www.sars-expertcom.gov.hk/english/reports/reports.html. Source: http://www.eurosurveillance.org/ew/2003/031002.asp

Cholera in Liberia
A cholera outbreak is ravaging Liberia's capital, Monrovia. As of 21 September the total number of cases since the beginning of the year is 18 038 cases with 17 561 cases occurring since the beginning of the epidemic in June. During 15-21 September, 2352 cases were reported by 12 of the 22 organizations participating in the emergency surveillance system developed by WHO. The case fatality rate is low (below 1% ) in the cholera treatment centres.

West Nile Virus in USA
During the reporting week of Thu 25 Sep to Wed 1 Oct 2003, a total of 1034 human cases of WNV infection were reported from 27 states. From January 2003 up to October 2, 2003, 5921 cases with 119 deaths were reported.

Comparative table: 2002-2003

<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>2003</th>
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<tbody>
<tr>
<td>N of cases</td>
<td>4156</td>
<td>5921</td>
</tr>
<tr>
<td>N of deaths</td>
<td>284</td>
<td>119</td>
</tr>
<tr>
<td>Fatality rate</td>
<td>6.8%</td>
<td>2%</td>
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Source: http://www.cdc.gov/ncidod/dvbid/westnile/surv&controlCaseCount02.htm