



IRELAND (IRE)

Population: 3.5 million

Area: 70 283 km²



The designations and the presentation of material on this map of the Member States of the WHO European Region (as at 31 July 1997) do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines represent approximate border lines for which there may not yet be full agreement.

1. General information

The Republic of Ireland is administratively divided into 8 Health Board areas. Directors of Public Health (DPH) in each Health Board are, amongst other duties, responsible for the investigation and control of infectious diseases.

Under the Infectious Diseases Regulations of 1981 and subsequent amendments, a total of 35 diseases are scheduled. Doctors have a statutory obligation to notify a medical officer of health of a patient known, or suspected to be suffering from any of these diseases.

At the end of each week returns of all diseases notified are sent to the Department of Health and Children. Aggregated data are collated nationally.

Among the diseases which must be notified are the following:

- Bacillary dysentery
- Brucellosis
- nvCreutzfeldt Jacob Disease
- Food poisoning (bacteria other than *Salmonella*)
- Gastroenteritis (in children under 2 years of age)
- Salmonellosis (other than typhoid or paratyphoid)
- Typhoid and paratyphoid fever

However, it is generally accepted that under-reporting occurs.

The Food Safety Authority of Ireland (FSAI) is an independent statutory body, set up under the Food Safety Authority of Ireland Act 1998. Its role and legal responsibility is to ensure that food produced, distributed or marketed in the State meets the highest standards reasonably achievable. The FSAI is responsible for the enforcement of all food safety legislation in Ireland. The Authority operates the national food safety compliance programme by means of service contracts with the 47 government agencies currently involved in the enforcement of food legislation. These contracts, which came into effect in July 1999, outline an agreed level and standard of food safety activity that the agencies perform as agents of the Authority. These agencies act as agents of the Authority in the performance of their contracts and the Authority publishes details of these contracts (http://www.fsai.ie/serv_contract.htm).

The National Disease Surveillance Centre (NDSC) was established in 1998 conjointly by Ireland's eight health boards and with the approval of the Minister for Health and Children. The aim of the NDSC is to improve the health of the Irish Population by the collation, interpretation and provision of the best possible information on infectious diseases. From July 2000 the Department of Health and Children has delegated the responsibility for surveillance of infectious diseases to the NDSC (<http://www.ndsc.ie/>).

The FSAI works closely with the NDSC and the Department of Health and Children in monitoring foodborne illness and we have recently established a monitoring system for the surveillance of general enteric disease outbreaks. As this system is in its infancy it is acknowledged that the data are incomplete.

Given the recent establishment of both the FSAI and NDSC, outbreak and serotyping data presented here only relates to 1996, 1997 and 1998. The data on the prevailing serotypes of Salmonella isolates were obtained from the Department of Bacteriology, University College Hospital Galway. This represents data on isolates referred for serotyping and additional data provided by a number of other clinical laboratories in the country.

In summary the surveillance data is obtained from the following sources:

- Laboratory reporting systems
- National notification systems
- Outbreak reporting systems

It is hoped to combine and enhance this data in the future.

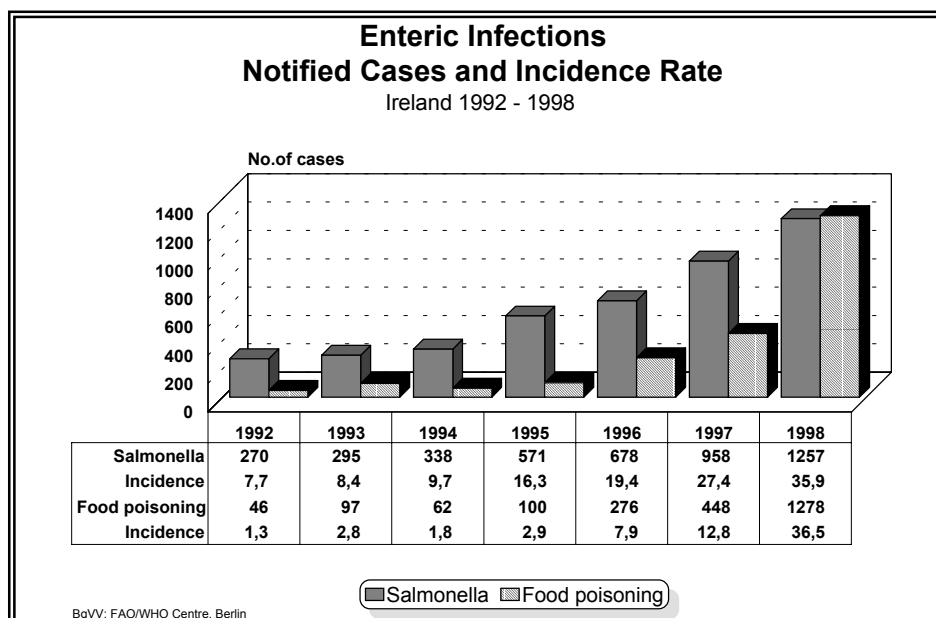
2. Statutory notification

Table IE 1

Reported cases and incidence rate of enteric infection
IRELAND 1992 - 1998

| Disease | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
|--|------|-------|------|------|------|------|------|
| Bacillary Dysentery | 283 | 219 | 203 | 97 | 59 | 41 | 120 |
| <i>Incidence rate</i> | 8.1 | 6.3 | 5.8 | 2.8 | 1.7 | 1.2 | 3.4 |
| Salmonellosis | 270 | 295 | 338 | 571 | 678 | 958 | 1257 |
| <i>Incidence rate</i> | 7.7 | 8.4 | 9.7 | 16.3 | 19.4 | 27.4 | 35.9 |
| Food poisoning | 46 | 97 | 62 | 100 | 276 | 448 | 1278 |
| <i>Incidence rate</i> | 1.3 | 2.8 | 1.8 | 2.9 | 7.9 | 12.8 | 36.5 |
| Paratyphoid fever | | | | | | | |
| Typhoid fever | 3 | 1 | 1 | 4 | 4 | - | 3 |
| <i>Incidence rate</i> | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | | 0.1 |
| Brucellosis | 26 | 28 | 14 | 6 | 10 | 7 | 15 |
| <i>Incidence rate</i> | 0.7 | 0.8 | 0.4 | 0.2 | 0.3 | 0.2 | 0.4 |
| Gastroenteritis (in children under 2 years of age) | 3410 | 3832 | 3043 | 3234 | 2997 | 2968 | 3472 |
| <i>Incidence rate</i> | 97.4 | 109.5 | 86.9 | 92.4 | 85.6 | 84.8 | 99.2 |

Figure IE 1



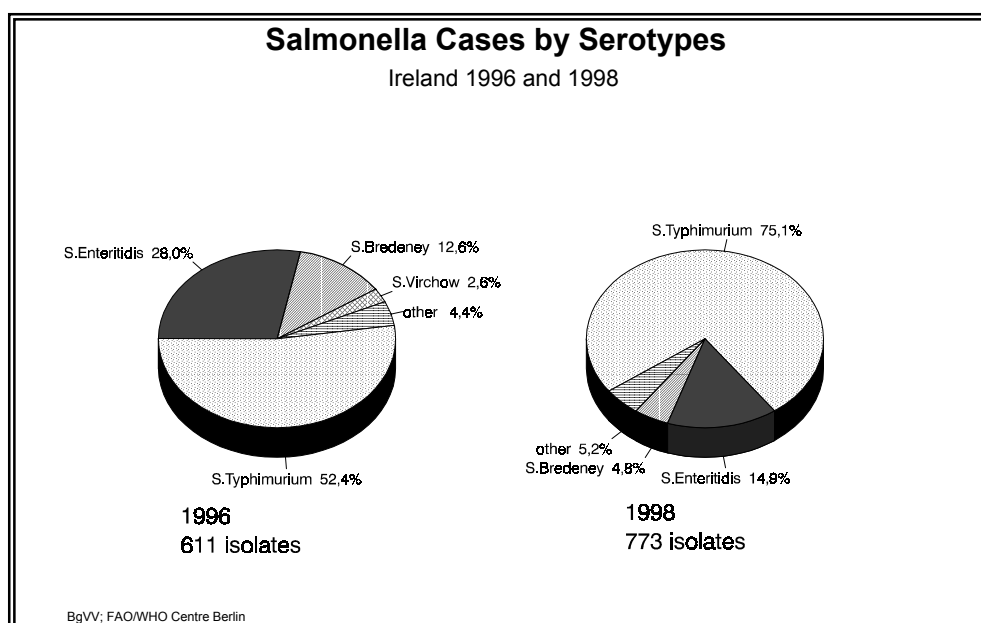
2.1 Detailed information on salmonellosis in Ireland

Table IE 2

Salmonella cases by serotypes
IRELAND 1996 - 1998

| Serotype | Year | | | Total | |
|-----------------------|------------|------------|------------|-------------|--------------|
| | 1996 | 1997 | 1998 | No. | % |
| <i>S. Enteritidis</i> | 171 | 219 | 114 | 504 | 22.6 |
| <i>S. Typhimurium</i> | 320 | 512 | 575 | 1407 | 63.0 |
| <i>S. Infantis</i> | 4 | 1 | 18 | 23 | 1.0 |
| <i>S. Agona</i> | 7 | 4 | 6 | 17 | 0.8 |
| <i>S. Bredeney</i> | 77 | 78 | 37 | 192 | 8.6 |
| <i>S. Derby</i> | 5 | 13 | 5 | 23 | 1.0 |
| <i>S. Virchow</i> | 16 | 14 | 7 | 37 | 1.7 |
| <i>S. Hadar</i> | 5 | 3 | 3 | 11 | 0.5 |
| <i>S. Saintpaul</i> | - | 1 | - | 1 | 0.0 |
| <i>S. Montevideo</i> | 1 | 3 | 2 | 6 | 0.3 |
| <i>S. Newport</i> | - | 2 | 3 | 5 | 0.2 |
| <i>S. Anatum</i> | - | 1 | 1 | 2 | 0.1 |
| <i>S. London</i> | - | - | 2 | 2 | 0.1 |
| <i>S. Ohio</i> | 5 | - | - | 5 | 0.2 |
| Total | 611 | 851 | 773 | 2235 | 100.0 |

Figure IE 2



WHO Surveillance Programme for Control of Foodborne Infections and Intoxications in Europe
7th Report

Country Reports: *IRELAND 1993 – 1998*

3. Epidemiologically investigated incidents

3.1 Foodborne diseases by causative agents

Table IE 3

Foodborne disease outbreaks by causative agents
IRELAND 1997 - 1998

| Causative Agents | 1997 | | 1998 | | Total | | |
|---|------------|----------------|------------|----------------|------------------|-------------|--------------------------|
| | out-breaks | cases in outbr | out-breaks | cases in outbr | outbreaks No. | % | cases in outbr No. |
| <i>Cl. perfringens</i> | | | 1 | 13 | 1 | 2.4 | 13 |
| <i>Salmonella</i> (other than <i>S. Typhi</i> and <i>S. Paratyphi</i>) | 8 | 182 | 16 | 626 | 24 | 58.5 | 808 |
| <i>E. coli</i> | | | 3 | 19 | 3 | 7.3 | 19 |
| SRSV | | | 4 | 147 | 4 | 9.8 | 147 |
| Unknown** | | | 9 | 173 | 9 | 22.0 | 173 |
| OVERALL TOTAL | 8 | 182 | 33 | 978 | 41 | 100 | 1160 |

§ Outbreaks include transmission by food, water and person-to-person.

For total *E. coli* O157:H7 figures see Table IE8 in section 4 (Further information).

3.2 Foodborne diseases by incriminated foods

Table IE 4

Foodborne disease outbreaks Incriminated foods
IRELAND 1997 - 1998

| Food | Year | | | | | |
|---------------------------------|----------|------------|-----------|------------|-----------|-------------|
| | 1997 | | 1998 | | Total | |
| | No. | % | No. | % | No. | % |
| Egg/Mayonnaise | 3 | 37 | 5 | 15 | 8 | 19.5 |
| Meat/poultry | 1 | 13 | 6 | 17 | 7 | 17.1 |
| Cheese | | | 1 | 3 | 1 | 2.4 |
| Other foods (please specify) | | | | | | |
| Cream | 1 | 13 | | | 1 | 2.4 |
| Water | | | 1 | 13 | 1 | 2.4 |
| Mousse | | | 2 | 5 | 2 | 4.9 |
| Salad | | | 2 | 5 | 2 | 4.9 |
| Confectionery | | | 1 | 3 | 2 | 4.9 |
| Not known | 3 | 37 | 15 | 45 | 18 | 43.9 |
| Total | 8 | 100 | 33 | 100 | 41 | 100 |

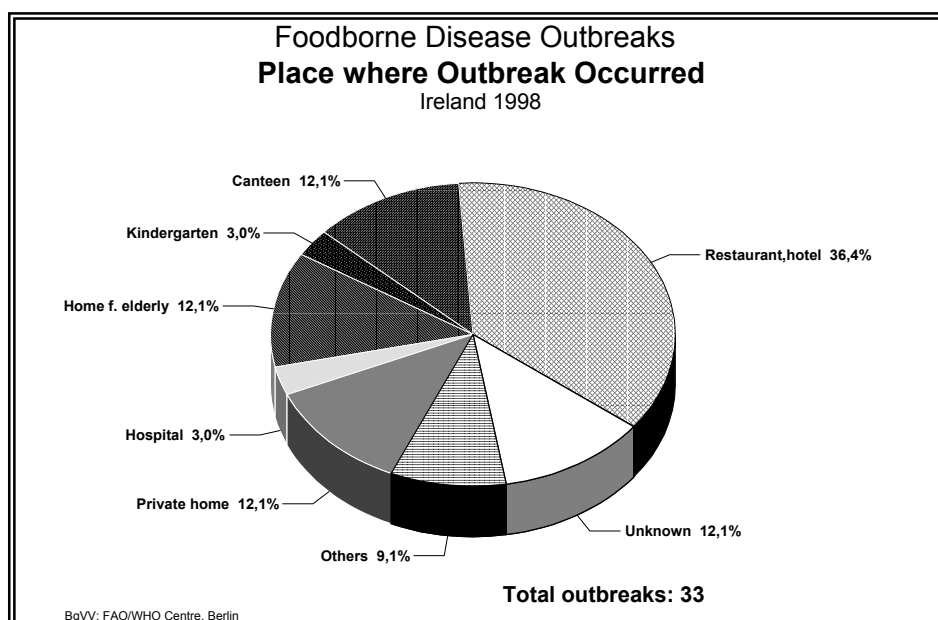
3.3 Places where food was eaten or acquired

Table IE 5

**Foodborne disease outbreaks by place where food was eaten or acquired
IRELAND 1997 - 1998**

| Place | Year | | | | | |
|--|----------|------------|-----------|------------|-----------|------------|
| | 1997 | | 1998 | | Total | |
| | No. | % | No. | % | No. | % |
| Private home | - | - | 4 | 12 | 4 | 9.7 |
| Restaurant (incl. Hotel and guest house) | 4 | 50 | 12 | 36 | 16 | 39 |
| Canteens *) | - | - | 4 | 12 | 4 | 9.7 |
| School/kinder-garten | - | - | 1 | 3 | 1 | 2.4 |
| Homes for elderly people | - | - | 4 | 12 | 4 | 9.7 |
| Hospital | 4 | 50 | 1 | 3 | 5 | 12.1 |
| Bakery/pastry shop/ retail/stores | - | - | 1 | 3 | 1 | 2.4 |
| Camping/Picnic | - | - | 1 | 3 | 1 | 2.4 |
| Other places | - | - | 1 | 3 | 1 | 2.4 |
| Golf club | - | - | 1 | 3 | 1 | 2.4 |
| Not known | - | - | 4 | 12 | 4 | 9.7 |
| TOTAL | 8 | 100 | 33 | 100 | 41 | 100 |

Figure IE 6



WHO Surveillance Programme for Control of Foodborne Infections and Intoxications in Europe
7th Report

Country Reports: *IRELAND 1993 – 1998*

3.4 Contributing factors

Table IE 7

Foodborne disease outbreaks contributing factors
IRELAND 1997 – 1998

| Factor | Year | | | | | |
|---|-----------|------------|-----------|------------|-----------|------------|
| | 1997 | | 1998 | | 1997-1998 | |
| | No. | % | No. | % | No. | % |
| Food prepared too far in advance | 1 | 7.7 | 6 | 23.1 | 7 | 17.1 |
| Improper storage | 3 | 23.1 | 3 | 11.5 | 6 | 15.4 |
| Inadequate cooking/ reheating | 4 | 30.8 | 6 | 23.1 | 10 | 25.6 |
| Cross contamination | 3 | 23.1 | 6 | 23.1 | 9 | 23.1 |
| Infected person | 2 | 15.3 | 5 | 19.2 | 7 | 17.9 |
| Total factors known * | 13 | 100 | 26 | 100 | 39 | 100 |
| Total outbreaks where factors were known | 7 | 87 | 15 | 45 | 22 | 54 |
| Total outbreaks where factors were not known | 1 | 13 | 18 | 55 | 19 | 46 |
| TOTAL OUTBREAKS | 8 | 100 | 33 | 100 | 41 | 100 |

* In some outbreaks there was more than one contributing factor

4. Further information

Table IE 8

Total number of *E. coli* O157:H7 cases (both single and linked cases)
IRELAND 1996 - 1998

| Cases | Year | | | Total |
|----------------------------------|------|------|------|-------|
| | 1996 | 1997 | 1998 | |
| <i>E. coli</i> O157:H7 | 8 | 31 | 76 | 115 |

5. Source Information

Food Safety Authority of Ireland (FSAI); National Disease Surveillance Centre (NDSC); the Department of Bacteriology, University College Hospital Galway; Department of Health and Children.

For further reference on national and international data on foodborne diseases please visit the web page <http://www.who.it/docs/fdsaf/fddata.htm>.