



ESTONIA (EE)

Population: 1.4 million (1999)

Area: 45 227 km²



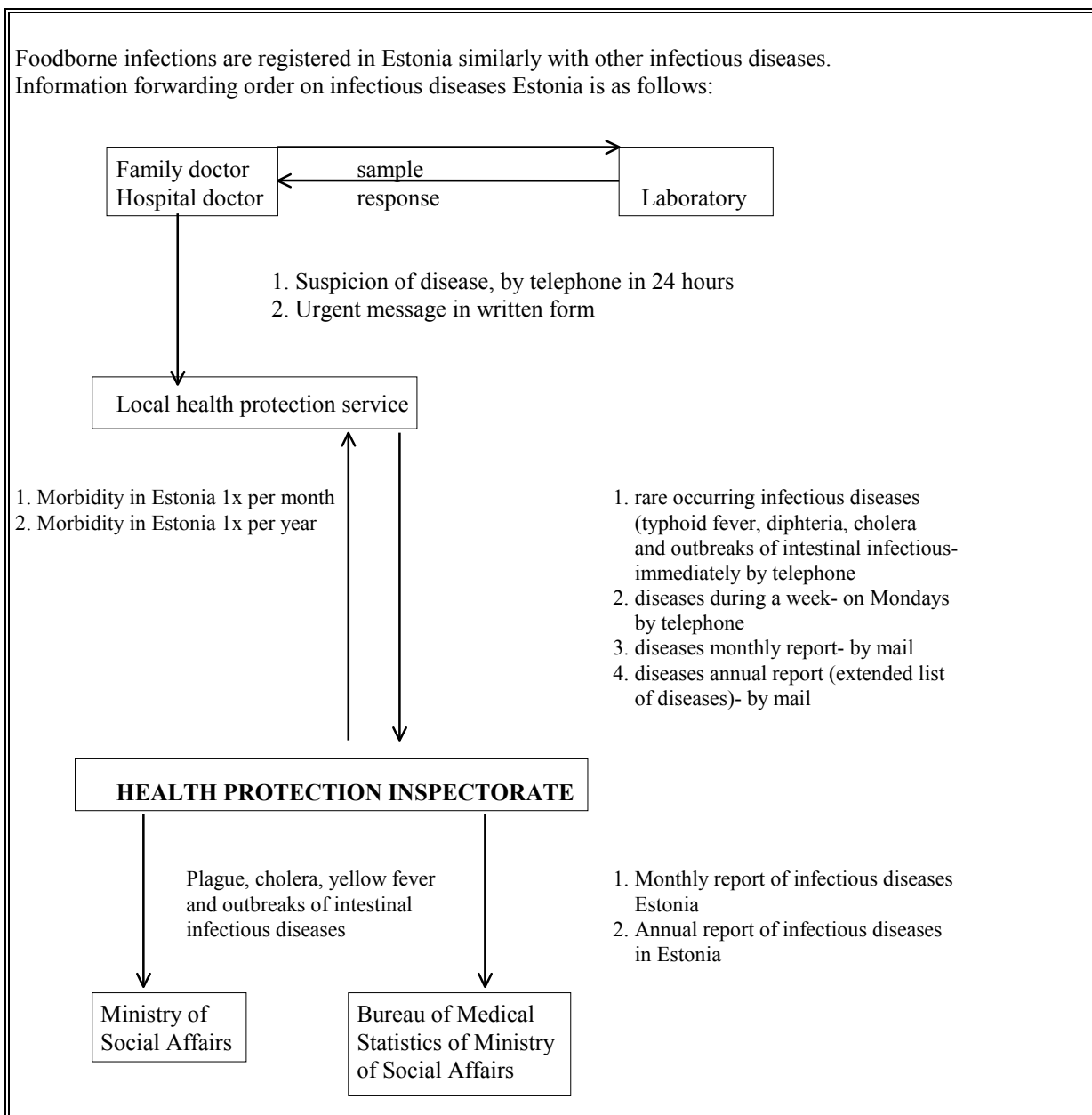
The designations and the presentation of material on this map of the Member States of the WHO European Region (as at 31 July 1997) do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or 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

Total area of Republic of Estonia is 45227km². Resident population (1 January 1999) is 1445580. Administrative units: 15 counties; 207 communes.

Figure EE 1

General description of the official reporting system



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

Country Reports: *ESTONIA 1993 – 1998*

2. Statutory notification

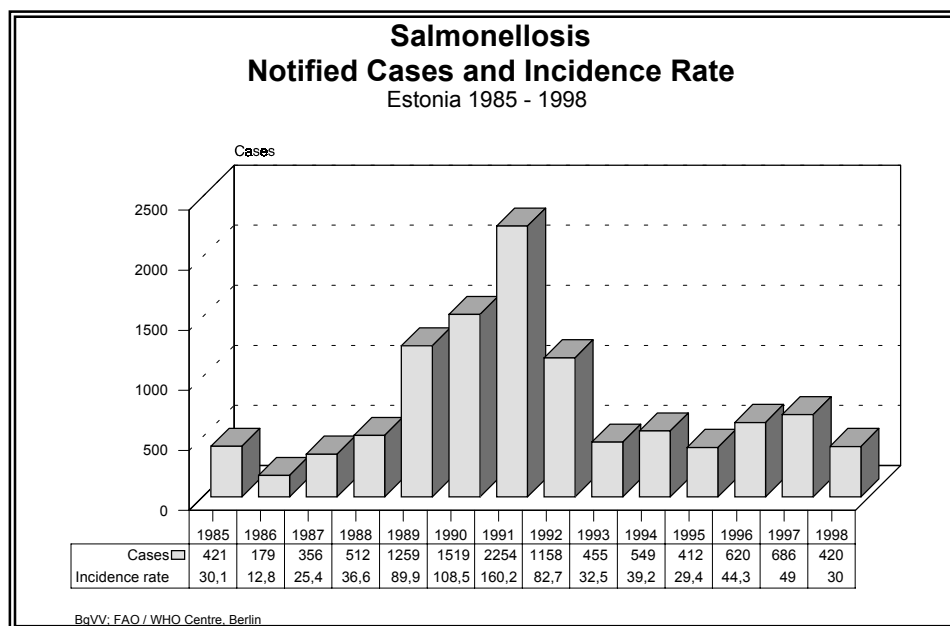
Table EE 1

Foodborne and other intestinal infections
ESTONIA 1992-1998

Disease	Year						
	1992	1993	1994	1995	1996	1997	1998
Salmonellosis	1158	455	549	412	620	686	420
<i>Incidence rate</i>	82.7	32.5	39.2	29.4	44.3	49.0	30.0
Shigellosis	2359	1575	1039	826	693	672	263
<i>Incidence rate</i>	168.5	112.5	74.2	59.0	49.5	48.0	18.8
Viral hepatitis	637	1751	615	252	108	174	953
<i>Incidence rate</i>	45.5	125.1	43.9	18.0	7.7	12.4	68.1
Botulism	10	4	1	-	-	3	1
<i>Incidence rate</i>	0.7	0.3	0.1	-	-	0.2	0.1

2.1 Salmonellosis

Figure EE 2

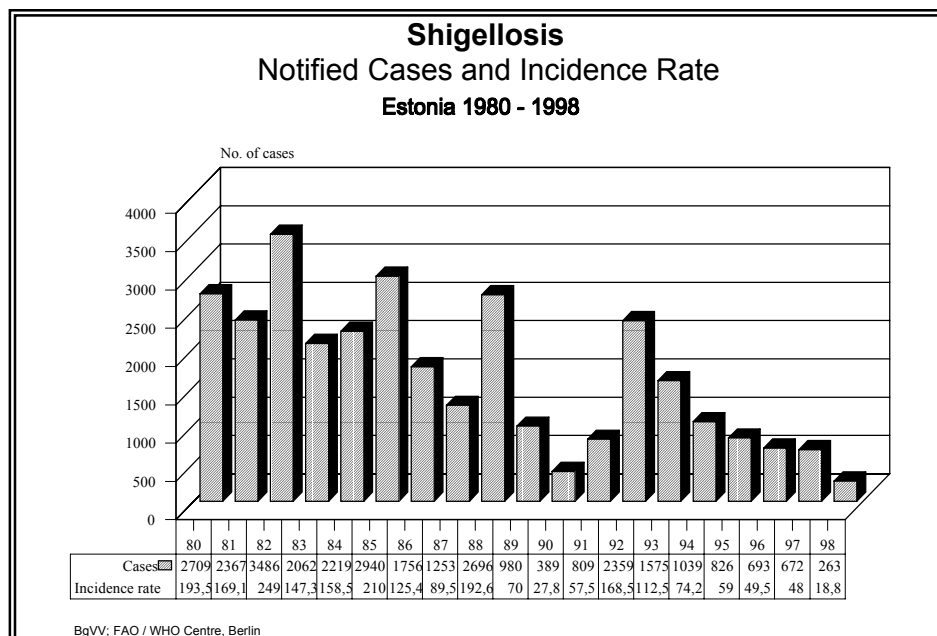


WHO Surveillance Programme for Control of Foodborne Infections and Intoxications in Europe
7th Report

Country Reports: *ESTONIA 1993 – 1998*

2.2 Shigellosis

Figure EE 3



3. Epidemiologically investigated incidents

3.1 Salmonella serotypes

Table EE 2

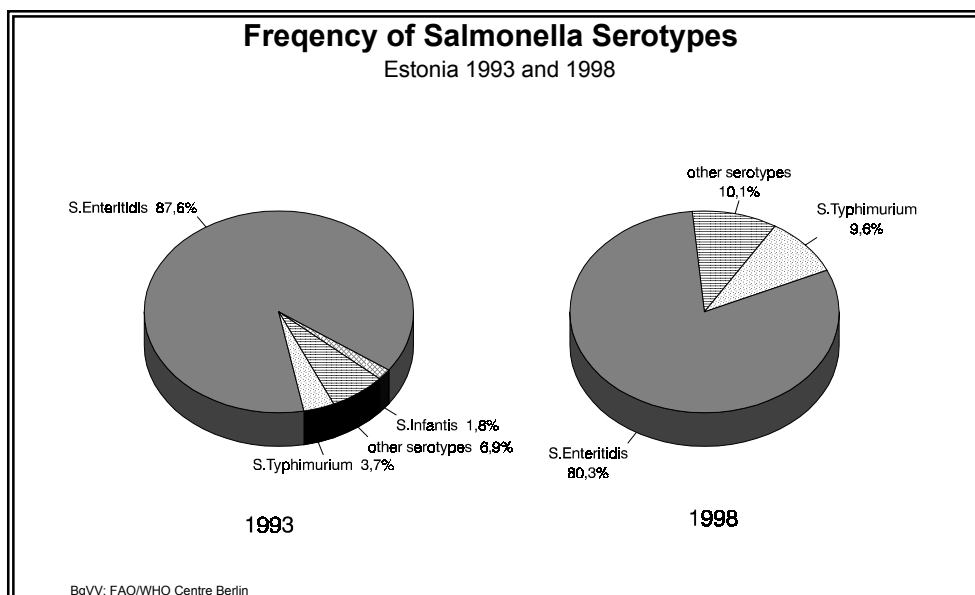
Frequency of Salmonella serotypes isolated
ESTONIA 1993-1998

	1993	1994	1995	1996	1997	1998	Total	
	No.						1993-1998	%
<i>S. Enteritidis</i>	432	483	368	542	594	35	2770	83.5
<i>S. Typhimurium</i>	18	24	8	45	54	4	191	5.8
<i>S. Virchow</i>	-	-	1	-	-	-	1	0.0
<i>S. Infantis</i>	9	13	5	3	2	3	34	1.0
<i>S. Hadar</i>	-	5	-	1	2	-	8	0.2
<i>S. Heidelberg</i>	2	-	-	-	-	-	4	0.1
<i>S. Thompson</i>	-	-	-	-	1	-	1	0.0
<i>S. Branderburg</i>	1	1	1	-	2	-	6	0.2
<i>S. Newport</i>	-	3	-	-	-	-	3	0.1
Other	7	26	19	19	20	31	129	3.9
Not known	24	33	35	38	34	3	166	5.0
TOTAL	493	591	437	648	710	43	3316	100

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

Country Reports: ESTONIA 1993 – 1998

Figure EE 4



3.2 Foodborne disease outbreaks

Table EE 3

Foodborne disease outbreaks
ESTONIA 1990-1998

Year	No. of cases in outbreaks	Causative agent	Incriminated food	Place of consumption
1990	78	<i>S. Enteritidis</i>	Eggs	Kindergarten
	51	<i>S. Enteritidis</i>	Curds	Private home
1991	180	<i>S. Enteritidis</i>	Eggs	Private home
	32	<i>S. Enteritidis</i>	Eggs	School
	120	<i>S. Enteritidis</i>	Eggs	Private home
	24	<i>S. Enteritidis</i>	Eggs	Canteen
	150	<i>S. Enteritidis</i>	Fish	Kindergarten
	79	<i>S. Enteritidis</i>	Cake	Private home
	13	<i>S. Enteritidis</i>	Food	Prison
	9	<i>S. Enteritidis</i>	Eggs	Private home
	1	<i>C. botulinum</i>	Home canned mushrooms	Private home
	1	<i>C. botulinum</i>	Home canned meat	Private home
	1	<i>C. botulinum type E</i>	Marinated herring	Private home
1992	61	<i>S. Enteritidis</i>	Milk	Hospital
	27	<i>Sh. sonnei</i>	Food	Kindergarten
	12	<i>Sh. sonnei II</i>	Food	Orphanages
	10	<i>Sh. sonnei I</i>	Food	Orphanages
	13	<i>Sh. sonnei II</i>	Food	Kindergarten
	16	<i>Sh. sonnei II</i>	Milk	School
	19	<i>Sh. sonnei II</i>	Food	Welfare Private home
	7	<i>Sh. sonnei II + III</i>	Milk	Private home
	9	<i>Sh. sonnei I</i>	Unpasteurized milk	Private home
	11	<i>Sh. sonnei I</i>	Food	Welfare Private home
	53	<i>Sh. sonnei II</i>	Unpasteurized milk	Private home

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

7th Report

Country Reports: *ESTONIA 1993 – 1998*

Year	No. of cases in outbreaks	Causative agent	Incriminated food	Place of consumption	
1993	21	<i>Sh. sonnei II</i>	Liver paste	Kindergarten	
	36	<i>Sh. sonnei I</i>	Food	Kindergarten	
	1	<i>C. botulinum</i>	Home- canned mushrooms	Private home	
	1	<i>C. botulinum</i>	Home- canned meat	Private home	
	4	<i>C. botulinum A</i>	Dried meat	Private home	
	2	<i>C. botulinum type E</i>	Home made sprats in oil	Private home	
	1	<i>C. botulinum</i>	Home- canned fish	Private home	
	2	<i>C. botulinum</i>	Dried fish	Private home	
	17	<i>S. Enteritidis</i>	Confectionery products	Private home	
	27	<i>S. Enteritidis</i>	Eggs	Private home	
	44	<i>Sh. sonnei II</i>	Unpasteurized milk	Private home	
	54	<i>Sh. sonnei I</i>	Food	School	
	12	<i>Sh. sonnei I</i>	Food	Welfare Private home	
	1	<i>C. botulinum</i>	Home canned mushrooms	Private home	
1994	1	<i>C. botulinum type E</i>	Dried fish	Private home	
	1	<i>C. botulinum</i>	Salted herring	Private home	
	61	<i>Sh. sonnei II</i>	Milk	Private home	
	13	<i>Sh. sonnei II</i>	Curds	School	
	36	<i>Sh. sonnei II</i>	Unpasteurized milk	Private home	
	11	<i>Sh. flexneri 2A</i>	Potato salad	Private home	
	17	<i>Sh. flexneri</i>	Food	Welfare Private home	
	1	<i>C. botulinum</i>	Home- canned fish	Private home	
	1995	19	<i>S. Enteritidis</i>	Food	Defence force
		8	<i>Sh. sonnei II</i>	Food	Summer camps
9		<i>Sh. sonnei I</i>	Food	Kindergarten	
1996	8	<i>S. Enteritidis</i>	Eggs	Hospital	
	21	<i>S. Enteritidis</i>	Confectionery products	Private home	
	12	<i>Sh. sonnei II</i>	Food	Kindergarten	
	15	<i>Sh. sonnei II</i>	Food	Canteen	
	20	<i>Sh. sonnei I</i>	Food	Kindergarten	
	1997	73	<i>S. Enteritidis</i>	Eggs	Kindergarten
37		<i>S. Enteritidis</i>	Eggs	Hospital of psychiatry	
10		<i>S. Enteritidis</i>	Confectionery products	Private home	
64		<i>Sh. sonnei II</i>	Food	School	
9		<i>Sh. sonnei II</i>	Food	Defence force	
2		<i>C. botulinum type B</i>	Home-canned vegetables	Private home	
1		<i>C. botulinum</i>	Home- canned mushrooms	Private home	
1998		1	<i>C. botulinum</i>	Home- canned mushrooms	Private home

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

Country Reports: *ESTONIA 1993 – 1998*

Figure EE 5

