



KAZAKHSTAN (KAZ)

Population: 16.8 million (1994)

Total area: 2 724 900 km²



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1. General information

The registration of infectious diseases, including foodborne diseases, is performed in the Republic of Kazakhstan in accordance with Order No. 205 "On the Recording System for Various Infectious and Parasitic Diseases in the Republic of Kazakhstan" issued by the Ministry of Health and Veterinary Medicine of the Republic of Kazakhstan.

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

Country Reports: *KAZAKHSTAN 1993 – 1998*

2. Statutory notification

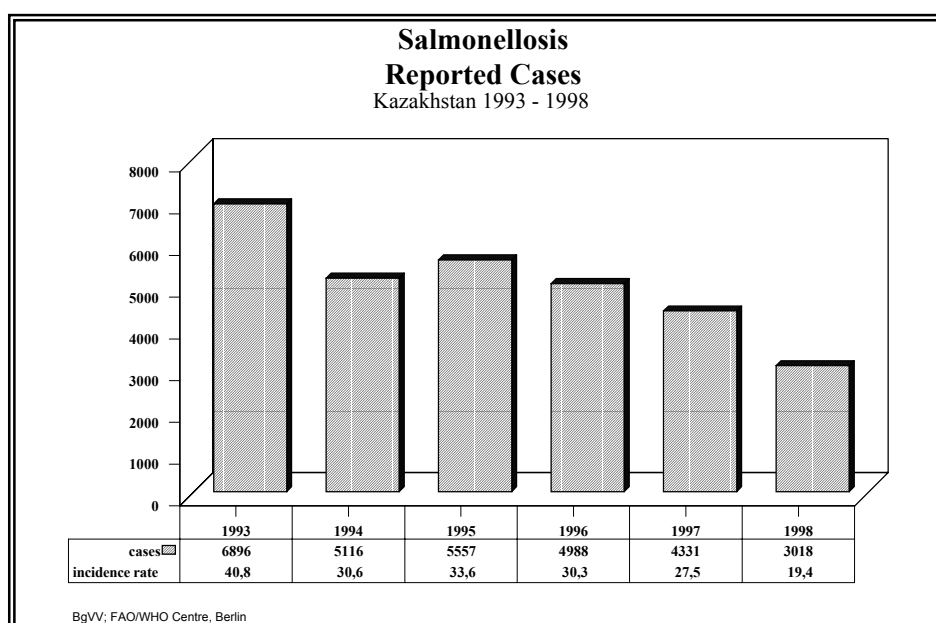
Table KZ 1

Notified cases of foodborne diseases
KAZAKHSTAN 1993 - 1998

Disease	1993	1994	1995	1996	1997	1998
Salmonellosis	6896	5116	5557	4986	4331	3018
<i>Incidence rate</i>	41.0	30.5	33.1	29.7	25.8	18.0
Botulism	44	54	39	30	42	53
<i>Incidence rate</i>	0.3	0.3	0.2	0.2	0.3	0.3
Shigellosis	15390	16415	14492	11969	14619	15164
<i>Incidence rate</i>	91.6	97.7	86.3	71.2	87.0	90.3
E. coli enteritis	15761	11977	13526	12719	13941	13368
<i>Incidence rate</i>	93.8	71.3	80.5	75.7	83.0	79.6
Cholera	123	8	17	-	74	3
<i>Incidence rate</i>	0.7	0.0	0.1	-	0.4	0.0
Brucellosis	3125	2982	2378	2591	2027	2066
<i>Incidence rate</i>	18.6	17.8	14.2	15.4	12.1	12.3
Yersiniosis	335	321	335	365	260	261
<i>Incidence rate</i>	2.0	1.9	2.0	2.2	1.5	1.6
Hepatitis A	38137	34957	52280	43959	57414	34844
<i>Incidence rate</i>	227.0	208.1	311.2	261.7	341.8	207.4
Echinococcosis	228	201	202	337	415	521
<i>Incidence rate</i>	1.4	1.2	1.2	2.0	2.5	3.1
Trichinellosis	4	2	13	24	3	36
<i>Incidence rate</i>	0.0	0.0	0.1	0.1	0.0	0.2
Giardiasis	-	-	2855	4855	6899	4637
<i>Incidence rate</i>	-	-	17.0	28.9	41.1	27.6
Amoebiasis	1	-	34	57	9	158
<i>Incidence rate</i>	0.0	-	0.2	0.3	0.1	0.9
Infectious Enteritis of unknown origin	29067	25160	24650	20755	24895	18998
<i>Incidence rate</i>	173.0	149.8	146.7	123.5	148.2	113.1

Note: Staphylococcosis, Campylobacteriosis, Listeriosis, other bacterial foodborne infections and intoxications and other viral enteritis are not included in the statutory notification system.

Figure KZ 1



3. Epidemiologically investigated incidents

Table KZ 3

Salmonella cases by serotypes
KAZAKHSTAN 1993-1998

Serotype	1993	1994	1995	1996	1997	1998	Total	
							cases	%
<i>S. Enteritidis</i>	1643	2000	1583	1529	1046	852	8653	45.9
<i>S. Typhimurium</i>	2508	1382	1416	1698	1554	778	9336	49.5
<i>S. Infantis</i>	6	7	2	6	2	1	24	0.1
<i>S. Agona</i>	2	-	-	-	-	-	2	0.0
<i>S. Derby</i>	4	11	-	-	-	-	15	0.1
<i>S. Virchow</i>	18	7	4	12	44	6	91	0.5
<i>S. Panama</i>	-	-	-	1	-	-	1	0.0
<i>S. Montevideo</i>	-	2	1	-	-	-	3	0.0
<i>S. Newport</i>	66	3	8	55	6	7	145	0.8
<i>S. Anatum</i>	2	1	-	1	-	-	4	0.0
<i>S. London</i>	-	1	-	-	1	-	2	0.0
<i>S. Muenchen</i>	-	2	-	-	-	-	2	0.0
<i>S. Arizona</i>	134	167	117	55	72	20	565	3.0
Total specified	4383	3583	3131	3357	2725	1664	18843	100.0
<i>S. Spp., unspecified</i>	4483	4430	5009	4731	4054	2277	24984	
Total	8866	8013	8140	8088	6779	3941	43827	

Figure KZ 2

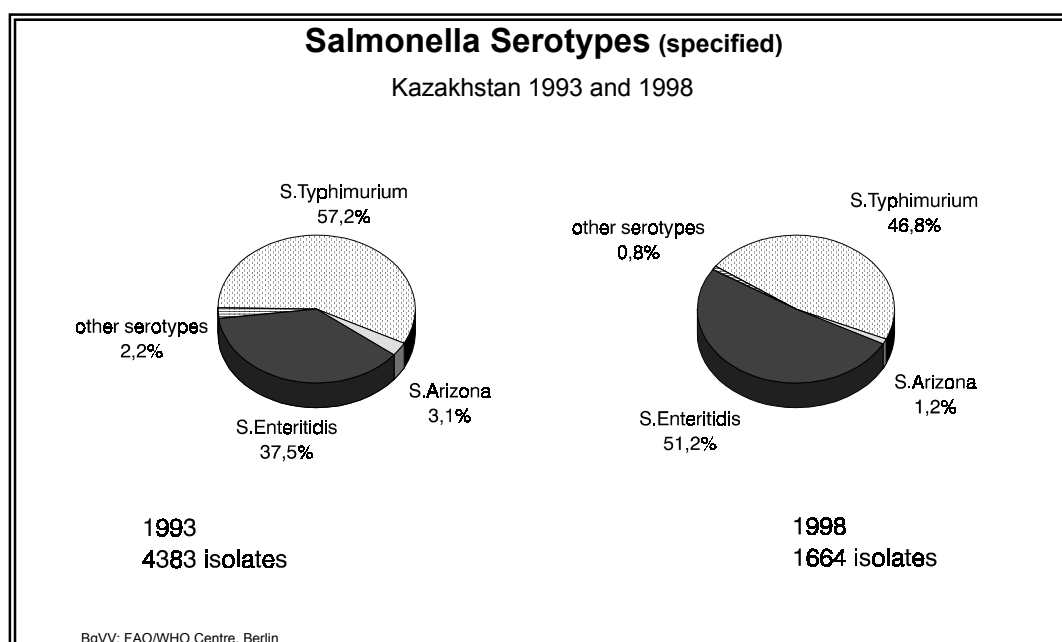
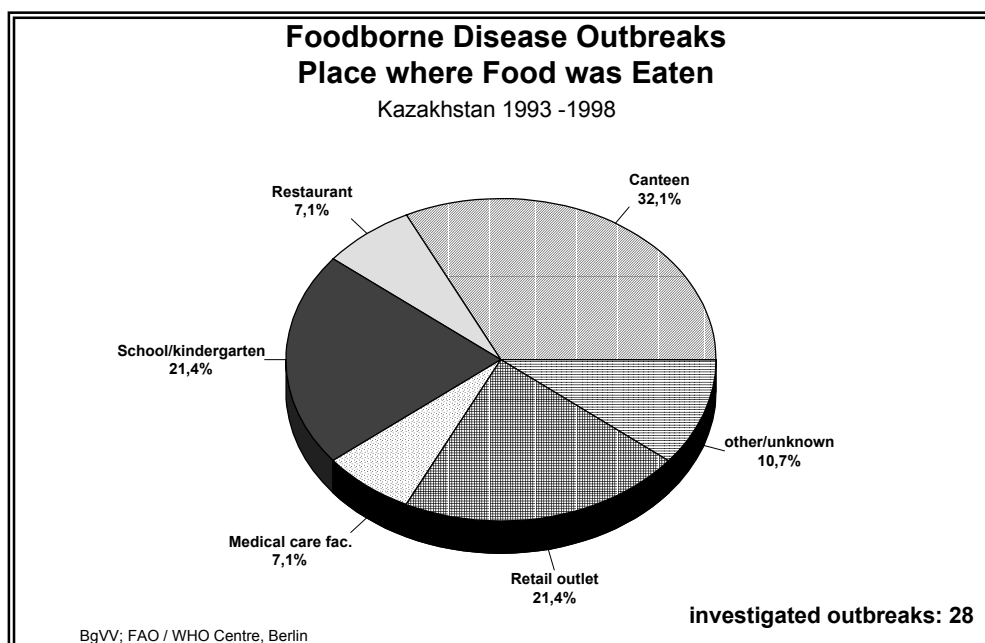


Figure KZ 3



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Table KZ 4

Foodborne disease outbreaks
KAZAKHSTAN 1993-1998

Year	Causative agent	No. of cases in outbreak	Incriminated food	Place of consumption
1993	<i>Proteus</i>	18	Sprat	Canteen
	<i>Salmonella</i>	20	Meat salad	Restaurant
	<i>Salmonella</i>	125/97*	Meatloaf	Kindergarten
	<i>Salmonella</i>	48	Cake	Bakery
	<i>Salmonella</i>	36	Cake	Bakery
	<i>Salmonella</i>	25	Goulash, meat chops	Canteen
	<i>Sh. sonnei</i>	99	Boiled milk	Kindergarten
	<i>Staphylococcus</i>	7	Soft ice cream	Bakery
	Nonbacterial	14	Apple juice	Boarding school
1994	<i>Salmonella</i>	20	Poultry	Hospital
	<i>Salmonella</i>	15	Small pancakes	Delicatessen
	<i>Salmonella</i>	78	Meat chops	Canteen
	<i>Salmonella</i>	37	Soft ice cream	Delicatessen
	<i>Dysentery</i>	17	Garnish	Psychiatric Hospital
	<i>Sh. sonnei</i>	68	Vegetable salad	Kindergarten
	<i>Staphylococcus</i>	17	Cake	School
	1995	<i>Salmonella</i>	41	Pastry
<i>Salmonella</i>		60	Pastry	Bakery
<i>Salmonella</i>		49	Pancakes, meat chops	unknown
<i>Sh. sonnei</i>		35	Macaroni	Canteen
1996	<i>Staphylococcus</i>	22	Cake	Private home
	<i>Salmonella</i>	95	Meat soufflé	Canteen
	<i>Salmonella</i>	30	Mayonnaise	Canteen
	<i>Staphylococcus</i>	32	Milk	Day care centre
	<i>Staphylococcus</i>	16	Stewed fruit (compote)	Canteen
1997	<i>Salmonella</i>	116	Pastry	Canteen
1998	<i>Salmonella</i>	41	Pastry	Canteen
	<i>Staphylococcus</i>	165	Ready-to-eat meal products	Unknown

* 97 children