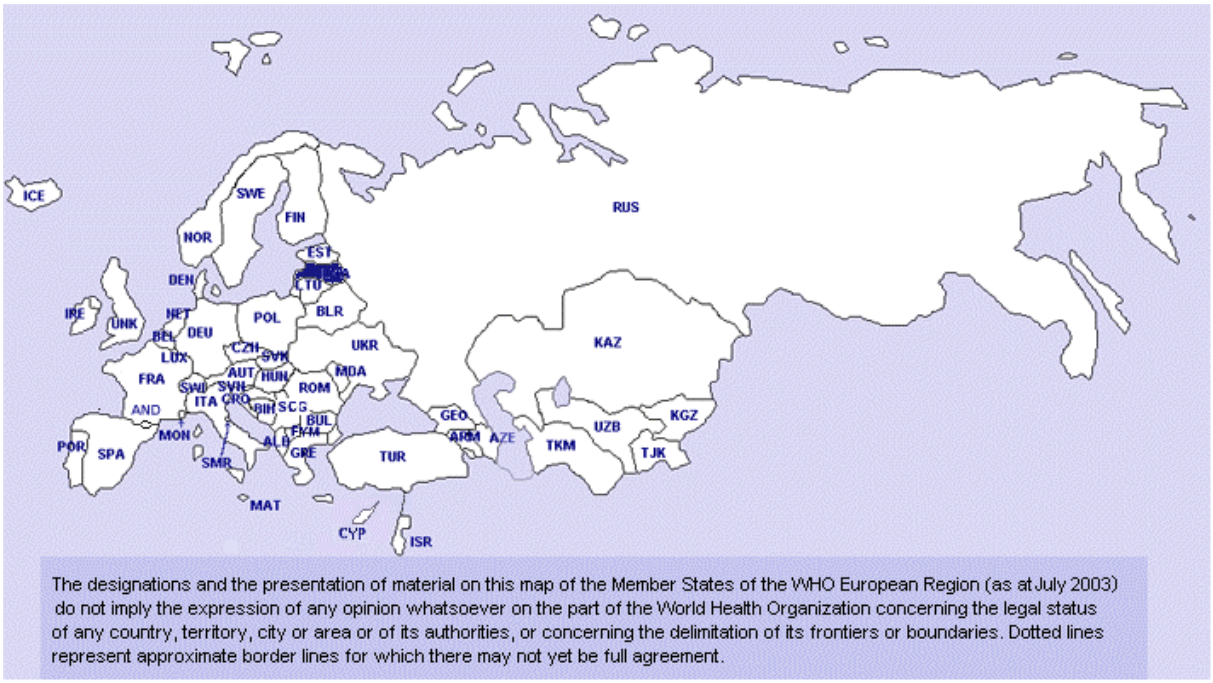
LATVIA

PROVISIONAL DATA

Population 1999: 2 439 445
Population 2000: 2 424 150
Area: 64 589 km^2



1. General information

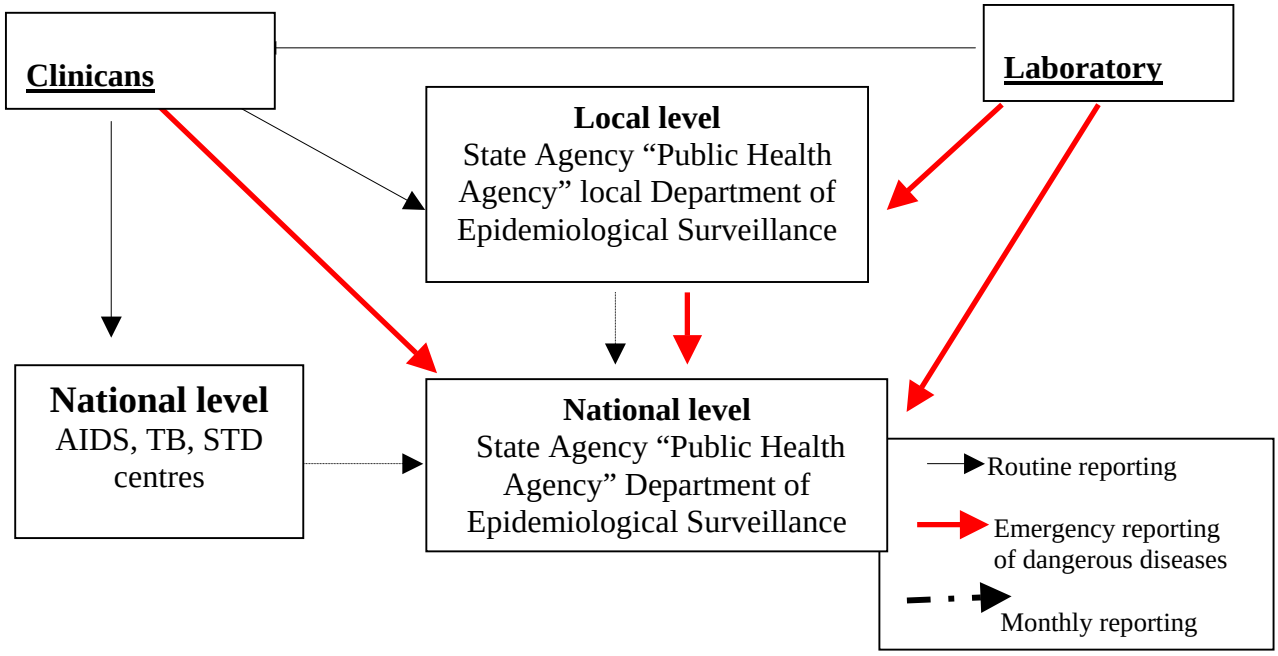
In Latvia (country abbreviation: LV), the Law on Epidemiological Safety clarifies the purpose of epidemiological surveillance. Surveillance is carried out to ensure the uninterrupted, dynamic and complex monitoring of the epidemic process of infectious diseases. It allows for the investigation of epidemiological situations and the prediction of outbreaks and epidemics of infectious diseases, the management of epidemiological situations, and the assessment of the efficiency of preventive, anti-epidemic and health measures.

1.2 Reporting System

The flow of information for surveillance and notification in Latvia is illustrated in Figure LV 1.

Figure LV 1

Epidemiological information flow chart



1.2 Notifiable diseases

Cabinet Regulations No. 96 set out those infectious diseases and specific conditions (e.g.: acute flaccid paralysis or rabies-prone contacts with animals) which are notifiable.

Reportable diseases may be divided up into two groups:

- Individual notification and registration (every single case),
- Summary notification and registration of cases (only for enterobiasis, influenza and other acute respiratory infections)

Various agencies are tasked with the collection, storage and analysis of data on communicable diseases. A breakdown of the responsibilities of the various components is provided in Figure LV 2.

Figure LV 2

Responsibilities of Various Surveillance Institutions in Latvia

Surveillance institutions	**Diseases**
State Agency "Public Health Agency" including local structures (10 branches)	• Vaccine-preventable diseases; • viral hepatitis • infectious diseases associated with foodstuffs • infectious diseases associated with water and environment • nosocomial infections • other diseases carried by rarely encountered agents (e.g. Jacob- Creutzfeldt disease) • diseases included in international sanitary hygienic regulations (yellow fever, cholera and plague) • other diseases (rabies, typhus, viral haemorrhagic fevers, malaria) • partly dermatological infections
State Centre of Sexually Transmitted and Dermal Diseases	STDs, skin diseases: anogenital herpes virus infection, dermatophytosis, phthiriasis, gonococcal infection, scabies, leprosy, sexually transmissive chlamydias, syphilis, chancroid and trachoma
AIDS Prevention Centre	HIV infection and AIDS
The State Centre of Tuberculosis and Lung Diseases	Tuberculosis, mycobacterium-borne diseases

Clinicians must report (by phone within 12 hours and by sending a completed reporting form) to surveillance institutions: a) suspected infectious diseases, b) changes or discharges of diagnosis of infectious diseases, c) final diagnosis and outcome of infectious diseases, d) laboratory confirmation of diagnosis.

In the case of tuberculosis BK(-), STD, skin diseases, HIV and AIDS, notification is performed exclusively through the sending of a completed reporting form within 72 hours.

In the case of enterobiasis, influenza and other acute respiratory infections, monthly reports are submitted, except for during the influenza epidemic season, at which time reports on the number of influenza, ARI and pneumonia patients are submitted on a weekly basis.

Epidemiologists of local branches of the State Public Health Agencies perform investigations of the cases, take samples for laboratory investigation, collect, store and analyse epidemiological data, and organize preventive and control measures. They are responsible for monthly reporting to the State Public Health Agency on registered cases of infectious diseases by completing standardized forms and sending protocols on the results of investigations of infectious diseases most significant to public health for detailed analysis at the national level.

The State Public Health Agency summarizes, analyses, interprets and provides feedback on epidemiological data (by means of the "Epidemiological Bulletin") in the country, develops

projects of legislative acts, and coordinates preventive and control measures for infectious diseases.

Epidemiological surveillance of sexually transmitted diseases, dermatological infectious diseases, TB and AIDS is carried out in a different manner. Medical staff must report directly to the central surveillance institutions of these diseases. Epidemiologists of local branches of the State Public Health Agency participate in the organisation of specific preventive measures.

There are different regulations concerning early warning systems, including the order of the Ministry of Welfare that describes obligatory procedures on immediate (24 hour) notification of serious public health events including:

- Any single suspected case of dangerous infectious disease (cholera, anthrax, plague, YF, Ebola, Lassa, Marburga and other HF, epidemic louse-borne typhus fever/Brill-Zinsser disease, relapsing fever);
- rabies;
- three or more cases of botulism, brucellosis, diphtheria, tick-borne encephalitis, *E.coli* 157, HF with renal syndrome, legionellosis, leptospirosis, malaria, meningococcal infection, ornithosis, paratyphoid fever, Q-fever, nosocomial infection, trichinellosis, tularaemia, typhoid fever,
- five or more cases of hepatitis A, yersiniosis, salmonellosis, shigellosis, food intoxications, measles, mumps, rubella, pertussis, influenza (during non-epidemic season), viral meningitis, encephalitis; serious (hospitalised) cases without clear aetiology of the disease;
- suspicion of quarantine diseases on state borders.

The set of minimum reporting information about serious public health events is also described.

Set of data collected

The data which is routinely collected includes the patient's name, date of birth, town/municipality of residence, town/municipality of notification, postal code, specific age, sex, profession, data on onset of symptoms, data of visit of doctor, whether patient is admitted to hospital, data of admission, hospital address, preliminary and final diagnosis, and results of laboratory examination.

Depending on the type of infectious disease, additional data are collected over the course of the epidemiological investigation, including vaccinations received, travel history, probable source of infection, contacts, risk factors etc.

Validation and Analysis of the data

Data validation and analysis is performed at both the local and national level. Information received over the course of the epidemiological investigation of cases is used for data validation at the local level. Logical and mathematical evaluation of the data is used for data validation on the national level.

2. Statutory notifications

Table LV 1

Notified Cases of Foodborne Diseases

LATVIA 1999 - 2000

Diseases	1999		2000	
	No. of cases	Incidence rate	No. of cases	Incidence rate
Salmonellosis	915	37.5	1032	42.6
Staphylococcosis	120	4.9	78	3.2
Botulism	6	0.2	1	0.0
Campylobacteriosis	2	0.1	4	0.2
Shigellosis	439	18.0	409	16.9
E. coli enteritis	41	1.7	52	2.1
Listeriosis	1	0.0	36	1.5
Cholera	0	-	0	-
Brucellosis	0	-	0	-
Other bacterial foodborne infections and intoxications, of wich:	574	23.5	453	18.7
Clostridium difficile	1	0.0	2	0.1
Hepatitis A	702	28.8	237	9.8
Other viral enteritis	533	21.9	881	36.3
Echinococcosis	0	-	4	0.2
Trichinellosis	40	1.6	91	3.8
Giardiasis	177	7.3	124	5.1
Amoebiasis	0	-	4	0.2
Infectious Enteritis of unknown origin	1519	62.3	2074	85.6
Other (please specify)				
Typhoid fever	3	0.1	0	-
Paratyphoid fever	2	0.1	1	0.0
Taenia solium taeniasis	2	0.1	3	0.1
Yersiniosis	96	3.9	64	2.6
Diphyllobothriasis	24	1.0	21	0.9

3. Epidemiologically investigated outbreaks

Table LV 2 Cases of Salmonella and incidence rate
LATVIA 1999 - 2000

Year	No. of cases of salmonellosis	Incidence rate (No. of cases per 100 000 inhabitats)
1999	915	37.51
2000	1032	42.57

Table LV 3

Salmonella cases by serotypes
LATVIA1999 – 2000

Serotype	1999	2000
S. Enteritidis	696	831
S. Typhimurium	235	98
S. Infantis	6	1
S. Agona		
S. Bredeney		
S. Derby	-	1
S. Virchow	7	1
S. Hadar	2	-
S. Tennessee		
S. Panama		
S. Saintpaul		
S. Montevideo		
S. Newport	1	-
S. Anatum	-	1
S. London		
S. Ohio		
S. Muenchen		
S. Arizona		
S. Bareilly		
S. Oranienburg		
S. Glostrup	1	39
S. Isangi	2	-
S. Bovismorbificans	1	-
S. Concord	4	-
S. London	1	
S. Tshiongwe	-	1
S. Species	2	2
S group "B"		6
S.group "C"		1
S.group "D"		15

Table LV 4

Aggregated data of foodborne disease outbreaks

LATVIA 1999

Outbreaks	Causative Agent	No. of cases in outbreaks	Incriminated Food	Place of consumption
1	*S.* Enteritidis	9	Soup with meat ball	Nursery school
2	*S.* sonnei 2g	5	Milk	Private home
3	*S.* Enteritidis	7	Smoked chicken, dessert with raw eggs	Private home
4	*S.* Enteritidis	7	Dessert with raw eggs	Private home
5	S. Enteritidis	7	Cakes	Private home
6	*E. coli*	7	Liver pie	Old peoples home
7	S. Enteritidis	27	Cakes	Party
8	*S.* Enteritidis	32	Eggs	Party
9	S. Enteritidis	12	Cakes	Private home
10	Unknown	42	Dessert with whipped cream	Academy of Defensive
11	S. sonnei 2g	14	Sandwiches	Nursery school
12	Unknown	6	Unknown	Nursery school
13	Unknown	14	Unknown	Camp

Table LV 5

Aggregated data of foodborne disease outbreaks

LATVIA 2000

Outbreaks	Causative Agent	No. of cases in outbreaks	Incriminated Food	Place of consumption
1	*S.* Enteritidis	10	Cakes	Private home
2	Unknown	5	Omlet	Private home
3	Salmonella	5	Eggs	Private home
4	*S.*.sonnei	12	Milk	Nursery school
5	*S.* Enteritidis	5	Eggs	Party
6	*S.*Enteritidis	5	Chicken	private home
7	*S.* Enteritidis	38	Dessert with raw eggs	School
8	*S.*Enteritidis	38	Chicken	Song festival
9	Unknown	5	Pudding	Centre
10	*S.* flexneri 2a	7	Fruit	Camp
11	*S.*Enteritidis	6	Cakes	Private home
12	*S.*Enteritidis	5	Cakes	Private home
13	*S.*Enteritidis	5	Meat	Private home
14	*Salmonella*	18	Cakes	Nursery school
15	*S.*Enteritidis	5	Cakes	Private home
16	Unknown	14	Unknown	Cafe
17	*S.*Glostrup	43	Chicken	Private home
18	*S.*Enteritidis	5	Eggs	Cafe

4. Additional information

Latvia participates in a project of the European Commission, the Inventory of Resources for Infectious diseases (I.R.I.D.E.) Further information and data for participating countries may be found at the web site http://iride.cineca.org.

For further reference on national and international data on foodborne diseases, please visit the web page http://www.euro.who.int/foodsafety/Surveillance/20020904_1.