



## **SURVEILLANCE** REPORT



# Annual epidemiological report on communicable diseases in Europe

# 2010

## Legionnaires' disease (legionellosis)

- The notification rate in the EU and EEA/EFTA countries remains stable at 1.2 per 100 000 population.
- The peak of reported cases in July observed in previous years was more prolonged in 2008, extending from June to September.
- The number of reported cases of travel-associated Legionnaires' disease decreased compared with 2007 and so did the number of travel-associated clusters.

### Epidemiological situation in 2008

Of the 5789 cases of Legionnaires' disease reported across 28 EU and EEA/EFTA countries in 2008, 5611 cases were confirmed. Data were not available from two countries (Czech Republic and Liechtenstein). The overall notification rate was 1.2 per 100 000 population (Table 2.1.5) which was similar to the previous two years' rates. The individual country rates varied little between < 0.1 and 2 cases per 100 000 population; only three countries reported a rate over 2 (Denmark, Slovenia and Spain).

### Age and gender distribution

Cases of Legionnaires' disease are mainly reported in persons from the older age groups: in 2008, 4 565 (80 %) were 45 years old or older. The male-to-female ratio is 2.9. The notification rates increased with age, from < 0.1 per 100 000 in the under 25 year-olds to 2.9 per 100 000

in persons aged 65 years and above (4.6 per 100 000 in males and 1.7 per 100 000 in females) (Figure 2.1.4).

### Seasonality

A clear trend in the monthly reports can be observed across all countries, with cases increasing in May, peaking during summer and then decreasing gradually throughout the winter months. In 2008, the period June to September accounted for 2 449 cases, representing almost 50 % of the reported cases for which month of report was known (Figure 2.1.5).

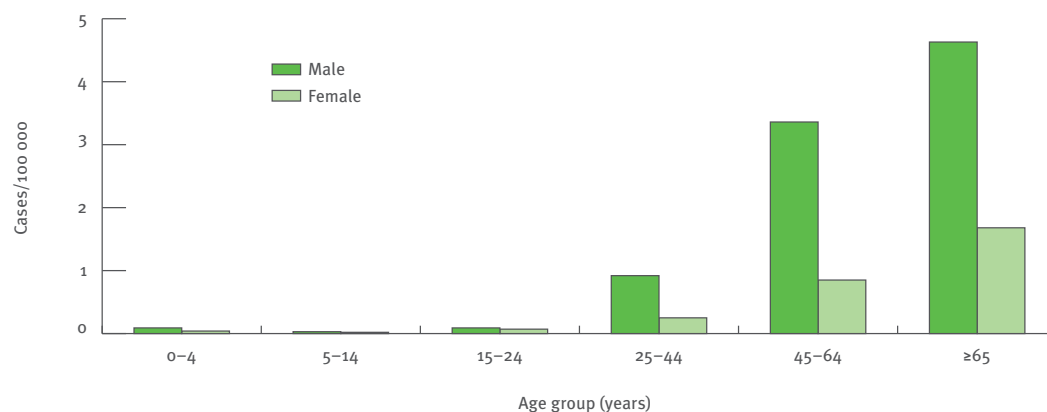
### Enhanced surveillance in 2008

EWGLINET was the EU's dedicated surveillance network collecting data on cases of Legionnaires' disease in the EU and travel-associated Legionnaires' disease (TALD). In 2008, 19 of 35 countries participating in the EWGLINET scheme reported a total of 853 individual TALD cases resulting in 108 TALD clusters (252 cluster cases) being identified. The number of reported individual cases has shown an increasing trend since the inception of EWGLINET but in 2008 the reported number of cases decreased compared with 2007 (946 cases). The number of TALD clusters detected in 2008 decreased from 113 such clusters in 2007.

### Discussion

The notification rate of reported Legionnaires' disease across the EU and EEA/EFTA remained stable in 2008. Seasonality, age and gender distributions of cases are similar to those observed in previous years. The decrease

**Figure 2.1.4.** Notification rates of Legionnaires' disease by age and gender, in EU and EEA/EFTA countries, 2008 (n = 5372)



Source: Country reports: Austria, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Luxembourg, Malta, Netherlands, Poland, Slovakia, Slovenia, Spain, Sweden, United Kingdom, Iceland and Norway.

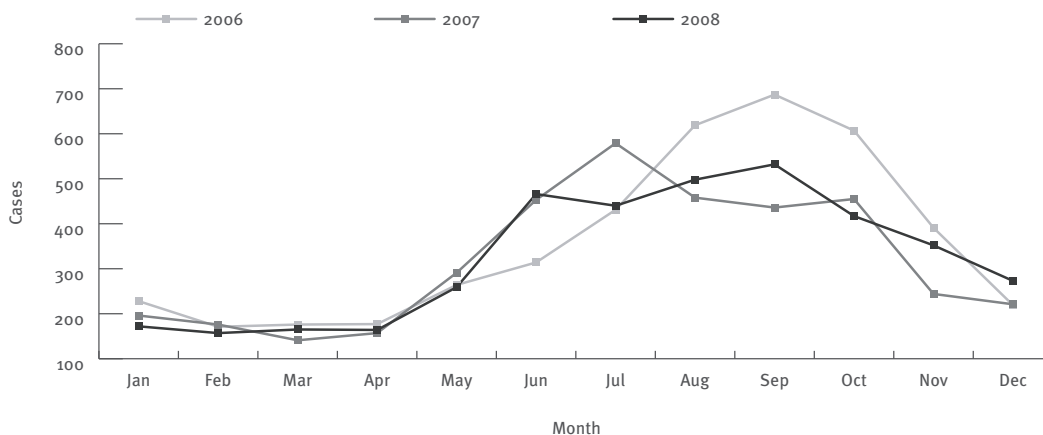
**Table 2.1.5. Number and notification rate of Legionnaires' disease cases in the EU and EEA/EFTA, 2006–08**

Country	Report type*	2008			2007		2006	
		Total cases	Confirmed cases	Notification rate per 100 000 population	Confirmed cases and notification rate		Confirmed cases and notification rate	
					Cases	Rate	Cases	Rate
Austria	C	100	95	1.14	96	1.16	64	0.78
Belgium	A	138	138	1.29	77	0.73	131	1.25
Bulgaria	A	1	1	0.08	1	0.01	2	0.03
Cyprus	C	9	9	1.14	1	0.13	1	0.13
Czech Republic	—	—	—	—	—	—	12	0.12
Denmark	C	130	130	2.37	126	2.31	90	1.66
Estonia	C	7	7	0.52	3	0.22	4	0.30
Finland	C	30	28	0.53	31	0.59	13	0.25
France	C	1 244	1 205	1.88	1 336	2.10	1 385	2.19
Germany	C	522	522	0.63	529	0.64	571	0.69
Greece	C	32	29	0.26	24	0.21	33	0.30
Hungary	C	27	22	0.22	12	0.12	6	0.06
Ireland	C	11 <sup>(a)</sup>	10	0.23	14	0.32	12	0.29
Italy	C	1 103	1 043	1.75	936	1.58	814	1.39
Latvia	A	5	5	0.22	2	0.09	2	0.09
Lithuania	A	2	2	0.06	2	0.06	0	0.00
Luxembourg	C	4	4	0.83	5	1.05	7	1.49
Malta	C	3	3	0.73	17	4.17	5	1.23
Netherlands	C	337	309	1.88	286	1.75	379	2.32
Poland	C	15	6	0.02	5	0.01	18	0.05
Portugal	A	102	102	0.96	78	0.74	89	0.84
Romania	A	4	4	0.21	1	0.00	—	—
Slovakia	C	5	5	0.09	2	0.04	4	0.07
Slovenia	C	48	44	2.19	32	1.59	39	1.95
Spain	C	1 318	1 300	2.87	1 012	2.28	955	2.18
Sweden	C	153	153	1.67	127	1.39	105	1.16
United Kingdom	C	396	392	0.64	485	0.80	584	0.97
EU total		5 746	5 568	1.21	5 240	1.08	5 325	1.13
Iceland	C	2	2	0.63	4	1.30	1	0.33
Liechtenstein	—	—	—	—	—	—	—	—
Norway	C	41	41	0.87	35	0.75	27	0.58
EU/EEA total		5 789	5 611	1.20	5 279	1.08	5 353	1.12

Source: Country reports.

\*A: Aggregated data report; C: Case-based report; —: No report, U: Unspecified.

(a) In addition, one case of Pontiac fever was reported (not included).

**Figure 2.1.5. Seasonal distribution of Legionnaires' disease cases in the EU and EEA/EFTA, 2006–08**

Source: Country Reports: Austria, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Luxembourg, Malta, Netherlands, Poland, Slovakia, Spain, Sweden, United Kingdom, Iceland and Norway.

## Legionnaires' disease (legionellosis)

## Surveillance systems overview

Country	Data Source	Compulsory (Cp) / Voluntary (V) / Other(O)	Comprehensive (Co) / Sentinel (Se) / Other(O)	Active (A) / Passive (P)	Case-Based (C) / Aggregated (A)	Data reported by				National Coverage
						Laboratories	Physicians	Hospitals	Others	
Austria	AT-Epidemiegesetz	Cp	Co	P	C	Y	Y	Y	Y	Y
Belgium	BE-FLA_FRA_LABNET_REFLAB	Cp	O	A	C	Y	Y	Y	-	Y
Bulgaria	BG-NATIONAL_SURVEILLANCE	Cp	Co	P	A	Y	Y	Y	Y	Y
Cyprus	CY-NOTIFIED_DISEASES	Cp	Co	P	C	N	Y	N	N	Y
Denmark	DK-MIS	Cp	Co	P	C	N	Y	N	N	-
Estonia	EE-LEGIONELLOSIS	Cp	Co	P	C	Y	Y	Y	Y	Y
Finland	FI-NIDR	Cp	Co	P	C	Y	Y	N	N	Y
France	FR-MANDATORY_INFECTIOUS_DISEASES	Cp	Co	P	C	Y	Y	Y	Y	Y
Germany	DE-SURVNET@RKI-7.1	Cp	Co	P	C	Y	N	N	Y	Y
Greece	GR-NOTIFIABLE_DISEASES	Cp	Co	P	C	Y	Y	Y	N	Y
Hungary	HU-EFRIR	Cp	Co	P	C	Y	Y	Y	N	Y
Iceland	IS-SUBJECT_TO_REGISTRATION	Cp	Co	P	C	Y	Y	Y	N	Y
Ireland	IE-CIDR	Cp	Co	P	C	Y	Y	Y	N	Y
Italy	IT-LEGIONELLOSIS	Cp	Co	P	C	N	Y	Y	N	Y
Latvia	LV-BSN	Cp	Co	P	C	Y	Y	Y	N	Y
Lithuania	LT-COMMUNICABLE_DISEASES	Cp	Co	P	C	Y	Y	N	N	-
Luxembourg	LU-SYSTEM1	Cp	Co	P	C	-	Y	N	N	-
Malta	MT-DISEASE_SURVEILLANCE	Cp	Co	P	C	Y	Y	Y	Y	-
Netherlands	NL-OSIRIS	Cp	Co	P	C	Y	Y	N	Y	Y
Norway	NO-MSIS_A	Cp	Co	P	C	Y	Y	Y	N	-
Poland	PL-NATIONAL_SURVEILLANCE	Cp	Co	P	C	Y	Y	N	N	-
Slovakia	SK-EPIS	Cp	Co	A	C	Y	Y	Y	N	Y
Slovenia	SI-SURVIVAL	Cp	Co	P	C	Y	Y	Y	N	Y
Spain	ES-STATUTORY_DISEASES	Cp	Co	P	C	N	Y	Y	N	Y
Sweden	SE-SMINET	Cp	Co	P	C	Y	N	N	N	Y
United Kingdom	UK-LEGIONELLOSIS	O	Co	A	C	Y	N	Y	Y	Y

of TALD cases and the decreasing trend in TALD clusters could possibly indicate that the EWGLINET guidelines for the control of Legionnaires' disease are being widely applied to some good effect. Close observation is required over the coming years to determine whether this decrease continues.