



# Euro Polio Page February 2007 (week 5)

Vaccine-preventable Diseases and Immunization Programme  
Division of Health Programmes

## EUROPE

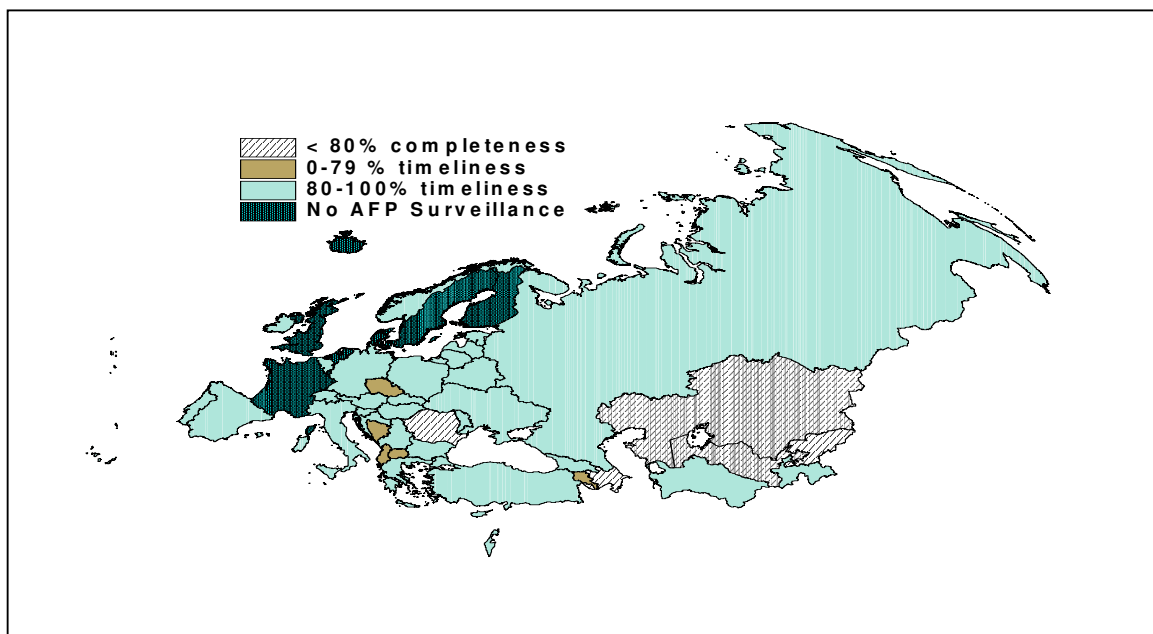
### AFP Surveillance in the WHO European Region, 2006

Since the 1988 World Health Assembly resolution to eradicate poliomyelitis, the number of countries where polio is endemic decreased from 125 to four, by the end of 2006. The persistent transmission of wild poliovirus in areas neighbouring the European Region, reminds us that the threat of importation of wild polioviruses is real, and that national and regional polio eradication programmes must remain vigilant. As part of the eradication strategy, a global surveillance system was established to 1) identify non-polio acute flaccid paralysis (AFP) cases in children aged <15 years and 2) deploy a network of accredited laboratories to perform virological testing of stool specimens to determine whether the paralysis resulted from poliovirus infection. Because only one of every 200 poliovirus infections results in clinically apparent paralytic disease, maintaining high quality AFP surveillance is essential. *High-quality* AFP surveillance requires 1) detection of at least one case of non-polio AFP per 100,000 population aged <15 years, 2) testing of two adequate stool specimens from at least 80% of AFP cases in WHO-accredited laboratories.

The 43 (81%) of 53 Member States of the WHO European Region conducting national AFP surveillance reported 1,549 AFP cases in 2006, with an overall AFP rate of 1.19. There were no cases of wild poliovirus detected – all polioviruses isolated from patients were vaccine-derived. Adequate stool specimens (i.e., two specimens collected at least one day apart within 14 days of onset of symptoms) were collected from patients for 81% of the AFP cases, giving a Regional surveillance index of 0.81. Overall, these indicators are good, and show that AFP surveillance meets the minimum requirements of the Global Poliomyelitis Eradication Initiative. This is similar to the programme performance indicators for 2005, when AFP rate and surveillance index were 1.15 and 0.86, respectively. The 18 “recently endemic” countries (see Table 1) had higher quality indicators in 2006, reporting 1,129 AFP cases, with a AFP rate of 1.43. This represents 72% of the Region’s AFP case reports. Adequate stool specimens were collected from patients for 91% of the AFP cases, giving a surveillance index of 0.91.

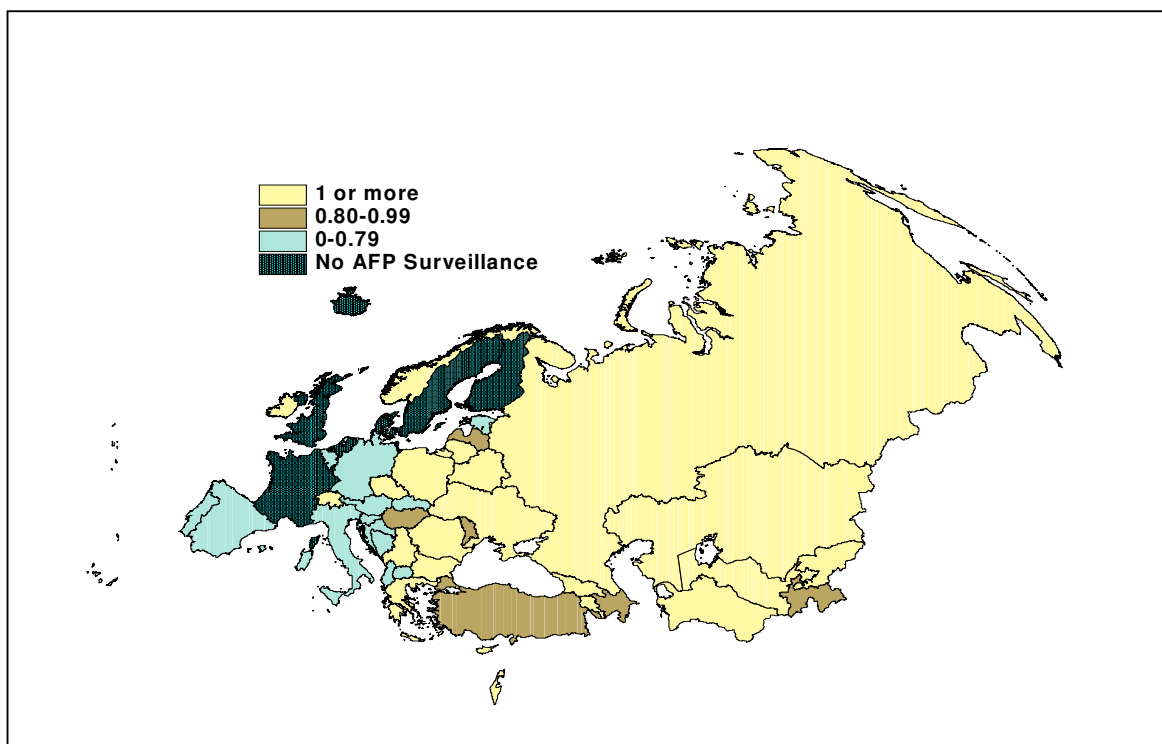
Completeness and timeliness of reporting are important indicators of national programme organization and management. In this analysis, completeness of reporting is the percentage of weekly reports (including reports of “zero cases”) received by EURO. Timeliness of reporting is the percentage of reports received at the Regional Office by Friday of the week following reporting to the national level. In general, the completeness of reporting was 90% for the Region and overall timeliness of reporting was 82%. Because an eradication programme requires the highest levels of reporting completeness and timeliness, it is important that all Member States strive to report AFP surveillance data to the Regional Office as efficiently as possible. Map 1 displays data on both completeness and timeliness of reporting in 2006. First, countries with less than 80% completeness are shown in marked with stripe lines. Second, timeliness is displayed for the countries that reported with at least 80% completeness.

**Map 1. Reporting timeliness for Member States that completed at least 80% of their epidemiological reporting to WHO Regional Office for Europe in 2006**



Map 2 shows national AFP rates in the European Region in 2006. Twenty-one countries achieved rates of 1.0 or greater: Armenia, Belarus, Bulgaria, Cyprus, Czech Republic, Georgia, Greece, Ireland, Israel, Kazakhstan, Kyrgyzstan, Montenegro, Norway, Poland, Romania, the Russian Federation, Serbia, Switzerland, Turkmenistan, Ukraine, and Uzbekistan. The least sensitive AFP reporting was seen in the eight countries reporting AFP rates under 50%: Albania, Belgium, Bosnia and Herzegovina, Croatia, Malta, Portugal, Slovakia and Slovenia.

**Map 2. AFP rates reported to the WHO Regional Office for Europe by Member States in 2006**

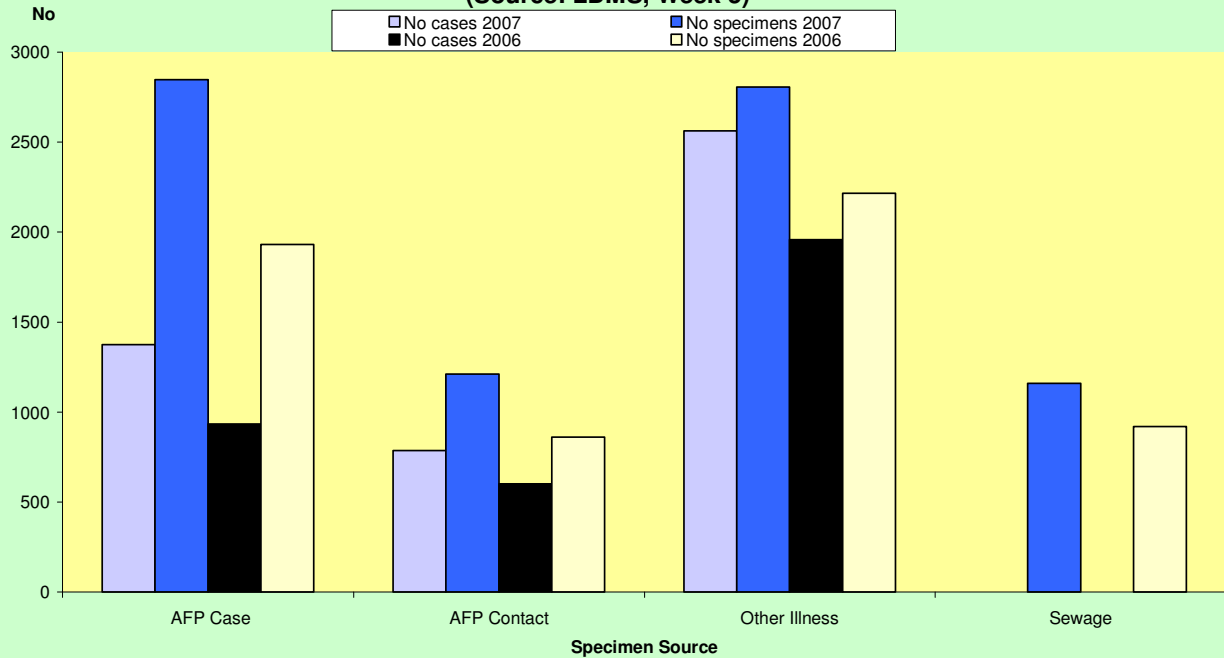


The final step in this evaluation of AFP surveillance quality was an examination of the trends in AFP rates. The European Region was declared “Polio-Free” in 2002, and we examined AFP surveillance rates from 2002 through 2006 to detect positive and negative linear trends. Most national programmes maintained the quality of their surveillance, with no significant changes in AFP rates in the post-certification period. Two national programmes (Tajikistan and the Former Yugoslav Republic of Macedonia) maintained surveillance quality until 2006, but showed a marked decline below 1.0 in the past year. Three countries (Albania, Portugal and Slovakia) showed steady declines in surveillance rates during the five year period. The greatest concern for each national polio programme must be to remain vigilant in the post-certification period. At this time, four countries remain polio-endemic and there is active transmission of wild polioviruses in nine countries worldwide. To help assure that the European Region will remain Polio Free, each Member State must do its own examination of AFP surveillance quality at the national and sub-national levels, detect “silent” or poorly reporting areas, identify barriers to case detection and investigation and endeavour to achieve and sustain international standards for AFP reporting.

# POLIO LABORATORY DATA

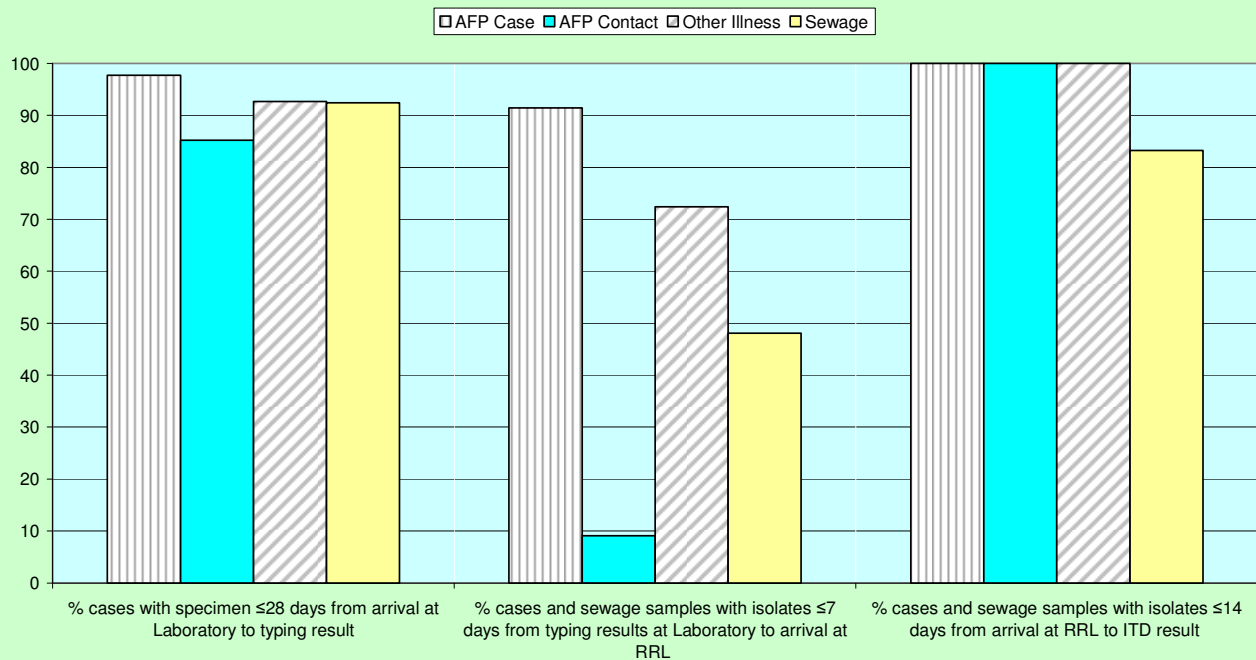
Cases and specimens processed in the Polio Laboratory Network, by source and year, 2006-2007

(Source: LDMS, Week 5)



Performance indicators, Polio Laboratory Network, 2007

(Source: LDMS, Week 5)



**Table 1. AFP/Polio Weekly Reporting  
European Region 2007 (all countries)**

	Polio compatible cases	% Completeness of reporting	Week of last report	Method of reporting	Country using "priority"
Albania	0	20%	4	email	yes
Andorra*	0	100%	5	direct web entry	-
Armenia	0	100%	5	email	yes
Austria	0	100%	5	direct web entry	yes
Azerbaijan	0	100%	5	email	yes
Belarus	0	100%	5	direct web entry	yes
Belgium	0	100%	5	direct web entry	-
Bosnia and Herzegovina	0	60%	4	email	partial
Bulgaria	0	100%	5	direct web entry	yes
Croatia*	0	0%		direct web entry	yes
Cyprus	0	100%	5	direct web entry	yes
Czech Republic	0	80%	5	email	
Denmark	0	0%		DNR	-
Estonia	0	100%	5	direct web entry	yes
Finland	0	0%		DNR	-
France	0	0%		DNR	-
Georgia	0	80%	5	email	yes
Germany	0	100%	5	email	yes
Greece	0	100%	5	direct web entry	partial
Hungary	0	100%	5	direct web entry	yes
Iceland	0	0%		DNR	-
Ireland	0	100%	5	direct web entry	yes
Israel	0	100%	5	email	yes
Italy	0	100%	5	direct web entry	yes
Kazakstan	0	60%	5	email	yes
Kyrgyzstan	0	80%	5	email	yes
Latvia	0	100%	5	direct web entry	yes
Lithuania	0	100%	5	direct web entry	yes
Luxembourg	0	0%		DNR	-
Malta*	0	0%		email	yes
Monaco	0	0%		DNR	-
Montenegro	0	0%			
Netherlands	0	0%		DNR	-
Norway	0	100%	5	direct web entry	yes
Poland	0	100%	5	direct web entry	yes
Portugal	0	80%	4	email	partial
Republic of Moldova	0	100%	5	direct web entry	yes
Romania	0	100%	5	email	partial
Russian Federation	0	100%	5	direct web entry	yes
San Marino	0	0%		DNR	-
Serbia	0	100%	5	email	partial
Slovak Republic	0	80%	5	direct web entry	yes
Slovenia*	0	100%	5	direct web entry	-
Spain	0	100%	5	direct web entry	yes
Sweden	0	0%		DNR	-
Switzerland	0	100%	5	direct web entry	yes
Tajikistan	0	80%	5	email	yes
T.F.Y.R.Macedonia	0	100%	5	email	no
Turkey	0	100%	5	email	yes
Turkmenistan	0	100%	5	email	yes
Ukraine	0	80%	4	email	yes
United Kingdom	0	0%		DNR	-
Uzbekistan	0	100%	5	email	yes
<b>Average/Totals</b>		86%			

Shaded country name indicates country classified as endemic / recently endemic by the Regional Certification Commission in 1996

\* No AFP cases reported to WHO Regional Office for Europe

DNR-do not report AFP surveillance data

**TABLE 2. AFP Reporting - European Region,  
2006-2007 Countries with AFP surveillance**

Country	2006			2007					
	non-Polio AFP rate*	% with 2 stool spec.**	Surveillance index***	No. of AFP cases	No. of cases pending §	No. of cases priority pending §§	non-Polio AFP rate*	% with 2 stool spec.**	Surveillance index***
Albania	0.36	100%	0.36	1	0	0	1.06	100%	1
Andorra	0	0%	0	0	0	0	0	0%	0
Armenia	1	50%	0.67	2	0	2	3.01	100%	1
Austria	0.72	67%	0.48	0	0	0	0	0%	0
Azerbaijan	0.86	94%	0.81	1	0	0	0.42	100%	0.42
Belarus	2.8	90%	0.9	7	0	1	4.36	100%	1
Belgium	0.35	17%	0.06	0	0	0	0	0%	0
Bosnia and Herzegovina	0.47	100%	0.47	0	0	0	0	0%	0
Bulgaria	1.83	84%	0.84	4	0	0	3.42	100%	1
Croatia	0	0%	0	0	0	0	0	0%	0
Cyprus	1.83	67%	1	0	0	0	0	0%	0
Czech Republic	1.09	81%	1	0	0	0	0	0%	0
Estonia	0.51	100%	0.51	0	0	0	0	0%	0
Georgia	1.11	100%	1	1	0	0	1.1	100%	1
Germany	0.54	44%	0.3	3	0	0	0.23	67%	0.15
Greece	1.26	75%	0.75	0	0	0	0	0%	0
Hungary	0.9	36%	0.51	1	0	0	0.57	100%	0.57
Ireland	1.06	22%	0.56	0	0	0	0	0%	0
Israel	1.06	5%	0.6	0	0	0	0	0%	0
Italy	0.64	65%	0.44	9	0	0	0.96	67%	0.75
Kazakhstan	1.47	96%	0.98	2	0	0	0.53	100%	0.53
Kyrgyzstan	1.52	96%	1	6	0	0	3.19	100%	1
Latvia	0.92	100%	0.92	0	0	0	0	0%	0
Lithuania	2	55%	0.91	0	0	0	0	0%	0
Malta	0	0%	0	0	0	0	0	0%	0
Montenegro	1.58	100%	1	0	0	0	0	0%	0
Norway	1.22	27%	0.73	0	0	0	0	0%	0
Poland	1.08	64%	0.74	1	0	0	0.15	0%	0
Portugal	0.24	75%	0.24	0	0	0	0	0%	0
Republic of Moldova	0.81	83%	0.68	2	0	0	2.43	100%	1
Romania	1.31	86%	0.88	4	0	0	1.08	75%	1
Russian Federation	2.15	90%	0.92	0	0	0	0	0%	0
Serbia	1.16	86%	0.95	2	0	0	0.99	50%	0.5
Slovakia	0.23	100%	0.23	0	0	0	0	0%	0
Slovenia	0	0%	0	0	0	0	0	0%	0
Spain	0.66	44%	0.4	4	0	0	0.55	25%	0.27
Switzerland	1.1	8%	0.15	0	0	0	0	0%	0
Tajikistan	0.83	100%	0.83	4	0	0	1.38	75%	0.75
T.F.Y.R.Macedonia	0.77	100%	0.77	0	0	0	0	0%	0
Turkey	0.9	84%	0.77	12	0	2	0.48	100%	0.48
Turkmenistan	1.25	95%	0.95	1	0	0	0.58	0%	0
Ukraine	1.9	94%	0.95	7	0	0	0.95	100%	0.95
Uzbekistan	1.15	99%	0.99	9	0	0	0.9	100%	0.9
<b>Average/Totals</b>	<b>1.17</b>	<b>81%</b>	<b>0.86</b>	83	0	5	0.45	<b>86%</b>	0.4
<b>Recently Endemic</b>	<b>1.41</b>	<b>91%</b>	<b>0.93</b>	54	0	4	0.49	<b>93%</b>	0.46

\*Annualized rate per 100 000 children under the age of 15. **Bold** = meeting WHO target of 1.0.

\*\*Two stool specimens collected at least 24 hours apart within 14 days of onset of paralysis and adequately shipped to the laboratory. **Bold** = meeting WHO target of 80%.

\*\*\*Index = non-polio AFP rate up to 1.0 x (% 1 adequate specimens), **Bold** = 0.8

§ Total number of AFP cases pending final classification 90 days after Date of onset.

§§ Number of AFP cases assigned a priority coding and pending.

All indicators are calculated year to date unless specified otherwise.

Website: <http://www.euro.who.int/vaccine> CISID: <http://data.euro.who.int/cisid> Contact: [polio@euro.who.int](mailto:polio@euro.who.int)