

## Wild poliovirus isolated in Switzerland's sewer system; insignificant risk of outbreak

The Swiss public health authorities have reported the isolation of a wild poliovirus from the sewage water of a Geneva city water treatment plant in a sample collected on 13 August 2007. Due to high vaccination coverage and good sanitation, this isolation does not represent a significant risk of outbreak for Switzerland.

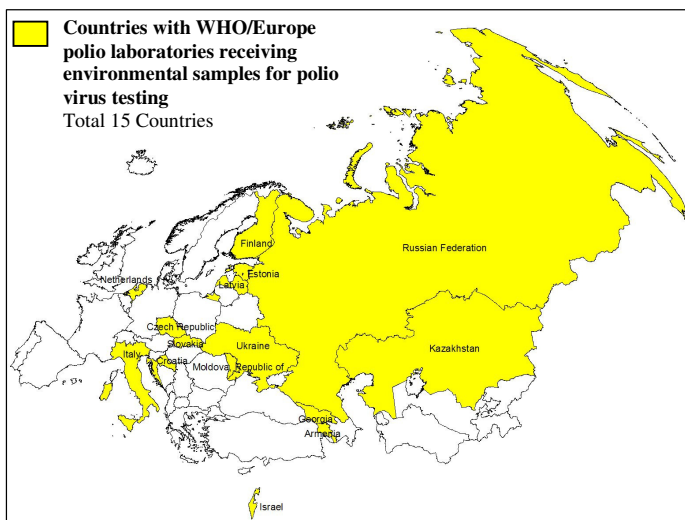
The virus is genetically closely related to the ongoing polio transmission in Chad. The Swiss authorities have taken measures appropriate for the detection of poliovirus from environmental sampling, including heightened surveillance and assessment of polio immunisation coverage of communities where the virus was detected and in surrounding areas. No cases of paralytic polio have been detected.



Similar response measures were taken in Australia in July 2007 where wild poliovirus was isolated from a student who was infected and developed polio in Pakistan. In Singapore, in 2006, wild poliovirus was isolated from a stool sample of a Nigerian child who was infected and developed polio in Nigeria before travelling to Singapore. Neither additional cases nor wild-virus positive contacts were found in either country.

Source: [www.polioeradication.org](http://www.polioeradication.org)

## Environmental surveillance in WHO/Europe



Using WHO polio laboratory network, currently 15 (28%) Member States conduct environmental surveillance for wild polio virus. This surveillance varies in the Member States and represent national in some Member States to only high risk areas in others.

As of week 47 a total of 339 samples (sewage and other environmental) were collected and tested by WHO polio laboratory network in 2007 compare to 1124 during all of 2006. No wild polio virus isolated from the samples collected in 2006 and 2007; however the wild virus found in sewage water treatment plant in Switzerland was detected by local public health laboratory in Geneva.

In June 2007, the Regional Certification Committee, reminded all governments of the importance of their full commitment to the eradication of poliomyelitis, including full support for national poliomyelitis laboratories; and explore the possibilities of implementing national or regional supplementary poliomyelitis surveillance (enterovirus and environmental) in countries and/or regions where AFP (Acute Flaccid Paralysis) surveillance is poor or non-existent.

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

Country	Polio Compatible Cases	% Completeness of Reporting	Week of Last Report	Method of Reporting	Country Using "Priority" Coding
Albania	0	93%	48	email	yes
Andorra*	0	77%	40	direct web entry	-
Armenia	1	85%	48	email	yes
Austria	0	100%	48	direct web entry	yes
Azerbaijan	0	93%	48	email	yes
Belarus	0	100%	48	direct web entry	yes
Belgium	0	100%	48	direct web entry	-
Bosnia and Herzegovina	0	72%	48	email	partial
Bulgaria	0	93%	48	direct web entry	yes
Croatia*	1	87%	45	direct web entry	yes
Cyprus	0	100%	48	direct web entry	yes
Czech Republic	0	60%	47	email	-
Denmark	0	0%		DNR	-
Estonia	0	100%	48	direct web entry	yes
Finland	0	0%		DNR	-
France	0	0%		DNR	-
Georgia	0	91%	48	email	yes
Germany	0	95%	48	email	yes
Greece	0	97%	48	direct web entry	partial
Hungary	0	97%	48	direct web entry	yes
Iceland	0	0%		DNR	-
Ireland	0	100%	48	direct web entry	yes
Israel	0	93%	48	email	yes
Italy	0	97%	48	direct web entry	yes
Kazakstan	0	89%	48	email	yes
Kyrgyzstan	0	35%	45	email	yes
Latvia	0	97%	48	direct web entry	yes
Lithuania	0	93%	48	direct web entry	yes
Luxembourg	0	0%		DNR	-
Malta*	0	58%	44	email	yes
Monaco	0	0%		DNR	-
Montenegro	0	70%	48	email	-
Netherlands	0	0%		DNR	-
Norway	0	97%	48	direct web entry	yes
Poland	0	100%	48	direct web entry	yes
Portugal	0	50%	24	email	partial
Republic of Moldova	0	91%	48	direct web entry	yes
Romania	0	100%	48	direct web entry	partial
Russian Federation	0	91%	48	email	yes
San Marino	0	0%		DNR	-
Serbia	0	93%	48	email	partial
Slovak Republic	0	97%	48	direct web entry	yes
Slovenia*	0	97%	48	direct web entry	-
Spain	0	100%	48	direct web entry	yes
Sweden	0	100%	48	direct web entry	-
Switzerland	0	95%	46	direct web entry	yes
Tajikistan	0	91%	48	email	yes
T.F.Y.R.Macedonia	0	87%	48	email	no
Turkey	0	97%	48	email	yes
Turkmenistan	0	93%	48	email	yes
Ukraine	0	81%	48	email	yes
United Kingdom	0	0%		DNR	-
Uzbekistan	0	83%	48	email	yes
<b>Average/Totals</b>	2	92%			

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,  
Countries with AFP Surveillance, 2006-2007**

Country	2006 (Weeks 1 - 52)			2007 (Weeks 1 - 48)					
	Non-Polio AFP Rate*	% With 2 Stool Specimens**	Surveillance Index***	Number of AFP Cases	Number of Cases Pending §	Number of Cases Priority Pending §§	Non- Polio AFP Rate*	% With 2 Stool Specimens**	Surveillance Index***
Albania	0.36	<b>100%</b>	0.36	9	0	0	1.17	<b>100%</b>	<b>1</b>
Andorra	0	0%	0	0	0	0	0	0%	0
Armenia	0	0%	0	14	1	0	<b>2.39</b>	<b>62%</b>	<b>0.92</b>
Austria	0.72	56%	0.48	3	0	0	0.26	33%	0.09
Azerbaijan	0.86	<b>94%</b>	<b>0.81</b>	23	0	0	<b>1.19</b>	<b>100%</b>	<b>1</b>
Belarus	<b>2.73</b>	<b>92%</b>	<b>0.92</b>	49	2	1	<b>3.74</b>	<b>92%</b>	<b>0.94</b>
Belgium	0.35	17%	0.06	6	4	0	0.37	0%	0.06
Bosnia and Herzegovina	0.63	<b>100%</b>	0.63	0	0	0	0	0%	0
Bulgaria	<b>1.83</b>	<b>84%</b>	<b>0.84</b>	12	10	0	<b>1.26</b>	<b>100%</b>	<b>1</b>
Croatia	0	0%	0	1	0	0	0	0%	0
Cyprus	<b>1.83</b>	67%	<b>1</b>	1	0	0	0.66	<b>100%</b>	0.66
Czech Republic	<b>1.03</b>	<b>87%</b>	<b>1</b>	7	0	0	0.52	<b>86%</b>	0.52
Estonia	0.51	<b>100%</b>	0.51	0	0	0	0	0%	0
Georgia	<b>1.11</b>	<b>100%</b>	<b>1</b>	12	0	0	<b>1.62</b>	<b>83%</b>	<b>0.83</b>
Germany	0.55	44%	0.3	56	0	0	0.51	31%	0.23
Greece	<b>1.2</b>	74%	0.74	14	0	0	<b>0.94</b>	64%	0.61
Hungary	<b>0.96</b>	40%	0.58	8	0	0	0.56	38%	0.56
Ireland	<b>1.06</b>	22%	0.56	2	0	0	0.25	50%	0.12
Israel	<b>0.9</b>	6%	0.58	9	0	0	0.5	0%	0.17
Italy	0.64	65%	0.44	56	7	1	0.73	57%	0.52
Kazakhstan	<b>1.5</b>	<b>94%</b>	<b>0.96</b>	53	0	0	<b>1.72</b>	<b>96%</b>	<b>0.98</b>
Kyrgyzstan	<b>1.7</b>	<b>96%</b>	<b>1</b>	30	0	0	<b>1.95</b>	<b>97%</b>	<b>1</b>
Latvia	<b>0.92</b>	<b>100%</b>	<b>0.92</b>	2	0	0	0.67	<b>100%</b>	0.67
Lithuania	<b>2.36</b>	46%	<b>0.85</b>	13	0	0	<b>2.61</b>	62%	<b>1</b>
Malta	0	0%	0	0	0	0	0	0%	0
Montenegro	<b>1.58</b>	<b>100%</b>	<b>1</b>	0	0	0	0	0%	0
Norway	<b>1.22</b>	27%	0.73	4	2	0	0.47	25%	0.36
Poland	<b>1.08</b>	71%	<b>0.82</b>	34	1	0	0.6	53%	0.43
Portugal	0.3	60%	0.24	4	4	0	0.25	25%	0.13
Republic of Moldova	<b>0.81</b>	<b>83%</b>	0.68	14	1	1	<b>2.09</b>	<b>93%</b>	<b>0.93</b>
Romania	<b>1.16</b>	<b>95%</b>	<b>0.95</b>	16	0	0	0.53	<b>88%</b>	0.46
Russian Federation	<b>1.93</b>	<b>90%</b>	<b>0.92</b>	356	87	18	<b>1.77</b>	<b>92%</b>	<b>0.93</b>
Serbia	<b>1.16</b>	<b>86%</b>	<b>1</b>	8	1	0	0.49	75%	0.37
Slovakia	0.23	<b>100%</b>	0.23	4	0	0	0.5	75%	0.5
Slovenia	0	0%	0	0	0	0	0	0%	0
Spain	0.67	43%	0.4	33	0	0	0.55	58%	0.47
Switzerland	<b>1.19</b>	7%	0.14	13	0	0	<b>1.1</b>	8%	0.17
Tajikistan	<b>0.83</b>	<b>100%</b>	<b>0.83</b>	40	11	0	<b>1.69</b>	<b>98%</b>	<b>0.98</b>
The former Yugoslav Republic of Macedonia	0.77	<b>100%</b>	0.77	4	0	0	<b>1.12</b>	75%	<b>1</b>
Turkey	<b>0.9</b>	<b>84%</b>	0.77	213	47	3	<b>1.05</b>	<b>85%</b>	<b>0.87</b>
Turkmenistan	<b>1.25</b>	<b>95%</b>	<b>0.95</b>	25	0	0	<b>1.78</b>	<b>92%</b>	<b>0.92</b>
Ukraine	<b>1.89</b>	<b>94%</b>	<b>0.95</b>	114	7	1	<b>1.89</b>	<b>95%</b>	<b>0.97</b>
Uzbekistan	<b>1.15</b>	<b>99%</b>	<b>0.99</b>	101	0	0	<b>1.24</b>	<b>99%</b>	<b>0.99</b>
Average/Total	<b>1.13</b>	<b>82%</b>	<b>0.86</b>	1363	185	25	<b>1.05</b>	<b>83%</b>	<b>0.88</b>
Recently Endemic	<b>1.34</b>	<b>91%</b>	<b>0.93</b>	1032	155	23	<b>1.33</b>	<b>91%</b>	<b>0.93</b>

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

\*\*Two stool specimens collected at least 24 hrs. 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 (% first 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.