

WHO Epidemiological Brief



Highlighting in the European Region:

- Measles outbreaks
- Wild Poliovirus importation

Summary

Measles outbreaks across the WHO European Region

During 2011, measles outbreaks continue to occur in many Member States in the WHO European Region.

In 2007–2010, outbreaks were reported in many countries in the western part of the Region. In 2011 measles viruses continue to spread within the Region and to other regions of the world. France reported nearly 1000 cases for January.

In January, a case was reported in a 9-month-old infant from the United States, who contracted measles in the Dominican Republic, most probably due to exposure to an adult from Europe. The WHO Region of the Americas eliminated measles in 2002.

Importation of wild poliovirus and response measures in the European Region

As of 4 March, Tajikistan had reported 3 acute flaccid paralysis (AFP) cases with date of onset in 2011. The last confirmed polio case in Tajikistan had a date of onset of 4 July 2010. Since 1 January 2011, the Russian Federation has reported 72 AFP cases; Kyrgyzstan, 8 AFP cases; Turkmenistan, 5 AFP cases; and Tajikistan, 3 AFP cases. Synchronized supplementary immunization activities (SIAs) will take place through April–May 2011 across the central Asian republics and in the Russian Federation.

Measles Outbreaks across the European Region

In recent years, countries in the European Region have had to fight large measles outbreaks.

Outbreaks continue to occur in many European countries in early 2011 (Fig. 1).

In 2007–2010, outbreaks were reported in many countries in the western part of Europe, including Austria, Bulgaria, France, Germany, Ireland, Italy, the Netherlands, the United Kingdom and Switzerland,

due to the accumulation of susceptible people over the previous few years, which allows sustained transmission. An outbreak in Bulgaria has been under way since 2009, with 23 986 cases reported to WHO, including 24 deaths.

Measles viruses continue to spread across the Region, leading to thousands of cases in people who are not immunized or not immunized on time. Outbreaks can be expected where coverage is below 95% for two doses of measles-containing vaccine (MCV2) (Fig. 2).

Denmark, Germany, the Netherlands, Norway, Serbia, Switzerland and the former Yugoslav Republic of Macedonia have reported measles cases in 2011 (Fig. 1). Turkey recently reported a small outbreak in Istanbul (genotype D9, not previously circulating in Turkey), in addition to cases linked to the large outbreak in Bulgaria (genotype D4). Small outbreaks have occurred in the Russian Federation (in Krasnoyarsk and Tomsk), linked to Uzbekistan's outbreak.

Since 2008, measles outbreaks have been a serious challenge to France. It reported over 5000 cases in 2010, and preliminary data from 2011 indicate that this trend is continuing, with nearly 1000 cases reported in January alone. Such epidemics have sparked smaller outbreaks in other countries, both within and outside the Region.

In January 2011, the Pan American Health Organization (PAHO) informed the WHO Regional Office for Europe of a measles case in a 9-month-old infant from the United States, who contracted measles in the Dominican Republic, most probably due to exposure to an adult from Europe with measles who was on holiday at the same resort. (Six measles cases also occurred in the territory of Saint Martin in January 2011.) As the Region of the Americas eliminated measles in 2002, this case represents an important public health event that required an immediate and comprehensive response. PAHO reports that a country can spend up to US\$ 25 000 conducting a case investigation on just one

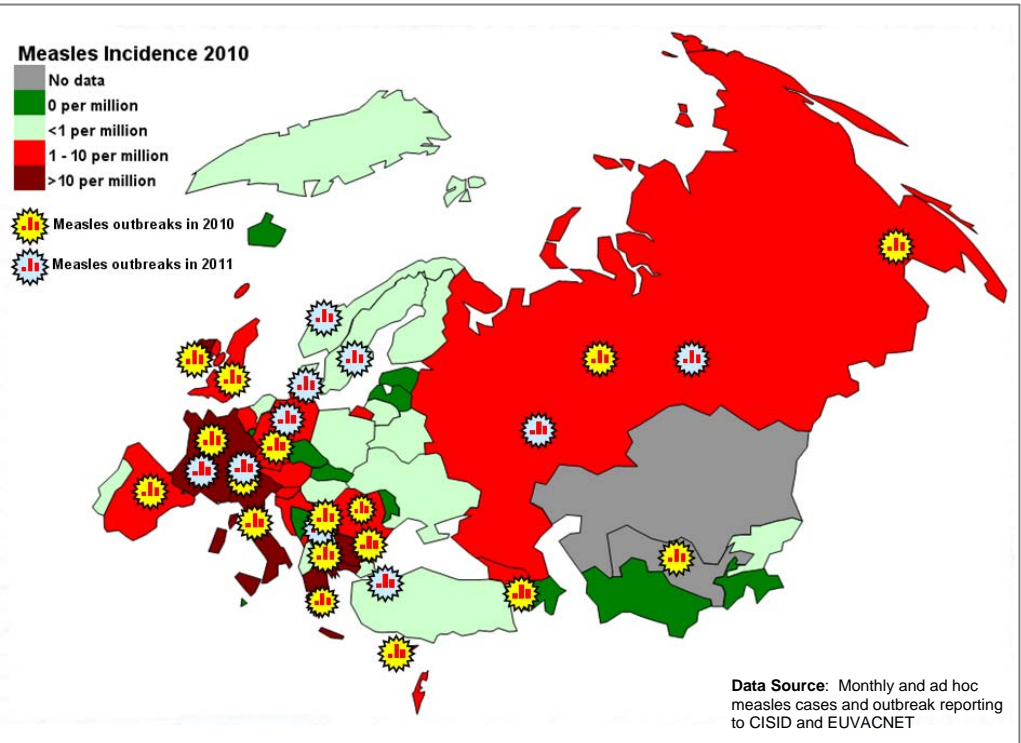


Figure 1. Measles Incidence in 2010 and measles outbreaks between Jan 2010 and Feb 2011

importation (personal communication).

Genotyping of current outbreaks has been extremely helpful in defining sources of importation and transmission pathways, and monitoring indigenous and imported measles virus, which is required to document progress towards elimination. At present, the main circulating genotype across the European Region is D4 (various variants of the D4 “Enfield” United Kingdom genotype).

Acting as the WHO Regional Committee for Europe in September 2010, Member States adopted a resolution to renew their commitment and accelerate action to eliminate measles and rubella and prevent congenital rubella syndrome in the European Region by 2015. This shows that they understand the importance of elimination, appreciate the severity of the challenges and acknowledge the need to strengthen efforts to reach elimination.

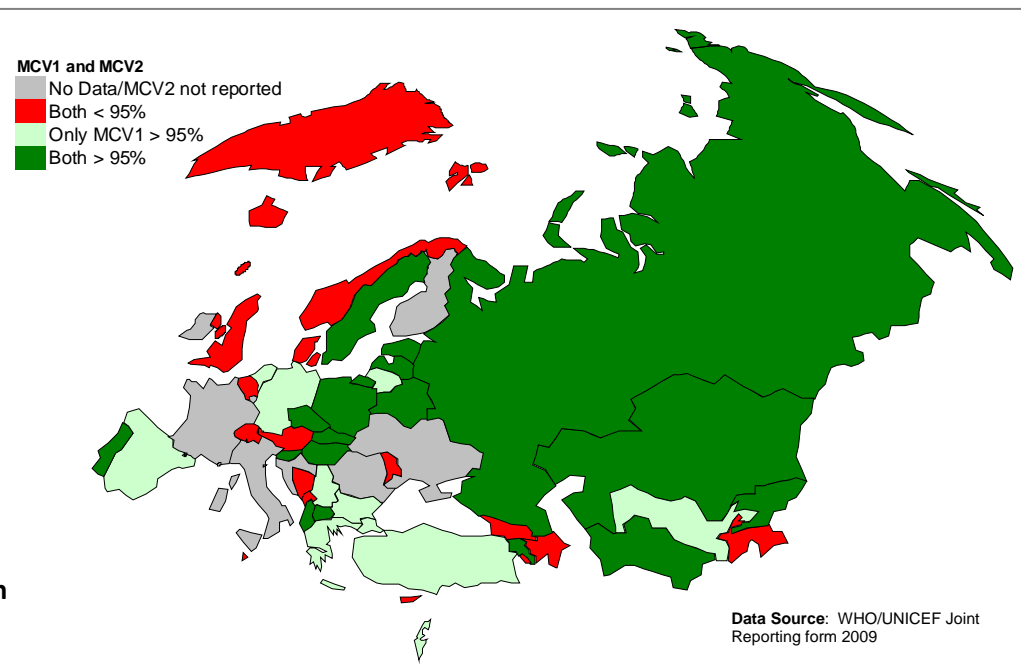


Figure 2. MCV1, MCV 2, coverage WHO European Region, 2009

Importation of Wild Polio Virus and Response Measures in the European Region

In 2010, the WHO European Region experienced the first importation of wild poliovirus since it was certified polio free in 2002 (Fig. 3).

Kazakhstan

As of 4 March 2011, no AFP cases had been reported for 2011.

In 2010, the country reported 113 AFP cases and 1 confirmed polio case to the WHO Regional Office for Europe, with onset of paralysis on 12 August 2010. The confirmed case was from Saryagach district in southern Kazakhstan.

Kyrgyzstan

As of 4 March 2011, the country had reported 8 AFP cases with onset in 2011. The most recent reported case had paralysis onset on 2 February 2011.

In 2010, Kyrgyzstan reported 68 AFP cases, but no polio cases.

Russian Federation

As of 4 March 2011, the Russian Federation had reported 72 AFP cases in 2011, including cases with onset in week 52 of 2010 (on 1 and 2 January). The most recent reported case had onset of paralysis on 28 February 2011.

In 2010, the Russian Federation reported 409 AFP cases; 14 were laboratory confirmed for wild poliovirus type 1.

Tajikistan

As of 4 March 2011, Tajikistan had reported three AFP cases with date of onset in 2011 (one case each in Kulyab, Kurgan-Tyube and Sogd regions). The last AFP case had a date of onset of 8 February 2011. Specimens from the first two cases were sent to the WHO regional reference laboratory in Moscow, Russian Federation on 12 February 2011.

In 2010, Tajikistan reported 458 laboratory confirmed cases of wild poliovirus type 1, including 29 deaths (6.3%). Confirmed cases were from 35 of 61 administrative territories (58 districts and 3 cities – Dushanbe, Khudjand and Kurgan-Tube).

Of the 458 confirmed wild poliovirus cases, 90 (20%) were aged less than 1 year; 225 (49%) were aged 1–5 years; 90 (20%) were aged 6–14 years; and 53 (11%) were aged 15 years and older.

Turkmenistan

As of 4 March 2011, the country had reported 5 AFP cases with onset in 2011. The most recent reported case had a date of paralysis onset of 28 January 2011.

In 2010, Turkmenistan reported three cases laboratory confirmed for wild poliovirus type 1 from two districts (Beyik Turkmenbashi and Koytendag) of Lebap province, bordering Uzbekistan. The last confirmed case had a date of onset of 28 June 2010. The confirmed cases occurred in children aged 2, 11 and 13 years.



Uzbekistan

As of 4 March 2011, the country had reported no AFP cases with onset in 2011. In 2010 there were 147 AFP cases, including 14 in people aged over 15 years. The latest reported AFP case had a date of paralysis onset of 28 December 2010.

Synchronized SIAs in 2011

In January 2011, six Member States (Kazakhstan, Kyrgyzstan, the Russian Federation, Tajikistan, Turkmenistan and Uzbekistan) agreed to synchronize rounds of SIAs with trivalent oral polio vaccine (tOPV), mostly in April and May 2010, to improve population immunity in the most vulnerable population group

(aged 0–5 years). Two additional rounds of national immunization days (NIDs) or subnational immunization days (sNIDs) in this age group, synchronized between neighbouring countries, should be effective to halt the current outbreak and prevent similar incidents in future.

In addition, Kazakhstan and the Russian Federation committed themselves to carrying out earlier rounds of SIAs in February and March, as part of their outbreak-response activities (Table 1). Kazakhstan has already reported successful implementation of its February round (using monovalent oral polio vaccine type 1 – mOPV1), with reported coverage of 98.8%.

Table 1. Planned SIAs in six countries in the WHO European Region, 2011
(data reported as of 8 March 2011)

Country	Dates, activities, vaccines and target groups			
	February	March	April	May
Kazakhstan	21–27 February SNIDs, mOPV1 Target: 0–6 years/ 0.41 million	TBC* SNIDs, mOPV1 Target: 7–15 years/ 0.39 million		TBC* NIDs, tOPV Target: < 6 years / 1.9 million
Kyrgyzstan			18–25 April NIDs, tOPV Target: < 15 years/ 1.67 million	16–23 April NIDs, tOPV Target: < 15 years/ 1.67 million
Russian Federation		28 March – 2 May SNIDs, tOPV Target: 6 months – 15 years/2.2 million	25–30 April SNIDs, tOPV Target: 6 months – 15 years/2.2 million	
Tajikistan			18–22 April NIDs, tOPV Target: < 6 years/ 1.2 million	23–27 May NIDs, tOPV Target: < 6 years/ 1.2 million
Turkmenistan			25–28 April NIDs, tOPV Target: < 6 years/ 0.67 million	30 May – 2 June NIDs, tOPV Target: < 6 years/ 0.67 million
Uzbekistan			19–23 April NIDs, tOPV Target: < 6 years/ 2.89 million	24–29 May NIDs, tOPV Target: < 6 years/ 2.89 million

* TBC = to be confirmed

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