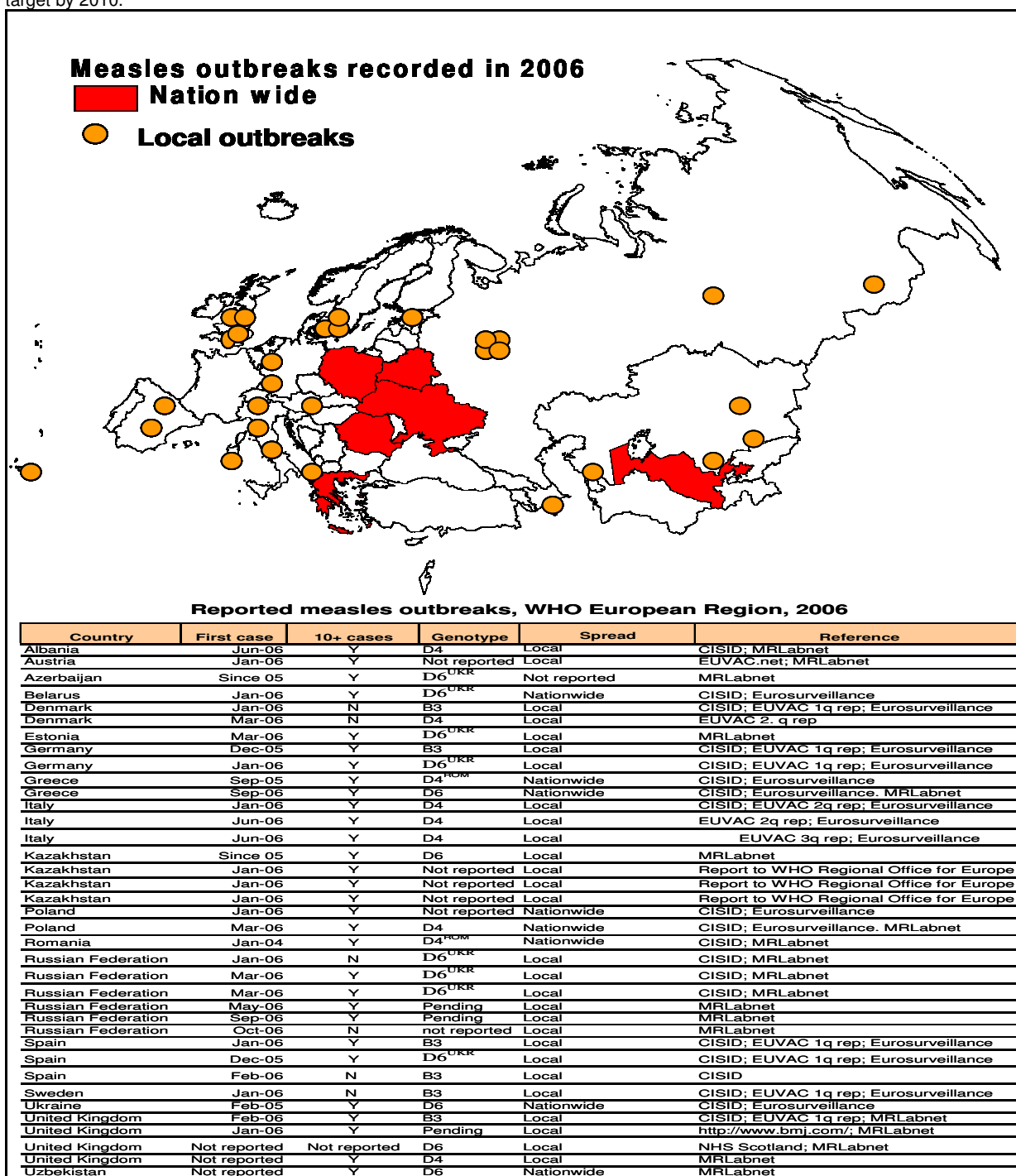


The December issue of the Measles and Rubella Bulletin highlights measles outbreaks in the European Region during 2006.

- The outbreaks indicated reflect those formally and informally (through the MRLabnet) reported; however, WHO is aware of other outbreaks for which it has only received a verbal report, and these are not reflected in the table.
- The column indicating outbreak size of 10+ cases reflects the modelling done by De Serres G et.al* by which the authors estimated ~80% of outbreaks would have 9 or fewer cases at an effective reproductive number of 0.70, the target for the European Region.
- The outbreaks in Romania, Ukraine and Uzbekistan have resulted in linked outbreaks in other countries in the European Region and have served as useful probes of a given country's level of population susceptibility to measles, including the existence of susceptible groups within the country.
- Timely investigation and reporting of outbreaks is critical within the European Region as we move towards achieving the elimination target by 2010.



*De Serres G, Gay NJ, Farrington CP. Epidemiology of transmissible diseases after elimination. *American Journal of Epidemiology*, 2000, 151:1039--1048

Table 1: Classification of reported measles and rubella cases, January - October 2006

Country	Measles cases in 2006				Last measles case (month/year)	Rubella cases in 2006				Last rubella case (month/year)
	Lab	E-Link	Clinical	Total		Lab	E-Link	Clinical	Total	
Albania	30		2	30	Oct-06					
Andorra			2	2	Jun-06	16	1	3	20	Jun-06
Armenia	15		112	127	Jun-06					
Austria*	14		12	26	Sep-06					
Azerbaijan			261	261	Sep-06					
Belarus	149		3	152	Oct-06					
Belgium*	8	1	7	16	Oct-06					
Bosnia and Herzegovina			8	8	Mar-06					
Bulgaria	1		1	2	Sep-06	1			1	Jun-06
Croatia*			1	1	Aug-06	1			1	Jul-06
Cyprus			0	0	Jun-05					
Czech Republic	1		1	2	Feb-06					
Denmark*	26	1		27	Aug-06					
Estonia	27			27	May-06					
Finland*				0	May-05					
France*	15		26	41	Oct-06					
Georgia	8		298	306	Jul-06					
Germany*	824		1441	2265	Oct-06					
Greece*	215		291	506	Sep-06					
Hungary	1		1	2	Apr-06					
Iceland*				0						
Ireland*	14		62	76	Oct-06					
Israel	7		1	8	May-06					
Italy*			54	54	Jul-06					
Kazakhstan	86		23	109	Sep-06					
Kyrgyzstan	25		1	26	Jul-06					
Latvia	5		2	7	Aug-06			6	6	Apr-06
Lithuania			1	1	Aug-06					
Luxembourg*			7	7	Apr-06					
Malta*				0	May-05					
Monaco	No report received in 2006									
Montenegro										
Netherlands*			1	1	Aug-06					
Norway*				0	Apr-04					
Poland	89		31	120	Oct-06					
Portugal*			2	2	Sep-06					
Republic of Moldova	23		11	34	Jul-06					
Romania	1325	80	132	1537	Apr-06					
Russian Federation	1042		47	1089	Oct-06					
San Marino	No report received in 2006									
Serbia				0	Sep-05					
Slovakia				0	Feb-06			1	1	Feb-06
Slovenia				0						
Spain*	223	12	13	248	Oct-06					
Sweden*	14			14	Apr-06					
Switzerland*	27		14	41	Jul-06					
Tajikistan	3			3	May-06					
TfYRMacedonia			1	1	Mar-06					
Turkey	25			25	Jun-06					
Turkmenistan	No report received in 2006									
Ukraine	820		43210	44030	Oct-06					
United Kingdom*	766		5	761	Oct-06					
Uzbekistan	212		578	790	Sep-06					
TOTAL	6030	94	46660	52784		18	1	10	29	

*Data reported to WHO by EUVAC.net

Suspected cases reported but not yet classified are shown in the column "Clinical"

Green cells: timely notification (before 25th of month).
 Orange cells: untimely notification (after 25th of month).
 Red cells: no notification received for this month.

Table 2: Infection source of measles cases, January – October 2006

Country	Source				Country	Source			
	Imported	Import related	Unknown	Indigenous		Imported	Import related	Unknown	Indigenous
Albania		3	18	9	Kazakhstan				109
Andorra	1			1	Kyrgyzstan	8	12	2	4
Armenia				127	Latvia	3			4
Austria				26	Lithuania				1
Azerbaijan				261	Luxembourg				7
Belarus				152	Poland				120
Belgium	1		10	5	Portugal			2	
Bosnia and Herzegovina				8	Republic of Moldova				34
Bulgaria	1				Romania				1537
Czech Republic	1			1	Russian Federation				1089
Denmark	5			22	Spain	19		6	223
Estonia	2			25	Sweden	8		6	
France				41	Switzerland				41
Georgia				306	Tajikistan				3
Germany				2265	TfYRMacedonia				1
Greece				506	Turkey				25
Hungary	1		1		Ukraine				44030
Ireland				76	United Kingdom				761
Israel				8	Uzbekistan				790
Italy				54					

Data source: monthly reports sent to WHO monthly

Cases not specifically reported as "imported", "import related" or "unknown" are categorized as indigenous in the table.

Website: <http://www.euro.who.int/vaccine>
 CISID: <http://data.euro.who.int/cisid>
 Contact: measles@euro.who.int