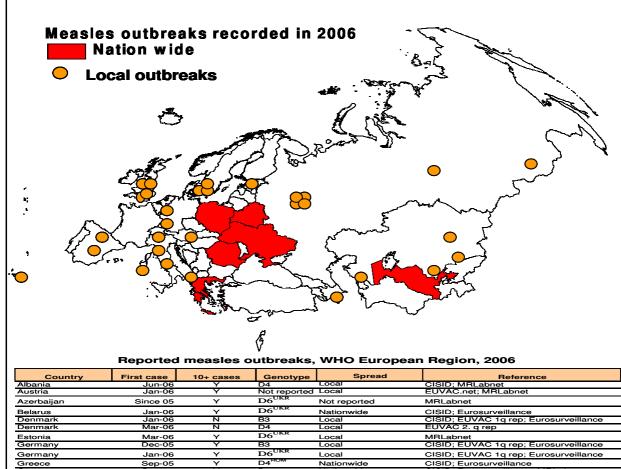


Measles and Rubella Bulletin 15 December 2006

Vaccine-preventable Diseases and Immunization Programme
Division of Health Programmes

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.



Country	First case	10+ cases	Genotype	Spread	Reference
Albania	Jun-06	Y	D4	Local	CISID; MRLabnet
Austria	Jan-06	Υ	Not reported	Local	EUVAC.net; MRLabnet
Azerbaijan	Since 05	Υ	D6 ^{UKR}	Not reported	MRLabnet
Belarus	Jan-06	Υ	D6 ^{UKR}	Nationwide	CISID; Eurosurveillance
Denmark	Jan-06	N	B3	Local	CISID; EUVAC 1q rep; Eurosurveillance
Denmark	Mar-06	N	D4	Local	EUVAC 2. q rep
Estonia	Mar-06	Y	D6 ^{UKR}	Local	MRLabnet
Germany	Dec-05	Υ	B3	Local	CISID; EUVAC 1q rep; Eurosurveillance
Germany	Jan-06	Y	D6 ^{UKR}	Local	CISID; EUVAC 1q rep; Eurosurveillance
Greece	Sep-05	Υ	D4 ^{ROM}	Nationwide	CISID; Eurosurveillance
Greece	Sep-06	Υ	D6	Nationwide	CISID; Eurosurveillance. MRLabnet
Italy	Jan-06	Υ	D4	Local	CISID; EUVAC 2q rep; Eurosurveillance
Italy	Jun-06	Υ	D4	Local	EUVAC 2q rep; Eurosurveillance
Italy	Jun-06	Υ	D4	Local	EUVAC 3q rep; Eurosurveillance
Kazakhstan	Since 05	Y	D6	Local	MRLabnet
Kazakhstan	Jan-06	Y	Not reported	Local	Report to WHO Regional Office for Europe
Kazakhstan	Jan-06	Y	Not reported	Local	Report to WHO Regional Office for Europe
Kazakhstan	Jan-06	Υ	Not reported	Local	Report to WHO Regional Office for Europe
Poland	Jan-06	Y	Not reported	Nationwide	CISID; Eurosurveillance
Poland	Mar-06	Y	D4	Nationwide	CISID; Eurosurveillance. MRLabnet
Romania	Jan-04	Υ	D4 ^{ROM}	Nationwide	CISID; MRLabnet
Russian Federation	Jan-06	N	D6 ^{UKR}	Local	CISID; MRLabnet
Russian Federation	Mar-06	Y	D6 ^{UKR}	Local	CISID; MRLabnet
Russian Federation	Mar-06	Y	D6 ^{UKR}	Local	CISID; MRLabnet
Russian Federation	May-06	Υ	Pending	Local	MRLabnet
Russian Federation	Sep-06	Υ	Pending	Local	MRLabnet
Russian Federation	Oct-06	N	not reported		MRLabnet
Spain	Jan-06	Y	B3	Local	CISID; EUVAC 1q rep; Eurosurveillance
Spain	Dec-05	Y	D6 ^{UKR}	Local	CISID; EUVAC 1q rep; Eurosurveillance
Spain	Feb-06	N	B3	Local	CISID
Sweden	Jan-06	N	B3	Local	CISID; EUVAC 1q rep; Eurosurveillance
Ukraine	Feb-05	Y	D6	Nationwide	CISID; Eurosurveillance
United Kingdom	Feb-06	Y	B3	Local	CISID; EUVAC 1q rep; MRLabnet
United Kingdom	Jan-06	Υ	Pending	Local	http://www.bmj.com/; MRLabnet
United Kingdom	Not reported	Not reported	D6	Local	NHS Scotland; MRLabnet
United Kingdom	Not reported	Υ	D4	Local	MRLabnet
Uzbekistan	Not reported	Υ	D6	Nationwide	MRLabnet

^{*}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		Rubella ca	ses in 2006	5	Last rubella
	Lab	E-Link	Clinical	Total	case (month/year)	Lab	E-Link	Clinical	Total	case (month/year)
Albania	30			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	Sep-06	1			1	Jun-06
Croatia*			1	1	Aug-06	1			1	Jul-06
Cyprus				Ö	Jun-05					00.00
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*				506	Sep-06					
Hungary	215		291	2	Apr-06					
lceland*	'			0	Apr-06					
Ireland*	14		62	76	Oct-06					
srael	7		1	8	May-06					
Italy*			54	54	Jul-06					
Kazakhstan	86		23	109	Sep-06					
Kyrgyzstan	25		1	26	Jul-06					1 00
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	N	o report rec	ceived in 200	06						<u> </u>
Montenegro										<u> </u>
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	N	o report rec	eived in 20							
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					
Гurkey	25			25	Jun-06					
Turkmenistan		o report rec	ceived in 20		Jul-04					
Ukraine	820		43210	44030	Oct-06					
United Kingdom*	756		5	761	Oct-06					
Jzbekistan	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		Sou	irce		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