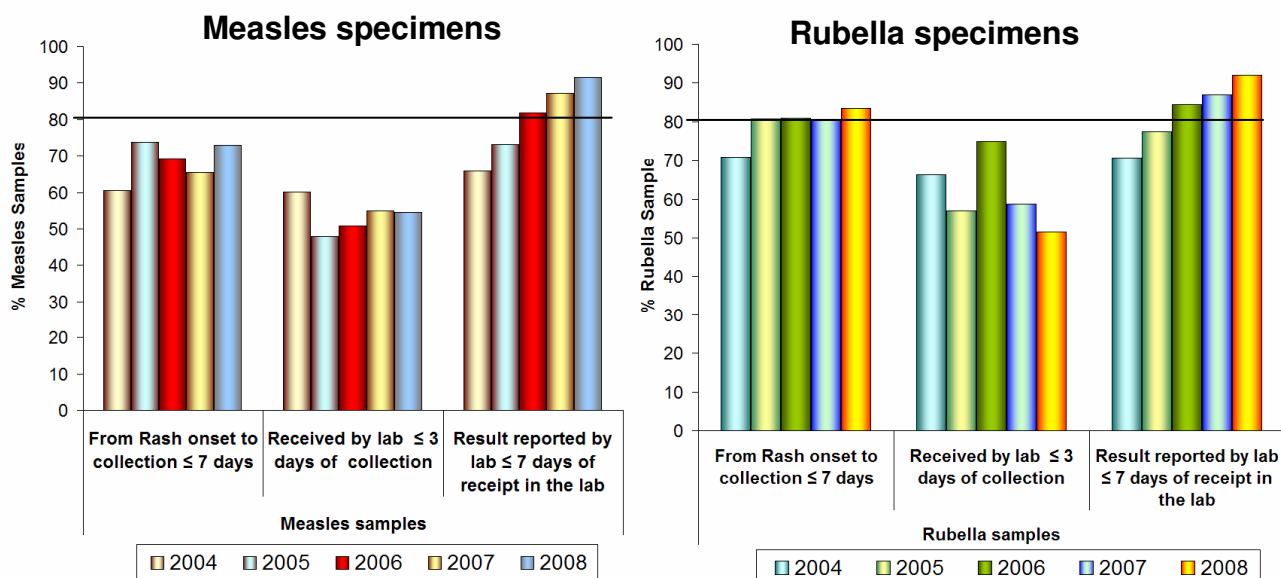


## Time from collection to result for measles and rubella specimens Surveillance and Laboratory Indicators 2004-2008\*, WHO EURO



\*Data as of May, 2008; Source: Monthly aggregate MR Lab reporting

The three indicators for surveillance and laboratory performance are timeliness of collecting clinical specimen upon onset of rash for both measles and rubella; timeliness of specimen transportation to the investigating laboratory; and timeliness of the laboratory reporting the results to the authorities. The target for all three indicators is 80%.

From 2004 through May 2008, collection of specimens within seven days of rash onset for measles and rubella has improved, however, countries still need to work on making sure that the laboratories receive the specimens within three days of collection. Laboratories in the Region have improved on ensuring timeliness of results to the authorities, and they have sustained the target of 80% for the past three years.

### Number and type of samples received by lab for testing measles, rubella or both

Year	Total	Serum (%)	Oral fluid (%)	Nasopharyngeal swab (%)	Dry blood spot (%)	Urine (%)	EDTA whole blood (%)	Other specimen (%)
2004	34756	29208 (84%)	4622 (13.3%)	224 (0.6%)	0 (0%)	306 (0.9%)	49 (0.1%)	347 (1%)
2005	34803	30917 (88.8%)	3020 (8.7%)	61 (0.2%)	48 (0.1%)	125 (0.4%)	458 (1.3%)	174 (0.5%)
2006	33471	24876 (74.3%)	4901 (14.6%)	710 (2.1%)	126 (0.4%)	668 (2%)	1661 (5%)	529 (1.6%)
2007	30870	23008 (74.5%)	4858 (15.7%)	177 (0.6%)	100 (0.3%)	604 (2%)	1208 (3.9%)	915 (3%)
2008	9023	6911 (76.6%)	1418 (15.7%)	230 (2.5%)	23 (0.3%)	218 (2.4%)	18 (0.2%)	205 (2.3%)

\*Data as of May, 2008 Source: Monthly aggregate MR Lab reporting



The WHO European Region thanks **Dr Mick Molders** for his work and dedication in support of the expansion and continuous quality performance of the regional measles and rubella lab network. After working for more than five years as regional measles and rubella Lab coordinator, Dr Mulders is returning to his home country The Netherlands to undertake new public health endeavors. We wish Dr Mulders all the very best.

**Table 1: Classification of suspected measles and rubella cases, Jan-Apr, 2008**

Country	Measles								Rubella							
	Total suspected	Total measles (%)	Classification				Monthly Reporting		Total suspected	Total Rubella (%)	Classification				Monthly Reporting	
			Lab confirmed	Epi-Link	Clinical <sup>1</sup>	Discarded	% Completeness	% Timeliness			Lab confirmed	Epi-Link	Clinical <sup>1</sup>	Discarded	% Completeness	% Timeliness
Albania	0	0	0	0	0	0	100%	100%	0	0	0	0	0	0	100%	60%
Andorra	0	0	0	0	0	0	100%	100%	0	0	0	0	0	0	100%	100%
Armenia	0	0	0	0	0	0	80%	40%	2	2 (100%)	0	0	2	0	80%	40%
Austria <sup>2</sup>	52	52 (100.0)	25	3	24	0	60%	20%	-	-	-	-	-	-	0%	0%
Azerbaijan	1	1 (100.0)	0	0	1	0	100%	100%	0	0	0	0	0	0	80%	80%
Belarus	0	0	0	0	0	0	80%	80%	1	1 (100%)	1	0	0	0	80%	80%
Belgium	60	59 (98.0)	22	33	4	1	80%	40%	-	-	-	-	-	-	0%	0%
Bosnia and Herzegovina	No Report	-	-	-	-	-	0%	0%	-	-	-	-	-	-	0%	0%
Bulgaria	0	0	0	0	0	0	100%	60%	-	-	-	-	-	-	0%	0%
Croatia <sup>2</sup>	68	48 (71.0)	38	6	4	20	100%	80%	-	-	-	-	-	-	0%	0%
Cyprus	0	0	0	0	0	0	100%	80%	0	0	0	0	0	0	100%	100%
Czech Republic	0	0	0	0	0	0	100%	80%	-	-	-	-	-	-	0%	0%
Denmark <sup>2</sup>	6	6 (100.0)	6	0	0	0	100%	60%	9	9 (100%)	0	0	9	0	20%	0%
Estonia	0	0	0	0	0	0	100%	40%	0	0	0	0	0	0	20%	20%
Finland	0	0	0	0	0	0	100%	80%	-	-	-	-	-	-	0%	0%
France <sup>2</sup>	64	59 (92.0)	47	1	11	5	80%	40%	-	-	-	-	-	-	0%	0%
Georgia	20	20 (100.0)	1	0	19	0	100%	100%	77	77 (100%)	6	0	71	0	100%	100%
Germany <sup>2</sup>	776	764 (98.0)	311	341	112	12	80%	40%	-	-	-	-	-	-	0%	0%
Greece	0	0	0	0	0	0	80%	40%	-	-	-	-	-	-	0%	0%
Hungary	0	0	0	0	0	0	100%	60%	-	-	-	-	-	-	0%	0%
Iceland	0	0	0	0	0	0	100%	40%	-	-	-	-	-	-	0%	0%
Ireland <sup>2</sup>	22	22 (100.0)	2	1	19	0	60%	40%	17	17 (100%)	1	1	15	0	100%	100%
Israel	595	595 (100.0)	69	0	526	0	60%	0%	0	0	0	0	0	0	0%	0%
Italy	0	0	0	0	0	0	40%	20%	-	-	-	-	-	-	0%	0%
Kazakhstan	11	11 (100.0)	6	5	0	0	100%	40%	2937	2937 (100%)	806	1299	832	0	100%	40%
Kyrgyzstan	6	1 (17.0)	1	0	0	5	100%	80%	-	-	-	-	-	-	0%	0%
Latvia	0	0	0	0	0	0	100%	60%	3	3 (100%)	2	0	1	0	60%	60%
Lithuania	1	1 (100.0)	1	0	0	0	80%	60%	0	0	0	0	0	0	80%	80%
Luxembourg	0	0	0	0	0	0	60%	20%	-	-	-	-	-	-	0%	0%
Malta	0	0	0	0	0	0	100%	80%	-	-	-	-	-	-	0%	0%
Moldova	0	0	0	0	0	0	60%	40%	-	-	-	-	-	-	0%	0%
Monaco	No Report	-	-	-	-	-	0%	0%	-	-	-	-	-	-	0%	0%
Montenegro	0	0	0	0	0	0	100%	60%	0	0	0	0	0	0	100%	60%
Netherlands <sup>2</sup>	2	2 (100.0)	2	0	0	0	20%	0%	-	-	-	-	-	-	0%	0%
Norway	0	0	0	0	0	0	80%	60%	-	-	-	-	-	-	0%	0%
Poland	44	10 (23.0)	1	0	9	34	80%	20%	-	-	-	-	-	-	0%	0%
Portugal	0	0	0	0	0	0	100%	20%	-	-	-	-	-	-	0%	0%
Romania <sup>2</sup>	233	14 (6.0)	14	0	0	218	100%	20%	-	-	-	-	-	-	0%	0%
Russian Federation	14	14 (100.0)	14	0	0	0	100%	100%	-	-	-	-	-	-	0%	0%
San Marino	No Report	-	-	-	-	-	0%	0%	-	-	-	-	-	-	0%	0%
Serbia	0	0	0	0	0	0	100%	60%	-	-	-	-	-	-	0%	0%
Slovakia	2	1 (50.0)	1	0	0	1	100%	80%	1	1 (100%)	0	0	1	0	100%	40%
Slovenia	0	0	0	0	0	0	100%	80%	-	-	-	-	-	-	0%	0%
Spain <sup>2</sup>	138	138 (100.0)	110	20	8	0	60%	20%	-	-	-	-	-	-	0%	0%
Sweden <sup>2</sup>	16	16 (100.0)	13	2	1	0	80%	40%	-	-	-	-	-	-	0%	0%
Switzerland <sup>2</sup>	1987	1829 (92.0)	679	120	1030	158	60%	20%	-	-	-	-	-	-	0%	0%
Tajikistan	0	0	0	0	0	0	60%	20%	16	16 (100%)	0	0	16	0	60%	20%
The former Yugoslav Republic of Macedonia	5	5 (100.0)	0	0	5	0	100%	100%	1	1 (100%)	0	0	1	0	40%	20%
Turkey	No Report	-	-	-	-	-	0%	0%	-	-	-	-	-	-	0%	0%
Turkmenistan	0	0	0	0	0	0	100%	80%	-	-	-	-	-	-	0%	0%
Ukraine	29	29 (100.0)	4	0	25	0	80%	80%	0	0	0	0	0	0	20%	20%
United Kingdom <sup>2</sup>	448	448 (100.0)	446	2	0	0	80%	40%	-	-	-	-	-	-	0%	0%
Uzbekistan	2	2 (100.0)	1	0	1	0	100%	100%	16	16 (100%)	10	0	6	0	100%	80%
<b>Total/Averages</b>	<b>4602</b>	<b>4147 (90.0)</b>	<b>1814</b>	<b>534</b>	<b>1799</b>	<b>454</b>	<b>79%</b>	<b>51%</b>	<b>3080</b>	<b>3080 (100.0)</b>	<b>826</b>	<b>1300</b>	<b>954</b>	<b>0</b>	<b>27%</b>	<b>20%</b>

Data source: Monthly aggregate and case-based data reported by Member States to WHO/Europe and/or EUVAC.NET.

<sup>1</sup> Cases with missing classification are classified as "Clinical"

<sup>2</sup> Importation of measles cases (included in total cases): Austria=2; Croatia=2; Denmark=2; France=5; Germany =61; Ireland=2; Netherlands=2; Romania = 5 (including 4 import related cases); Spain=1, Sweden=6; Switzerland=9, UK=2 .

**Table 2: Measles and rubella laboratory test results, Jan-May, 2008**

Country	Specimen* (Serum, Oral Fluid, Swab, Urine and other)									Reporting	
	Collected	Tested for measles	Positive for measles (%)	Measles Equivocal	Negative for measles	Tested for rubella	Positive for rubella (%)	Rubella Equivocal	Negative for rubella	% Completeness	% Timeliness
Albania	0	5	2 (40.0)	0	3	0	0	0	0	100.0	80.0
Andorra	No Lab										
Armenia	15	15	1 (7.0)	0	13	15	0 (0.0)	3	11	80.0	20.0
Austria	0	912	107 (12.0)	11	794	2334	2 (0.0)	0	2332	100.0	100.0
Azerbaijan	8	4	0 (0.0)	0	4	5	0 (0.0)	0	5	60.0	20.0
Belarus	80	73	0 (0.0)	0	73	78	1 (1.0)	0	77	100.0	80.0
Belgium	104	102	39 (38.0)	4	55	29	1 (3.0)	0	24	100.0	100.0
Bosnia and Herzegovina	No Report										
Bulgaria	28	28	0 (0.0)	0	28	28	0 (0.0)	0	28	100.0	80.0
Croatia	58	58	19 (33.0)	1	38	20	0 (0.0)	0	20	80.0	60.0
Cyprus	0	0	0	0	0	0	0	0	0	80.0	80.0
Czech Republic	19	13	2 (15.0)	2	9	18	0 (0.0)	0	18	100.0	100.0
Denmark	No Report										
Estonia	367	95	1 (1.0)	0	93	323	4 (1.0)	0	318	100.0	100.0
Finland	278	63	0 (0.0)	0	63	215	0 (0.0)	0	215	80.0	60.0
France	No Report										
Georgia	No Report										
Germany	331	330	176 (53.0)	4	150	3	1 (33.0)	2	0	100.0	20.0
Greece	No Report										
Hungary	608	29	0 (0.0)	0	29	50	0 (0.0)	0	50	100.0	100.0
Iceland	No Report									0.0	0.0
Ireland	778	134	7 (5.0)	1	126	659	0 (0.0)	0	659	100.0	80.0
Israel	1080	456	179 (39.0)	0	277	262	59 (23.0)	0	203	100.0	100.0
Italy	No Report										
Kazakhstan	262	100	8 (8.0)	2	76	230	106 (46.0)	8	80	100.0	80.0
Kyrgyzstan	95	95	9 (9.0)	5	81	95	4 (4.0)	4	87	100.0	60.0
Latvia	91	75	0 (0.0)	0	75	89	0 (0.0)	0	89	100.0	100.0
Lithuania	7	6	1 (17.0)	0	4	6	0 (0.0)	0	5	100.0	100.0
Luxembourg	95	45	0 (0.0)	1	44	50	9 (18.0)	9	32	100.0	100.0
Malta	No Report										
Moldova	16	16	0 (0.0)	0	16	16	0 (0.0)	0	16	100.0	80.0
Monaco	No Lab										
Montenegro	No Lab										
Netherlands	17	9	5 (56.0)	0	4	9	0 (0.0)	0	9	40.0	0.0
Norway	58	49	4 (8.0)	0	45	18	3 (17.0)	0	15	100.0	100.0
Poland	45	45	1 (2.0)	1	43	45	17 (38.0)	1	27	100.0	60.0
Portugal	25	1	0 (0.0)	0	1	0	0	0	0	100.0	100.0
Romania	194	164	14 (9.0)	1	149	180	3 (2.0)	1	176	80.0	80.0
Russian Federation	1467	1417	26 (2.0)	9	1364	808	141 (17.0)	9	608	100.0	100.0
San Marino	No Lab										
Serbia	18	0	0	0	0	18	0 (0.0)	0	18	40.0	20.0
Slovakia	12	13	1 (8.0)	0	12	0	0	0	0	100.0	80.0
Slovenia	138	28	0 (0.0)	1	27	115	20 (17.0)	0	95	100.0	100.0
Spain	252	331	135 (41.0)	7	182	161	26 (16.0)	0	135	60.0	40.0
Sweden	No Report										
Switzerland	No Lab										
Tajikistan	3	2	0 (0.0)	0	2	3	1 (33.0)	0	2	80.0	40.0
The former Yugoslav Republic of Macedonia	No Report										
Turkey	No Report										
Turkmenistan	68	68	0 (0.0)	0	63	68	0 (0.0)	0	63	100.0	100.0
Ukraine	263	250	6 (2.0)	2	242	262	13 (5.0)	0	249	100.0	100.0
United Kingdom	1953	1354	365 (27.0)	39	950	330	7 (2.0)	19	304	60.0	20.0
Uzbekistan	24	18	1 (6.0)	0	17	24	18 (75.0)	1	5	100.0	80.0
<b>Total / Average</b>	<b>8857</b>	<b>6403</b>	<b>1109 (17%)</b>	<b>91</b>	<b>5152</b>	<b>6566</b>	<b>436 (7%)</b>	<b>57</b>	<b>5975</b>	<b>62.0</b>	<b>51.0</b>

\*Laboratories may have received more than 1 clinical sample or may have conducted more than 1 test for a given case reported in Table 1

Data source: Aggregated monthly lab data provided by laboratories of the regional measles and rubella lab network.

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