

Spotlight on measles 2010: Measles elimination in Europe – a new commitment to meet the goal by 2015

I Steffens (eurosurveillance@ecdc.europa.eu)¹, R Martin², P L Lopalco¹

1. European Centre for Disease Prevention and Control (ECDC), Stockholm, Sweden

2. Communicable Diseases Unit, World Health Organization (WHO) Regional Office for Europe, Copenhagen, Denmark

Citation style for this article:

Steffens I, Martin R, Lopalco PL. Spotlight on measles 2010: Measles elimination in Europe – a new commitment to meet the goal by 2015. *Euro Surveill.* 2010;15(50):pii=19749. Available online: <http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19749>

Article published on 16 December 2010

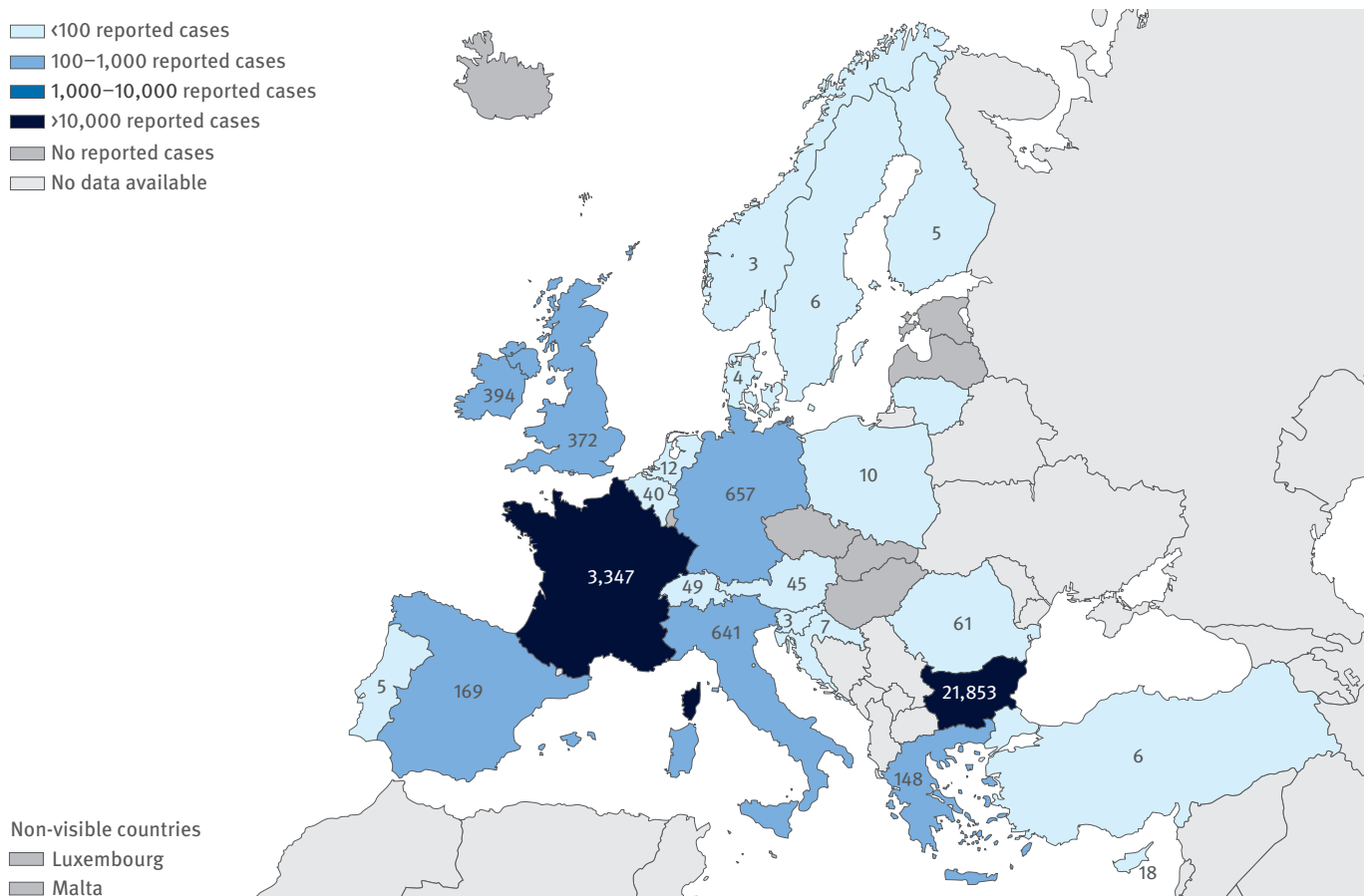
In September 2010, the 53 member states of the World Health Organization (WHO) European Region met in Moscow, Russia, and adopted a resolution to renew their commitment to the elimination of measles and rubella and the prevention of congenital rubella syndrome by 2015 [1]. While great progress has been made towards measles and rubella elimination in the Region, with some countries interrupting endemic transmission of one or both of the diseases, the public health community had to come to terms with the fact that 2010 will not be the year when measles and rubella elimination

is achieved in the European Region. As experience from the Americas shows, it is technically feasible to eliminate measles with a defined strategy [2]. So why has the goal not yet been reached in Europe?

The reasons are manifold. In 2010, *Eurosurveillance* has put a spotlight on measles to mark this, tracked measles outbreaks in Europe, and highlighted the associated challenges. In 19 papers, mostly rapid communications, ongoing outbreaks have been described and their implications discussed. Together with earlier

FIGURE

Number of measles cases reported by European Union and European Economic Area countries, January – October 2010 (n=27,795)



Source: [3].

reports in this journal from recent years, the comprehensive compilation of reports on measles shows that measles virus is freely circulating in Europe and is not confined to specific populations or countries. According to preliminary data from EUVAC.net, the European surveillance community network for vaccine preventable infectious diseases, covering January to October 2010 [3], measles outbreaks of various sizes occurred in a majority of European Union (EU) countries, Iceland and Norway, with 27,795 notified cases (Figure). Only eight EU countries reported zero cases in 2010. In addition, five countries (Bosnia and Herzegovina, Israel, Russia, Switzerland, Uzbekistan) among the WHO European Region countries experienced outbreaks between 2007 and 2010.

The Region will not achieve the initial goal of eliminating measles by 2010 because not all children are immunised on time, and some are never immunised. Many member states from the eastern part of the Region have conducted national supplementary immunisation activities to vaccinate population cohorts that were susceptible to measles and rubella viruses. Over 57 million persons have been immunised through these activities between 2000 and 2010.

This is, however, not enough. The compilation of *Eurosurveillance* papers provides further evidence of the known fact that there are areas or pockets of individuals not protected against the measles virus where coverage for two doses of a measles virus-containing vaccine is often below the 95% minimum needed for the elimination of the disease. These pockets are present throughout Europe and disease can propagate and spread within them, but the virus can also spread across country and regional borders with the movement of individuals. Therefore it is important to identify specific groups at risk for measles at local and national levels and to tailor health information and preventive measures specifically for these groups. In addition, one needs to be aware that it is not always possible to identify a specific group at risk [4,5]. While we see many outbreaks reported among Roma populations [6,7], Irish travellers [7] and anthroposophical [9,10] or religious communities [11,12], these populations are from different social backgrounds and there are different reasons why they are not vaccinated. Moreover, clustering in space of highly educated individuals who do not immunise their children put them at increased risk of disease if the virus is introduced into such a community. While immunisation has led to a considerable reduction in disease over the years, there has been a shift in public perception from the risk, implications and severity of the disease to the safety of the vaccines.

Consequently, how do we increase measles vaccine coverage in the general population as well as among known risk groups? More information is needed in Europe on the severity of measles and secondary infections, including pneumonia and encephalitis, and the

healthcare costs associated with the disease. In addition, information about the benefits of vaccination should be shared with politicians, healthcare professionals and parents.

If Europe is to meet the new measles elimination target of 2015, accelerated actions and innovative approaches need to be implemented by countries and the described challenges should be addressed so as not to jeopardise the goal. Besides targeted supplementary immunisation activities, which are not common practice in western Europe, catch-up vaccination campaigns among identified groups and individuals who are not immunised can dramatically close immunity gaps. Health professionals – such as doctors, nurses and midwives – play a critical role in achieving and maintaining high vaccination coverage. They need to be partners in strategies to promote vaccination and aide in closing immunisation gaps at any possible occasion, including reminding their clients and recalling children for vaccination. Ensuring that these healthcare providers have an appreciation of the benefits of vaccination against measles and a sound scientific knowledge of vaccinology, including information about the relatively few contraindications, is imperative. Lastly, renewing high-level political and societal commitment and ensuring appropriate resources are needed to reach the elimination goal by 2015. The Region cannot afford to lose ground on the substantial gains made to date.

References

1. World Health Organization (WHO). Resolution. Renewed commitment to elimination of measles and rubella and prevention of congenital rubella syndrome by 2010 and Sustained support for polio-free status in the WHO European Region. Moscow, Russia, WHO Regional Office for Europe; 2010. Available from: http://www.euro.who.int/__data/assets/pdf_file/0016/122236/RC60_eRes12.pdf.
2. World Health Organization (WHO). Strategic plan for measles and congenital rubella infection in the WHO European Region. Copenhagen, Denmark, WHO Regional Office for Europe; 2003. Available from: <http://www.euro.who.int/document/e81567.pdf>
3. EUVACNET. Surveillance Community for Vaccine Preventable Diseases. [Internet]. Status of measles surveillance data. www.euvac.net/graphics/euvac/status_2010.html (accessed 16 December 2010)
4. Parent du Châtelet I, Antona D, Freymuth F, Muscat M, Halftermeyer-Zhou F, Maine C, et al. Spotlight on measles 2010: Update on the ongoing measles outbreak in France, 2008-2010. *Euro Surveill.* 2010;15(36):pii=19656. Available from: <http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19656>
5. Smithson R, Irvine N, Hutton C, Doherty L, Watt A. Spotlight on measles 2010: Ongoing measles outbreak in Northern Ireland following an imported case, September-October 2010. *Euro Surveill.* 2010;15(43):pii=19698. Available from: <http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19698>
6. Orlikova H, Rogalska J, Kazanowska-Zielinska E, Jankowski T, Slodzinski J, Kess B, et al. Spotlight on measles 2010: A measles outbreak in a Roma population in Pulawy, eastern Poland, June to August 2009. *Euro Surveill.* 2010;15(17):pii=19550. Available from: <http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19550>
7. Pervanidou D, Horefti E, Patrinos S, Lytras T, Triantafyllou E, Mentis A, et al. Spotlight on measles 2010: Ongoing measles outbreak in Greece, January–July 2010. *Euro Surveill.* 2010;15(30):pii=19629. Available from: <http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19629>

8. Gee S, Cotter S, O'Flanagan D, on behalf of the national incident management team. Spotlight on measles 2010: Measles outbreak in Ireland 2009-2010. *Euro Surveill.* 2010;15(9):pii=19500. Available from: <http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19500>
9. Bätzing-Feigenbaum J, Pruckner U, Beyer A, Sinn G, Dinter A, Mankertz A, et al. Spotlight on measles 2010: Preliminary report of an ongoing measles outbreak in a subpopulation with low vaccination coverage in Berlin, Germany, January-March 2010. *Euro Surveill.* 2010;15(13):pii=19527. Available from: <http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19527>
10. Roggendorf H, Mankertz A, Kundt R, Roggendorf M. Spotlight on measles 2010: Measles outbreak in a mainly unvaccinated community in Essen, Germany, March – June 2010. *Euro Surveill.* 2010;15(26):pii=19605. Available from: <http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19605>
11. Noury U, Stoll J, Haeghebaert S, Antona D, Parent du Châtelet I, The investigation team. Outbreak of measles in two private religious schools in Bourgogne and Nord-Pas-de-Calais regions of France, May-July 2008 (preliminary results). *Euro Surveill.* 2008;13(35):pii=18961. Available from: <http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=18961>
12. Lernout T, Kissling E, Hutse V, De Schrijver K, Top G. An outbreak of measles in orthodox Jewish communities in Antwerp, Belgium, 2007-2008: different reasons for accumulation of susceptibles. *Euro Surveill.* 2009;14(2):pii=19087. Available from: <http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19087>