
NATIONAL CONGENITAL RUBELLA SURVEILLANCE PROGRAMME

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Objectives To monitor the effectiveness of the rubella immunisation programme by determining the incidence of congenital rubella and investigating the circumstances surrounding any new cases.

Background

The World Health Organisation has established a goal of reducing congenital rubella incidence to <1/100,000 births per year in all 52 countries of the WHO European region by 2010 (WHO 2005). Before the introduction of rubella vaccine in 1970 an estimated 200-300 babies were born with congenital rubella defects every year in the UK and many more in epidemic years. Selective vaccination was introduced in 1970 for all schoolgirls and subsequently extended to susceptible adult women. Although this programme had considerable success, cases of rubella in pregnancy and congenital rubella continued to occur, and in 1988 the combined measles, mumps and rubella (MMR) vaccine was introduced for all children in the second year of life with the aim of eliminating rubella virus from the UK. In 1994, as part of an attempt to avert a predicted measles epidemic, combined measles/rubella (MR) vaccine was offered to all schoolchildren. Antenatal screening to identify women requiring post-partum vaccination continues, as does mass immunisation of young children, but the schoolgirl programme stopped in 1996. Uptake of MMR vaccine has never reached the target of 95% in the UK, and declined from a peak of 92% in 1995/6 to 80% in 2003/4 (available at www.publications.doh.gov.uk/public/sb0416.htm).

The National Congenital Rubella Surveillance Programme (NCRSP) was set up in 1971 to monitor the effectiveness of the rubella immunisation programme. The annual incidence of reported congenital rubella births has dropped dramatically from an average of 48 cases per year 1971-1975 to an average 4 per year 1991-1995 (Miller et al 1997). Rubella-associated terminations have also declined over the same period from an annual average of 742 to less than 10 a year. In 1996, following a resurgence of rubella infection in the community, mainly affecting young men, 12 congenital rubella births were reported from England, Scotland and Wales, and two from the Republic of Ireland (Tookey & Peckham 1999). Only 10 cases have been reported altogether since 1997 (Tookey 2004).

While rubella infection is currently rare in Britain, women who travel abroad during early pregnancy may come into contact with infection. Data from the London region shows that rubella susceptibility in pregnant women varies considerably by ethnic group (Tookey et al 2002). Women who have come to the UK from countries with less successful or disrupted vaccination programmes are likely to be at higher risk if there is renewed circulation of rubella. European countries continue to struggle to maintain high uptake of vaccine, and in several, for example Greece, Italy, Spain and Romania, there are emerging cohorts of susceptible women, and recent outbreaks of rubella have been documented (Crowcroft & Pebody 2004).

CONT...Congenital Rubella

In the UK outbreaks of measles and mumps are already occurring, due in part at least to the inadequate uptake of MMR vaccine, and resurgences of rubella may also occur unless uptake improves. Health professionals looking after pregnant women should be alert to signs of rash illness in pregnancy and aware of guidelines for the management of rash infection in pregnancy (Morgan-Capner & Crowcroft 2002).

Reporting case definition

Any infant (live or still born) or child up to 16 years of age who, in the opinion of the notifying paediatrician, has suspected or confirmed congenital rubella with or without defects, based on history, clinical, and/or laboratory findings. Please include "imported cases", including children born in the British Isles where the maternal infection occurred abroad, AND children who were born abroad.

REVISED Reporting instructions

Please report any infant or child seen by you for the first time in the past month who meets the case definition, REGARDLESS OF COUNTRY OF BIRTH. This is a change to the reporting instructions, as previously children who were born abroad were excluded.

Method

Reporting paediatricians will be asked to complete a case report form shortly after the reporting card is returned to the BPSU.

Funding

The NCRSP was previously funded by the MRC. It is currently supported by contributions from

- the HPA
- Sense, the charity run by and for people with sensory disabilities
- the Centre for Paediatric Epidemiology and Biostatistics, ICH.

Ethics Approval

Studies undertaken through the BPSU use anonymised patient details and do not require individual patient consent. This study has been reviewed and approved by London MREC (ref:05/MRE02/2).

References

- 1) Crowcroft N, Pebody R. Prevention of congenital rubella infection: a challenge for every country in Europe. *Euro Surveill* 2004; 9:1-2
- 2) Miller E, Waight P, Gay N, Ramsay M, Vurdien J, Morgan-Capner P, Hesketh L, Brown D, Tookey P, Peckham C. The epidemiology of rubella in England and Wales before and after the 1994 measles and rubella vaccination campaign: fourth joint report from the PHLS and the National Congenital Rubella Surveillance Programme. *CDR* 1997; 7(2):R26-R32
- 3) Morgan-Capner P, Crowcroft NS. Guidelines on the management of, and exposure to, rash illness in pregnancy (including consideration of relevant antibody screening programmes in pregnancy). *Commun Dis Public Health*. 2002 Mar; 5(1): 59-71
- 4) Tookey P. Rubella in England, Scotland and Wales. *Euro Surveill* 2004; 9:21-22
- 5) Tookey PA, Cortina-Borja M, Peckham CS. Rubella susceptibility among pregnant women in North London, 1996-1999. *J Public Health Medicine* 2002; 24(3): 211-16
- 6) Tookey PA, Peckham CS. Surveillance of congenital rubella in Great Britain, 1971-96. *BMJ* 1999; 318:769-7
- 7) WHO. Progress towards elimination of measles and prevention of congenital rubella infection in the WHO European Region, 1990-2004. *Wkly.Epidemiol.Rec* 2005; 80(8); 66-71

A powerpoint presentation of summary slides is available from Pat Tookey on request.