NATIONAL CONGENITAL RUBELLA SURVEILLANCE PROGRAMME

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.

Principal Investigator
Dr Helen Bedford
Population, Policy and Practice Programme
UCL Institute of Child Health
30 Guilford Street
London WC1N 1EH
Tel: 020 7905 2604 Email: h.bedford@ucl.ac.uk

Website
www.rcpch.ac.uk/bpsu/congenitalrubella

Background
The World Health Organisation 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 and to health professionals. 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 immunisation of young children, with the first dose given at about 13 months and a 2nd at 3-5 years. The schoolgirl programme stopped in 1996. Uptake of MMR vaccine by 24 months has never reached the target of 95%, and declined from a peak of 92% in 1995/6 to 80% in 2003/4, recovering to about 85% in England and higher in the rest of the UK by 2008/9 (data available at www.phe.gov.uk).

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 dropped dramatically from about 50 cases per year 1971-1975 to 4 per year 1991-1995. Rubella-associated terminations declined over the same period from an annual average of about 740 to fewer than 10 a year. In 1996, following a resurgence of rubella infection in the community, 12 births were reported from England, Scotland and Wales, and two from the Republic of Ireland (Tookey & Peckham 1999). Fewer than 20 congenital rubella births have been reported altogether since 1997, and only a handful of rubella-associated terminations (Tookey 2004, BPSU Annual Report 2008-2009). About half of the recently reported infants had mothers who acquired infection abroad in early pregnancy, generally in their country of origin. Most of the rest had mothers who, though they acquired infection in the UK or Ireland, were born abroad.

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 show that rubella susceptibility in pregnant women varies considerably by ethnic group (Tookey et al 2002, Hardelid et al 2009). Women coming 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. Several European countries struggle to maintain high uptake of vaccine, and recent rubella outbreaks have been documented (Crowcroft & Pebody 2004).

PTO
Outbreaks of measles and mumps are occurring in the UK, due in part at least to the inadequate uptake of MMR vaccine, and resurgences of rubella may also occur. 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).

**Coverage**
United Kingdom and Republic of Ireland

**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.

**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.

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

**Funding**
The NCRSP, previously funded by the MRC and HPA, is currently supported by contributions from the National Screening Committee and the Population, Policy and Practice Programme at UCL 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).

**Patient Support Group**
Sense (national charity that supports and campaigns for children and adults who are deaf blind). Details available at [http://www.sense.org.uk/](http://www.sense.org.uk/)

**References**