Whooping cough (Pertussis) vaccination for pregnant women PH 3.03

Pertussis is an acute bacterial infection which can affect people of all ages. Whilst adolescents and adults tend to display mild symptoms, young unimmunised infants are the most vulnerable group with the highest rates of complications and death.

In September 2012 the Department of Health announced a programme to vaccinate pregnant women to protect their infants in the first weeks after birth, following a rapid rise in the number of cases of whooping cough during the summer months. Over 700 cases were being reported each month compared with between 50 and 100 per month in previous years. Analysis showed that most infant cases were in babies under 6 weeks of age, too young to be vaccinated.

More women need to be encouraged to be vaccinated locally, to protect their newborn babies. Uptake in Cheshire East appears to be similar to the national picture with only around half of all pregnant women being vaccinated.

Prior to the routine use of vaccination in the late 1950’s over 100,000 cases of whooping cough were reported each year in England and Wales. Vaccination coverage fell in the late 1970’s and early 80’s and the disease returned for several years. The number of cases of whooping cough had been at historic low levels for over 20 years until late 2011. 4791 cases were confirmed between January and August 2012 in England and Wales, with 9 infant deaths in young babies below the age of routine vaccination. The greatest number s of cases were in adolescents and young adults but the highest rates of infection were in infants less than three months of age.

Three doses of pertussis containing vaccine are given at age 2, 3 and 4 months as part of the primary course.
Protection against whooping cough is not lifelong, even after natural disease. Vaccinated people can get a mild infection, particularly as immunity wanes in adolescence and adulthood. Transmission of the organism occurs as a result of close direct contact with an infected person. It is highly contagious, with up to 90% of household contacts developing the disease. Reasons for the recent epidemic are unclear, but many other developed countries have also experienced increases in incidence, such as the USA, Canada, Australia, the Netherlands and Norway.

Over 300 of the cases of pertussis in 2012 (to the end of August) were in young children aged less than 3 months.

More recent data indicates that cases fell from November 2012 through to June 2013, with a slight increase in July 2013 in line with seasonal trends. Levels are however still high compared to previous years, and high numbers of confirmed cases continue in those aged 15 years and over.

Between January and July 2013 there were 86 cases in infants less than 1 year old compared to 288 in the same 7 months in 2012, which is consistent with a programme effect. In this timeframe there has been only 1 infant death.

The vaccination programme is for all pregnant women between 28 and 38 weeks gestation, ideally between 28 and 32 weeks, to boost maternal antibodies that are then passed to the baby.

National coverage rates for the vaccination of pregnant women increased from 43.7% in October 2012 to 59.4% in February 2013. However rates then fell from March to only 50% in mothers giving birth in May and June 2013.

Guidelines: Details about the vaccination programme and it’s continuation until 2014 can be found at https://www.gov.uk/government/publications/whooping-cough-vaccination-programme-for-pregnant-women-extension-to-2014

Further information: Resources including a leaflet, and factsheet have been published on the PHE website and can be found at https://www.gov.uk/government/publications/resources-to-support-whooping-cough-vaccination