Pertussis - change to age of 1\textsuperscript{st} vaccination in babies

The PHPU has previously notified primary care staff of the dramatic increase in both clinical and laboratory confirmed cases of pertussis (Whooping Cough) during the first half of 2012. This local increase in pertussis cases is consistent with a general rise in Scotland and the wider UK.

Further epidemiological investigations have shown that about two thirds of the laboratory confirmed cases this year were in individuals aged 15 years and over. This is believed to be due to waning immunity in those who have previously been vaccinated therefore cases may present in those with a full history of immunisation. Although the course of their illness may be less severe, teenagers and adults can be a source of infection to very young infants.

About 12\% of the confirmed cases were in children aged less than 3 months. Most of those children were not vaccinated and presented with severe complications leading to hospitalisation and, in some cases, death. Initial information from England and Wales suggests that 5 children have died so far this year compared to a total of 7 deaths due to pertussis in 2011.

Vaccination is the most effective way to prevent spread of the disease and to protect vulnerable infants. Data show that even a single dose of pertussis-containing vaccine given to infants under 6 months of age can provide over 60\% protection; it is important that infant vaccinations are given at the scheduled time and are not delayed.

From mid-July onwards all infants will be called to commence the childhood immunisation programme at 8 weeks of age (currently it's at 9 weeks). Every effort should be made to give the 1\textsuperscript{st} dose of the vaccine on scheduled time. In situations where the 1\textsuperscript{st} dose cannot be given at around the age of 8 weeks, it is advised that vaccination is brought forward to up to 6 weeks of age rather than delaying the dose beyond 9 weeks of age. The PGD will be updated to incorporate these changes.

Pertussis vaccine uptake data show that by the age of 12 months, the uptake is around 98\%, however up to 25\% of infants do not receive their 1\textsuperscript{st} dose until after 3 months of age. Practices are therefore requested to review the frequency and capacity of their clinics so that immunisation of infants is not unnecessarily delayed leaving them exposed to pertussis and its severe complications. Clinics on a daily, weekly or fortnightly frequency can be supported by SIRS Call/Recall facility.

Note: Paracetamol is not licensed for use in children under 2 months. Any baby under 2 months requiring paracetamol for post immunisation pyrexia would require a prescription as unlicensed use prevents its being available under the minor ailments scheme.

Gonnorhoea - increasing resistance to treatment

With more than 32 000 cases, gonorrhoea was the second most commonly reported sexually transmitted infection (STI) in Europe in 2010. A report published by the European Centre for Disease Prevention and Control (ECDC) on 12\textsuperscript{th} June illustrated that gonococci have become more resistant to common agents for treatment and show reduced susceptibility to newer antibiotics. In response to these signals, ECDC also published its "Response plan to control and manage the threat of multidrug-resistant gonorrhea in Europe."

Results from the European Gonococcal Antimicrobial Surveillance Programme (Euro-GASP) show that the percentage of isolates with decreased susceptibility to the recommended drug for treatment of gonorrhoea (cefixime) rose from 4\% in 2009 to 9\% in 2010. Decreased susceptibility was detected in 17 countries in 2010, seven more than in the previous year.

In new guidance issued on 6\textsuperscript{th} June, WHO likewise called for greater vigilance on the correct use of antibiotics and more research into alternative treatment regimens for gonococcal infections. WHO's "Global Action Plan to control the spread of antimicrobial resistance in Neisseria gonorrhoea also calls for increased monitoring and reporting of resistant strains as well as post treatment, diagnosis and control of gonococcal infections."

While the recent report "Gonococcal antibiotic surveillance in Scotland (GASS): prevalence, patterns and trends in 2011" (see pages 199-201) demonstrates that the rise in cephalosporin resistance is not yet universal, it does underline the vital importance of supporting surveillance by maintaining culture from a high proportion of gonococcal episodes.

The latest guidance on the management of gonorrhoea from the British Association for Sexual Health and HIV (BASHH) was issued last year http://www.bashh.org/guidelines
**Anthrax in Germany among IDUs**

As of 21 June 2012, two cases of anthrax among IDUs have been reported from Regensburg, Germany. Both cases had onset of symptoms in June 2012. It is probable that both cases are linked through exposure to heroin contaminated by *Bacillus anthracis*. The geographical distribution of the contaminated heroin is unknown at this time, but it is possible that the batch has the same source as the contaminated heroin incriminated in the 2009/2010 outbreak in Scotland (with cases also reported from Germany and England). The risk of exposure for heroin users in Germany and other countries is presumably still present and therefore it is likely that additional cases among IDUs will be identified in the near future. Read the [Rapid Risk Assessment](http://www.cdc.gov/vhf/anthrax) by the European Monitoring Centre for Drugs and Drugs Addiction published on 22nd June 2012.

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**Management of vaccines in primary care Apr 11 – Mar 12**

Self audit of vaccine storage arrangements should be undertaken annually to assure best practice and identify any areas where improvements are required. There has been a dramatic improvement in both participation and best practice with all 247 practices in NHSGGC undertaking self audit during 11/12 compared to only half the previous year. Improvement in almost all areas was observed while a new recommendation, to review temperature records monthly, explains the improvements in temperature monitoring required.

![Percentage of practices and main improvements required](image)

Nevertheless there are specific areas where practice could improve -

- Reviewing of temperature records monthly & signing to confirm review (new pads issued in May 2011)
- Resetting of thermometers after each reading - still not being undertaken in almost half of practices
- Contingency arrangements for alternative storage - required in a third of practices
- Following of correct procedure when temperature excursion occurs

This continued focus on storage and handling of vaccines has contributed to a reduction in the number of incidents reported and costs. Information on a new e learning module on vaccine storage and management is detailed in the article below [http://nhs.learnprouk.com](http://nhs.learnprouk.com). All relevant staff should be encouraged to undertake this training module to support best practice and prevent cold chain incidents; it takes less than 30 minutes to complete.

Public Health Pharmacy thanks colleagues for their continued support and cooperation in this important clinical governance activity.

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**Cold chain and e-learning**

Last year, problems with vaccine storage in NHSGGC involved almost £175k worth of vaccine. A new LearnPro course [Cold Chain Management](http://www.learnpro.org) has been developed by GGC pharmaceutical public health to provide practical advice on how to avoid problems. LearnPro NHS e-learning platform package is an online resource giving access to key e-learning modules from mandatory to CPD-related modules. Each module consists of learning sections with an assessment at the end of the module. The user can move about the module as required, leave it and come back in their own time to where it was bookmarked.

Test users of the module including pharmacists, practice managers and nursing staff confirmed it took less than 30 minutes to complete and considered it very useful. It is available on [http://nhs.learnprouk.com](http://nhs.learnprouk.com). Once registered, click on ‘more learning’ and find it under the ‘Pharmacy’ tab.

The system asks for the NI number to use as a unique identifier to prevent users creating multiple accounts. Learn Pro is a secure site and the NI number is not visible to anyone including the administrator. If any staff are, however, uncomfortable inputting this information they can use their date of birth or any other unique character string instead.

Maintenance of the cold chain is a critical element of successful immunisation services and a wide range of healthcare workers are involved in delivery of these services. While it has been designed for use in primary care it will be of interest to all staff involved in the handling of vaccines providing practical advice and examples of best practice. Feedback from users will inform future development. Please forward any comments on the module to [liz.mcgovern@ggc.scot.nhs.uk](mailto:liz.mcgovern@ggc.scot.nhs.uk).

If you would like to comment on any aspect of this newsletter please contact Marie Laurie on 0141 201 4933 or at [marie.laurie@ggc.scot.nhs.uk](mailto:marie.laurie@ggc.scot.nhs.uk)