NHS Dumfries and Galloway: pertussis comms (21.06.2024; Version 3)

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v3 update by Dr Jon van Aartsen, Consultant Microbiologist, for NHS DG Antimicrobial Handbook – fixed links, & new abx treatment guidance for June 2024

As you will possibly be aware, there has been a national increase in whooping cough cases. Whilst the proportion of pertussis cases in D&G is low relative to some Health Board areas, we have seen a marked increase in our numbers locally.

In the last month, there have been 46 cases of pertussis notified to the health protection team. In the same time period in 2019, there were a total of 3 cases.

Key points of note:

- Please consider pertussis as a possible diagnosis and arrange for testing as appropriate. Suspected pertussis is identified as:
    - Any person with an acute cough lasting 14 days or more, without an apparent cause plus one or more of the following:
        - Paroxysms of coughing
        - Vomiting after a coughing fit
        - Inspiratory whoop
- Testing is recommended as below
    - Less than 3 weeks from cough onset - PCR - throat swab (viral swab)
        - see Appendix 1 below.
        - **Ensure swab is in date for use**
    - More than 3 weeks from cough onset – serology
        - see Microbiology Laboratory Handbook
    - PCR/Serology are both sent to the national reference laboratory for processing.
- Being fully vaccinated doe**s not mean** it could not be whooping cough, as there is evidence of protection waning.
- It is important that if whooping cough is clinically suspected, that you **contact the Health Protection Team on 01387 272724 option 6 or by email dg.hpt@nhs.scot.** This enables the health protection team to risk assess cases and deploy mitigations to prevent the transmission of pertussis to vulnerable people.
- The decision to offer antibiotics for pertussis cases, and the choice of treatment, is a clinical one. The benefit of antibiotics on the clinical course of the illness is limited to the early catarrhal phase and certainly within 14 days from onset of cough. Beyond the first 14 days, the main benefit of antibiotic therapy is to reduce transmission to close contacts. Refer to The National Guidance to assist with determining treatment duration, which was updated in June 2024.
- Antibiotic regimens are summarised in Appendix 2 below.

Further information on the management of cases of pertussis (suspected or confirmed) is contained in the national guidance: Guidance on the management of cases of pertussis in England during the re-emergence of pertussis in 2024. Update: June 2024

Appendix 1: Laboratory handbook

Respiratory / Atypical Pneumonia / Pertussis Viral PCR screen

Microbiology

Test Name	Respiratory / Atypical Pneumonia / Pertussis Viral PCR screen
Alternative Names	Mycoplasma, Flu, Adenovirus, Enterovirus, RSV, Coronavirus, Pertussis, Whooping cough
Sample	Throat, Nasal, Eye, Sputum, Respiratory secretions, Nasopharyngeal aspirate
Sampling Information	Swabs: Use the provided packs containing viral transport medium and dry swab. Sputum/Respiratory Secretions: Collect in a dry sterile universal pot.
Handling Information	Please use the respiratory risk bag provided when sending any respiratory sample and all sample types from a suspected/known case of COVID 19
Lab Code	VIRS
Turnround	24-48 hrs
Comments	Please include relevant clinical information and any recent foreign travel. For information regarding Novel Respiratory infections e.g. Novel Coronavirus (SARS-CoV-2) and Novel avian influenza A (H7N9) **refer to current HPS guidelines click here** .

Last Updated	11 September 2020

Please use a Microbiology form when requesting this test and ensure that you add the mandatory CHI number.

Appendix 2: Recommended antibiotic treatment

Appendix 3. Antibiotic treatment and chemoprophylaxis recommendations[2]

Age group	Clarithromycin [note 1]	Azithromycin [note 1]	Erythromycin	Co-trimoxazole [note 1][3]
Neonates[4] (<1 month)	Preferred in neonates 7.5mg/kg twice a day for 7 days	10mg/kg once a day for 3 days	10 to 15mg/kg every 6 hours for 7 days	Not licensed for infants below 6 weeks
Infants (1 month to 12 months) and children (12 months and older)	**1 month to 11 years**: **Under 8kgs** 7.5mg/kg twice a day for 7 days **8 to 11kg** 62.5mg twice a day for 7 days **12 to 19kg** 125mg twice a day for 7 days **20 to 29kg** 187.5mg twice a day for 7 days **30 to 40kg** 250mg twice a day for 7 days **12 to 17 years**: 500mg twice a day for 7 days	**1 to 6 months**: 10mg/kg once a day for 3 days **> 6 months**: 10mg/kg (max 500mg) once a day for 3 days	**1 to 23 months**: 125mg every 6 hours for 7 days [note 2] **2 to 7 years**: 250mg every 6 hours for 7 days [note 2] **8 to 17 years**: 250 to 500mg every 6 hours for 7 days [note 2]	**6 weeks to 5 months**: 120mg twice a day for 7 days **6 months to 5 years:** 240mg twice a day for 7 days **6 to 11 years**: 480mg twice a day for 7 days **12 to 17 years**: 960mg twice a day for 7 days
Adults	500mg twice a day for 7 days	500mg once a day for 3 days	500mg every 6 hours for 7 days [note 2]	960mg twice a day for 7 days
Pregnant women[5]	Third line – dosing as for adults above	Second line – dosing as for adults above	Preferred antibiotic – dosing as for adults above	**Should not be used in pregnancy, particularly in the first trimester, unless no other antibiotic option available**

Note 1: Please note that the doses for treatment and prophylaxis are the same
Note 2: Doses can be doubled in severe infections

[2] For all antibiotic prescribing recommendations given above, please consult the BNF or the BNF for children for cautions, interactions and side-effects prior to prescribing.
[3] Consider if macrolides contra-indicated or not tolerated.
[4] Please note that macrolides should be used with caution in neonates. An association between erythromycin and azithromycin use and hypertrophic pyloric stenosis in infants has been reported, but it is judged that the risk of severe outcomes from pertussis in this age group outweigh the risk of developing this complication.
[5] For pregnant contacts, a risk assessment would need to be done to looks at the risk and benefits of antibiotic therapy/prophylaxis. The aim of treating/prophylaxing women in pregnancy is to prevent transmission to the newborn infant and should be considered in those who have not received a pertussis containing vaccine more than one week and less than 5 years prior. Where possible, pregnant women should begin treatment at least 3 days prior to delivery. Macrolide preferences outlined above are based on experience of use in pregnancy – for more information about macrolide prescribing in pregnancy refer to the UK Teratology Information Service website.