Galway: GAPP - Galway Antimicrobial Prescribing Policy / Guidelines (GAPP): Appendix 3: Chemoprophylaxis for Contacts of Meningococcal & Hib Disease

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Public Health & GUH Microbiology, Infectious Diseases & Pharmacy Depts

Updated November 2020

Management of Contacts of Meningococcal Disease (Meningitis/Septicaemia)

Management of Contacts of Meningococcal Disease (Meningitis/Septicaemia)

1. **Immediately notify** all cases of suspected invasive meningococcal disease to the local **Public Health Department 091-775200** (contact out-of-hours through Ambulance Control), without waiting for microbiological confirmation.
2. **Public Health will advise on the management of contacts and suspected outbreaks.**
3. Close contacts of all cases of invasive meningococcal disease are at increased risk of developing infection. This risk is highest in the first 7 days following onset of symptoms in the index case.
4. Chemoprophylaxis should be offered to close contacts irrespective of vaccination status and should be given as soon as possible after notification of the index case, preferably within 24 hours of diagnosis but can be given up to one month later if a contact is not immediately identified or traced.
5. The following is provided for information in relation to close contacts who should be offered chemoprophylaxis:

   Household-type contacts in the seven days prior to the onset of illness of the index case e.g.

   - shared living/sleeping accommodation with the index case, pupils in the same dormitory, boy/girlfriend, university students sharing kitchen in a hall of residence, child-minders and baby-sitters.
   - Intimate mouth to mouth kissing contacts with the index case
   - Nursery/crèche contacts where the nature of contact is similar to that for household contacts, including adult carers
   - **Other situations with possible close contact** (e.g. attendance at house party, classmates, extended family) may also warrant prophylaxis in certain circumstances **as advised by Public Health**

- **Health Care Workers (HCWs)** (including those present at autopsy) whose mouth and nose is directly exposed to respiratory droplets or secretions of a probable or confirmed case within 24 hours of commencement of antibiotics i.e. those carrying out high risk procedures and when within one metre of the patient. HCWs should wear masks when in close contact with an infectious case in the first 24 hours after starting antibiotic treatment. **Occupational Health should be contacted if necessary.**
- The **index case** should be given chemoprophylaxis before discharge from hospital UNLESS treated with cefTRIAXone.

6. **Prophylactic antibiotics**

- Chemoprophylaxis packs for close contacts are available in Emergency Department, Paediatric Department and the Pharmacy Department. Recipients should be given information on symptoms and signs of the disease and the need to seek urgent medical advice should they become unwell, even if they have already received chemoprophylaxis.This information is included in the patient information leaflet provided with the chemoprophlyaxis packs.
- Rifampicin and Ciprofloxacin are both recommended for chemoprophylaxis except for the following:
  - Women taking hormonal contraceptives – ciprofloxacin is the preferred option as rifampicin can affect the efficacy of these contraceptives.
  - For pregnant women Ciprofloxacin is the preferred option.
  - Please refer to most recent SPC available at www.hpra.ie for **contraindications** , **allergies or potential drug interactions** for these antibiotics. See below for summary information. Ceftriaxone may be used as an alternative option.

Ciprofloxacin:

- Ciprofloxacin can be used in all age groups and for the majority of the population (except for those with contraindications). It is the antibiotic of choice for those on the oral contraceptive pill. It may be particularly useful when there is a setting with a large number of adult contacts (e.g. university students). Ciprofloxacin has a number of advantages over rifampicin. It is given as a single dose. It does not interact with systemic hormonal contraceptives. It is more readily available in community pharmacies and does not affect contact lenses.
- The summary of product characteristics (SPC) for ciprofloxacin carries a precaution on its use in pregnancy – “As a precautionary measure, it is preferable to avoid the use of ciprofloxacin during pregnancy”. However, short duration treatment for other indications appeared to be safe. It is recommended for use in pregnancy and lactation by Public Health England.
- Contraindicated with tizanidine, caution in epilepsy and in combination with theophylline.

- Adult Dose is a single oral dose of 500mg

Rifampicin:

- Rifampicin can be used in all age groups and for the majority of the population (except for those with contraindications).
- Rifampicin is contraindicated in the presence of jaundice, severe liver disease or in combination with saquinavir/ritonavir (antiretroviral drugs).
- Caution with drugs metabolised by cytochrome P-450. These drugs include anticoagulants, anticonvulsants, and hormonal contraceptives.
- When administered during the last few weeks of pregnancy, rifampicin can cause post-natal haemorrhages in the mother and infant, for which treatment with Vitamin K1 may be indicated for both mother and neonate.
- **Written information on side effects of rifampicin and interaction with food should be provided and explained to patient including red colouration of urine, sweat and tears, and permanent discolouration of soft contact lenses.**
- Adult Dose is 600mg every 12 hours for two days

Ceftriaxone:

- **In pregnancy** : **CefTRIAXone** (single 250mg intramuscular dose) can be used.
- **Ceftriaxone should not be used for chemoprophylaxis in infants in the first 4 weeks of life.**

For more comprehensive guidance see Chapter 13 in https://www.rcpi.ie/Healthcare-Leadership/NIAC/Immunisation-Guidelines-for-Ireland ■

Management of Contacts of Invasive Haemophilus Influenzae B Disease

Management of Contacts of Invasive Haemophilus Influenzae B Disease

1. **Immediately notify** all cases of suspected invasive meningococcal disease to the local **Public Health Department 091-775200** (contact out-of-hours through Ambulance Control), without waiting for microbiological confirmation.
2. **Public Health will advise on the management of contacts and suspected outbreaks.**

   The following is provided for information :

   Chemoprophylaxis: Indicated for ***all*** household contacts (irrespective of age or immunisation history) in the following situations:
   - If there are any unvaccinated or incompletely vaccinated children under the age of 10 years
   - If there are any persons at increased risk of invasive Hib disease (asplenia, hyposplenism, immunocompromised etc.)
   - Play-group, crèche or school contacts aged less than 10 years: when 2 or more cases occur within 2 months, chemoprophylaxis should be offered to all room contacts, both adults and children.
   - Index patients aged <10 years not treated with ceftriaxone or cefotaxime should receive rifampicin prior to hospital discharge. Index cases of any age not treated with ceftriaxone or cefotaxime should receive rifampicin prophylaxis prior to hospital discharge if there is a vulnerable individual in the household.
   - Vaccination: In addition to prophylaxis, unvaccinated or partially vaccinated contacts should complete the age-appropriate vaccination schedule.
4. For more comprehensive guidance see https://www.rcpi.ie/Healthcare-Leadership/NIAC/Immunisation-Guidelines-for-Ireland
5. Antibiotic doses for prophylaxis:

- **Rifampicin -** Adult Dose (including if pregnant or breastfeeding) – 20mg/kg once daily for 4 days (max. 600 mg/day).

Ceftriaxone - Ceftriaxone can be given if rifampicin is contraindicated. Recommended dose is 50mg/kg (max 1g) IM or IV once daily for 2 days.

References

References

1. *Immunisation Guidelines for Ireland*

https://www.rcpi.ie/Healthcare-Leadership/NIAC/Immunisation-Guidelines-for-Ireland

Chapter 13 – Meningococcal infection (updated October 2019)

Chapter 7- Haemophilus influenzae type b (updated July 2018)

2. *HPSC Guidelines for the Early Clinical and Public Health Management of Bacterial Meningitis (including meningococcal disease) (updated November 2016)*