Algorithm 1: Management of contacts of a case of iGAS in a Household setting Version 2.4 07/02/2024

1. Invasive GAS infection (iGAS) is defined through isolation of GAS from a normally sterile body site. GAS isolated from non-sterile site in combination with severe clinical presentation should be managed as per iGAS.
2. Close contact is defined as someone who has had prolonged close contact with the case in a household-type setting during the seven days before diagnosis of illness and up to 24 hours after initiation of appropriate antimicrobial therapy in the index case. Examples include those living and/or sleeping in the same household, pupils in the same dormitory, intimate partners, or university students sharing accommodation. Consider contacts who provide nursing care (public health nurses, carers).
3. All close contacts should be alert to the signs and symptoms of GAS infection and should be advised to seek medical attention if they develop a febrile illness or any clinical manifestation of GAS within 30 days of diagnosis in the index case.
4. Symptoms suggestive of invasive disease include high fever, severe muscle aches, localized muscle tenderness, increasing pain, swelling and redness at site of wound, unexplained diarrhoea or vomiting. In the absence of a more likely alternative diagnosis then emergency referral to ED (contact ED to advise of incoming patient).
5. Symptoms suggestive of non-invasive GAS infection include sore throat, fever, minor skin infections, scarlatina/rash.
6. Other asymptomatic household close contacts may be offered chemoprophylaxis following PHRA and taking account of current epidemiological situation.

Identification of iGAS infection1 in a household setting

- Notify public health department urgently

Any close contacts2?

- Yes
  - Any diagnosed with iGAS or probable iGAS infection in previous 30 days?
    - Yes
      - (i) Offer chemoprophylaxis to entire household asap and not beyond 10 days after date of diagnosis of index case and
      - (ii) Provide household with HPSC ‘Information Leaflet for Contacts of Patients with Group A Strep’
    - No
      - No further action

- No
  - Any asymptomatic high-risk contacts?
    - Yes
      - (i) Offer chemoprophylaxis to high risk contact (within 24 hours, and not beyond 10 days after date of diagnosis of index case) and
      - (ii) Provide household with HPSC ‘Information Leaflet for Contacts of Patients with Group A Strep’
    - No
      - Any close contacts with signs and symptoms of possible GAS infection3?
        - Yes
          - Clinically suspected invasive infection4
            - Urgent referral to secondary care for immediate medical assessment
        - No
          - Clinically suspected non-invasive infection4
            - Refer symptomatic contact for clinical assessment & treatment

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