Algorithm 1: Management of contacts of a case of iGAS in a Household setting Version 2.4 07/02/2024
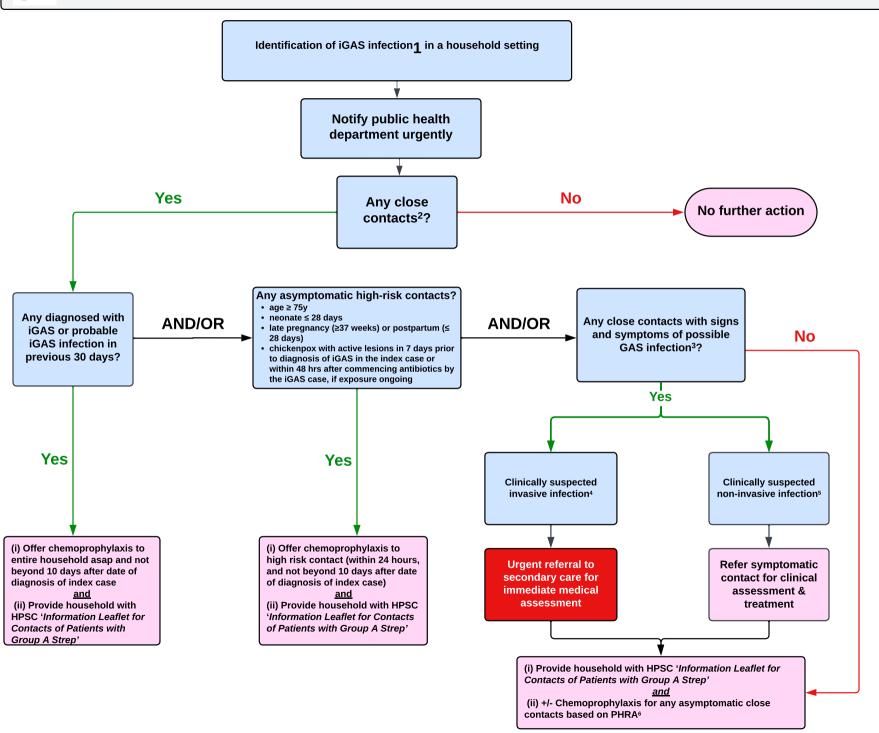
Identification of iGAS infection[1] in a household setting

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Notify public health department urgently

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Any close contacts[2]?

— **Yes** → (to left branch)
— **No** → No further action

Left branch (Yes):

Any diagnosed with iGAS or probable iGAS infection in previous 30 days?

AND/OR

Any asymptomatic high-risk contacts?
- age ≥ 75y
- neonate ≤ 28 days
- late pregnancy (≥37 weeks) or postpartum (≤ 28 days)
- chickenpox with active lesions in 7 days prior to diagnosis of iGAS in the index case or within 48 hrs after commencing antibiotics by the iGAS case, if exposure ongoing

AND/OR

Any close contacts with signs and symptoms of possible GAS infection[3]?

— **No** → (to bottom pink box)
— **Yes** →

Yes (first box):

(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*'

Yes (second box):

(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*'

Yes (GAS infection) branches:

Clinically suspected invasive infection[4]

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Urgent referral to secondary care for immediate medical assessment

Clinically suspected non-invasive infection[5]

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Refer symptomatic contact for clinical assessment & treatment

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(i) Provide household with HPSC '*Information Leaflet for Contacts of Patients with Group A Strep*'
and
(ii) +/- Chemoprophylaxis for any asymptomatic close contacts based on PHRA[6]

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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, localised muscle tenderness, increasing pain, swelling and redness at site of wound, unexplained diarrhoea or vomiting. In the absence of a more likely alternativediagnosis 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, scarlatiniform rash.
6. Other asymptomatic household close contacts may be offered chemoprophylaxis following PHRA and taking account of current epidemiological situation.