Communicable Disease Branch 2016 Program Alert



"Suspected Neisseria gonorrhoeae Treatment Failure Process"

Date: November 17, 2016

To: STD ERRNs and STD Clinical Coordinators

From: TATP STD Nurse Consultants

Subject: Suspected Neisseria gonorrhoeae Treatment Failure Process

Dear Colleagues,

Effective *Neisseria gonorrhoeae* (GC) treatment is becoming increasingly complicated by growing antibiotic resistance. In an effort to assure local health departments (LHD) are ready to respond if a suspected treatment failure case of GC is identified, the Communicable Disease Branch and the NC State Laboratory of Public Health have developed the below guidance.

STD Enhanced Role Registered Nurses (STD ERRN), Advanced Practice Providers (APP), and Medical Doctors (MD) should consider possible GC treatment failure when there is:

- Persistent or recurrent symptoms greater than 3-5 days after appropriate treatment has been given in persons without interim sexual exposure. OR
- 2) Positive test of cure (TOC) by culture (\geq 72 hours) or NAAT (\geq 7 days) after receiving appropriate treatment in persons without interim sexual exposure.

When treatment failure is suspected, the following steps should be followed:

- 1. Consult your LHD medical director (or APP or MD in the case of STD ERRNs.)
- 2. Notify the NC Communicable Disease Branch's Epi On-Call (at 919-733-3419) within 24 hours.
- 3. Collect specimens for both NAAT and culture from all symptomatic sites prior to retreating:
 - **a**. Culture plates must be at room temperature prior to use
 - b. Place the client's data label and specimen collection site on the GC culture plate. (Refer to Laboratory Test: GC Culture standing order if needed)
- 4. Follow the below instructions for sending specimens to NC SLPH for culture and antimicrobial susceptibility testing (AST):
 - **a.** Sample should be handled and sent to NCSLPH/Microbiology/ Atypical Bacteriology Laboratory in the exact same manner as a routine culture for gonorrhea:
 - i. Cultures should be incubated overnight or until growth is visible before shipment. *Neisseria* species die easily and ideally should be shipped when they are 18-24 hours old.
 - ii. The submitting lab should maintain an additional culture in the event the isolate does not survive shipment.
 - iii. Do not ship on Fridays or holiday weekends.
 - iv. Ship samples at room temperature and in a CO2 atmosphere. Special mailers, biobags and CO2 generators are available from NCSLPH Laboratory Improvement department (919)733-7186.
 - V. Complete DHHS form 4121 (Special/Atypical Bacteriology) as you would for a gonorrhea

culture, but include the additional note: "FOR *NEISSERIA GONORRHOEAE* SUSCEPTIBILITY TESTING, SUSPECTED TREATMENT FAILURE". http://slph.ncpublichealth.com/Forms/4121-SpecAtypBact-20160705.pdf

- 5. Upon receipt of the sample, the Atypical Bacteriology lab will determine whether GC is present. If the sample is growing GC, the isolate will be forwarded by the technologist to the CDC for susceptibility testing.
- 6. Retreatment of patients with suspected treatment failure and subsequent TOC should be performed pursuant to the 2015 CDC STD Treatment Guidelines recommendations, http://www.cdc.gov/std/tg2015/gonorrhea.htm
- 7. All sexual partners within the last 60 days should be notified according to agency policy, rapidly evaluated (including specimen collection for culture from sites of exposure), and empirically treated using the same regimen used to retreat the patient.

We also encourage LHDs to develop a similar response plan that can be shared with your community providers. This will ensure that your local providers know how to notify public health, submit specimens and retreat any patients they suspect as GC treatment failure.

For questions or concerns, please contact your STD TATP Nurse Consultant or Epidemiologist On-call at 919-733-3419