

Disseminated Gonococcal Infection (DGI)

CDC has received increasing reports of DGI, an uncommon, but severe, complication of gonorrhea.

What is DGI?

DGI occurs when the STD, *Neisseria gonorrhoeae*, invades the bloodstream and spreads to distant sites in the body. Infection leads to clinical manifestations like septic arthritis, polyarthralgia, tenosynovitis, petechial/pustular skin lesions, bacteremia, or, on rare occasions, endocarditis or meningitis. **Cultures from disseminated sites of infection are often negative and mucosal sites of infection** (e.g. urogenital, rectal, or pharyngeal) **are often asymptomatic** and not tested before empiric antimicrobial treatment is started despite having a higher diagnostic yield¹. As a result, DGI is usually a clinical diagnosis without microbiologic confirmation, which likely contributes to underdiagnosis and delays in treatment and reporting.

What should be done if DGI is suspected?

1. Collect and process nucleic acid amplification test (NAAT) or culture specimens from all exposed urogenital and extragenital mucosal site(s)
2. Collect NAAT and culture specimens from disseminated sites of infection (e.g. skin, synovial fluid, blood, or cerebrospinal fluid (CSF)).
3. All *N. gonorrhoeae* isolates from suspected DGI cases should be tested for antimicrobial susceptibility, which requires culture.
4. Manage DGI cases according to current CDC STD Treatment Guidelines: www.cdc.gov/std/treatment-guidelines/default.htm
5. Hospitalization and consultation with an infectious disease specialist are recommended for initial therapy.
6. Instruct patients to refer all sex partners within the past 60 days for evaluation, testing, and presumptive treatment for gonorrhea.
7. **Any laboratory confirmed or clinically suspected case of DGI, including those empirically treated without laboratory evidence of *N. gonorrhoeae*, should be reported to VDH within 24 hours** (www.vdh.virginia.gov/disease-prevention/disease-reporting).

Clinical consultation for DGI management is available through the STD Clinical Consultation Network: www.stdccn.org

1) CDC Health Alert Template for Disseminated Gonococcal Infection (DGI). <https://www.cdc.gov/std/program/outbreakresources/HANtemplate-dgi.htm>