

# Gonorrhea

## Investigation Guideline

*Note: A Behavioral Intervention Specialist (BIS) from the Kansas Department of Health and Environment, STI/HIV Section, will investigate all reports.*

**CONTENT:**

**VERSION DATE:**

**Investigation Protocol:**

- Investigation Guideline

**05/2013**

**Revision History:**

<b>Date</b>	<b>Replaced</b>	<b>Comments</b>
05/2013	11/2005	Updated case definition, clarified case and contact investigation roles.

# Gonorrhea

## Disease Management and Investigation Guidelines

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### CASE DEFINITION (CDC, 2008)

#### Clinical Description for Public Health Surveillance:

A sexually transmitted infection commonly manifested by urethritis, cervicitis, or salpingitis. Infection may be asymptomatic.

#### Laboratory Criteria for Case Classification:

- Isolation of typical gram-negative, oxidase-positive diplococci (presumptive *Neisseria gonorrhoeae*) from a clinical specimen, or
- Demonstration of *N. gonorrhoeae* in a clinical specimen by detection of antigen or nucleic acid, or
- Observation of gram-negative intracellular diplococci in a urethral smear obtained from a male.

#### Case Classification:

- **Confirmed:** A case that is laboratory confirmed.
- **Probable:**
  - Demonstration of gram-negative intracellular diplococci in an endocervical smear obtained from a female, or
  - A written morbidity report of gonorrhea submitted by a physician

### LABORATORY ANALYSIS

Additional information on laboratory testing and specimen collection can be found on the KDHE STI resources page: [www.kdheks.gov/std/resources.html](http://www.kdheks.gov/std/resources.html).

### EPIDEMIOLOGY

In the United States, an estimated 820,000 cases occur each year, with less than half of these infections being detected and reported, according to the CDC. An increase in gonorrhea among men who have sex with men has been noted and resistance to fluoroquinolones, has been documented. The highest rates occur among adolescents and young adults, minorities, and persons living in the southeastern United States.

### DISEASE OVERVIEW

#### A. Agent:

*Neisseria gonorrhoeae*, a gram-negative, diplococcal bacterium.

#### B. Clinical Description:

Both asymptomatic and symptomatic infections can occur. The site of infection varies and includes: the urethra, endocervix, rectum, and pharynx. In men, symptoms include dysuria, and/or a white, yellow, or green discharge from the penis. Sometimes men with gonorrhea have painful or swollen testicles. In women, symptoms are often mild, and many may have no symptoms. Initial symptoms in women may include: dysuria, increased vaginal discharge, or vaginal bleeding between periods, and dyspareunia. However, even when a woman has symptoms, they may be mistaken for a bladder or vaginal infection.

**C. Reservoirs:**

Humans.

**D. Mode(s) of Transmission:**

Contact with exudate from infected mucous membrane of infected individuals through sexual activity. Pregnant women that are infected may infect their newborn children during childbirth. In children >1 year of age, it is considered an indicator of sexual abuse.

**E. Incubation Period:**

Average 1-14days, but may range up to 30 days.

**F. Period of Communicability:**

Persons should be considered infectious from the time of exposure until they are adequately treated. Re-infection is common if partners are not adequately treated. Asymptomatic individuals may be just as infectious as those that are symptomatic.

**G. Susceptibility and Resistance:**

Susceptibility is universal and prior infection, with or without treatment, does not confer immunity. *Neisseria gonorrhoeae* has documented resistance to sulfonamides, penicillin, tetracycline, and fluoroquinolones.

**H. Treatment:**

Immediate antimicrobial therapy is recommended. Men and women with suspected urethritis, cervicitis or proctitis should be treated presumptively for gonorrhea and chlamydial infection, pending the results of laboratory testing for both. Serologic testing for syphilis and HIV should also be considered. For complete treatment guidelines refer to the 2010 CDC STD Treatment Guidelines available at: [www.cdc.gov/std/treatment/2010/default.htm](http://www.cdc.gov/std/treatment/2010/default.htm).

## **NOTIFICATION TO PUBLIC HEALTH AUTHORITIES**

Report all confirmed, probable, and suspect cases to the STI/HIV Section within 24 hours of initial report at 785-296-5596 or fax a report to 785-296-5590.

## **INVESTIGATOR RESPONSIBILITIES**

A Behavioral Intervention Specialist from KDHE will complete all investigation and case activity. There are no local responsibilities beyond the initial reporting requirements unless additional information and/or help are requested.

## **STANDARD CASE INVESTIGATION AND CONTROL METHODS**

### **Case Investigation**

The medical provider who reported or ordered testing of the case will be contacted to obtain the following:

- Information on symptoms and onset dates.
- Diagnosis date of disease.
- Laboratory testing results and dates.
- Information on hospitalizations, including location and dates

- Current treatment.
- Outcomes: disabilities, survived or date of death
- Case's demographic data and contact information (birth date, county, sex, race/ethnicity, occupation, address, phone number(s))

### **Contact Investigation**

- Contacts are defined as individuals that have had sexual contact with the case during the 60 day time period prior to the onset of symptoms or positive test. If no sexual contacts are identified in the 60 days prior to the onset of symptoms or positive test, identify the most recent sexual partner.
- Cases should be instructed to refer their sex partners for evaluation, testing, and treatment. The following recommendations on exposure intervals are based on limited evaluation. Sex partners should be evaluated, tested, and/or treated if they had sexual contact with the patient during the 60 days preceding onset of symptoms. The most recent sex partner should be evaluated and treated even if the time of the last sexual contact was >60 days before symptom onset or diagnosis.

### **Isolation, Work and Daycare Restrictions**

None; abstain from sexual contact for 7 days following completion of treatment.

### **Case Management**

Cases will be managed by attending medical provider.

### **Contact Management**

Contacts reasonably believed to have been exposed to an STI should be treated prophylactically at the time of exam based upon CDC treatment guidelines.

### **Environmental Measures**

None.

### **Education**

Cases and their contacts should be provided information including:

- The method of transmission of STI's, and
- The importance of taking medication, and
- Complications of the disease, and
- The need to practice safer sex (i.e., condom usage) and/or to be in a long-term mutually monogamous relationship with a partner who has been tested and is known to be uninfected.

## MANAGING SPECIAL SITUATIONS

### A. Outbreak Investigation:

- 1) Outbreak definition:
  - Higher than usual number of cases or unusual clustering of cases in time and/or space. Most outbreaks occur where there are sexually active adolescent social networks.
  - If you suspect an outbreak, consult with the STI/HIV Section at the KDHE (785-296- 5596). They can help determine a course of action to prevent further cases and can perform surveillance for cases that may cross county lines that would be difficult to detect at the local level.
- 2) Active case finding will be an important part of any investigation.
- 3) Recommendations will be made based on the CDC guidance.

## DATA MANAGEMENT AND REPORTING TO THE KDHE

- A. Collect and organize data.
- B. Report data by fax (785-296-0792).
  - Local health departments and medical providers should report data using KS Notifiable Disease Form.

## ADDITIONAL INFORMATION / REFERENCES

- A. **Treatment / Differential Diagnosis:** 2010 CDC STD Treatment Guidelines available at: [www.cdc.gov/std/treatment/2010/default.htm](http://www.cdc.gov/std/treatment/2010/default.htm)
- B. **Epidemiology, Investigation and Control:** Heymann. D., ed., Control of Communicable Diseases Manual, 19th Edition. Washington, DC, American Public Health Association, 2009.
- C. **Case Definitions:** CDC Division of Public Health Surveillance and Informatics, Available at: [www.cdc.gov/ncphi/diss/nndss/casedef/case\\_definitions.htm](http://www.cdc.gov/ncphi/diss/nndss/casedef/case_definitions.htm)
- D. **Kansas Regulations/Statutes Related to Infectious Disease:** [www.kdheks.gov/epi/regulations.htm](http://www.kdheks.gov/epi/regulations.htm)
- E. **Additional Information (CDC):** [www.cdc.gov/std/gonorrhea/default.htm](http://www.cdc.gov/std/gonorrhea/default.htm).