

National STD Curriculum Overview

Julia Freimund
IDEA Program Manager
juliasf@uw.edu

August 18, 2022



National STD Curriculum

www.std.uw.edu

The *National STD Curriculum* integrates the 2021 CDC STD Treatment Guidelines into a free, up-to-date, educational website. The site addresses the epidemiology, clinical manifestations, diagnosis, treatment, and prevention of STDs and STIs.

- Seven Self-Study or Quick Reference Lessons
- 20+ Question Bank Topics with 200+ interactive board-review style questions
- Podcast series on innovative and significant topics
- Innovative group learning tool to assign units and track members' progress
- 30+ FREE CME credits, MOC Points, CNE and CE contact hours, and 14+ pharmacology CE for advanced practice nurses

This curriculum is funded by the U.S. Centers for Disease Control and Prevention (CDC). The project is led by the Infectious Diseases Education & Assessment (IDEA) Program and the University of Washington STD Prevention Training Center, a National Network of STD Prevention Training Centers (NNPTC) regional center.

National STD Curriculum 2nd Edition: Summary of CME Credit, MOC Points, CNE Contact Hours, CE Contact Hours, and Pharmacology CE for Advanced Practice Nurses as of 8/15/22

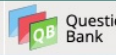
Lesson	CME/MOC/CNE/CE	Pharmacology CE for APNs
Chlamydial Infections	1.50	0.00
Gonococcal Infections	1.50	0.00
Human Papillomavirus (HPV)	2.00	0.00
Pelvic Inflammatory Disease (PID)	1.00	0.00
Syphilis	2.00	0.00
Vaginitis	2.00	0.00
CE Available in Lessons	10.00	0.00
Question Bank	CME/MOC/CNE/CE	Pharmacology CE for APNs
Anogenital Warts	1.00	0.00
Bacterial Vaginosis	0.75	0.00
Candidiasis Vulvovaginal	1.00	1.00
Cervicitis	0.50	0.50
Chancroid	0.50	0.50
Chlamydial Infections	1.00	1.00
Epididymitis	1.00	0.00
Gonococcal Infections	1.50	1.50
Granuloma Inguinale (Donovanosis)	0.50	0.00
Hepatitis A	0.75	0.00
Hepatitis B	1.00	0.00
Hepatitis C	0.75	0.00
Genital Herpes	1.50	1.50
HIV Infection	1.00	1.00
HPV Infection: Prevention	1.00	0.00
Lymphogranuloma venereum (LGV)	0.50	0.50
<i>Mycoplasma genitalium</i>	0.50	0.50
Pediculosis Pubis	0.50	0.50
Proctitis, Proctocolitis, and Enteritis	0.50	0.00
Scabies	0.75	0.75
Syphilis	2.50	2.50
Trichomoniasis	1.00	1.00
Urethritis	0.50	0.50
CE Available in Question Bank Topics	20.50	14.25
Combined CE total as of 8/15/22	30.5	14.25



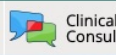
Self Study >



Quick Reference >



Question Bank



Clinical Consultation



Master Bibliography



STD Podcast

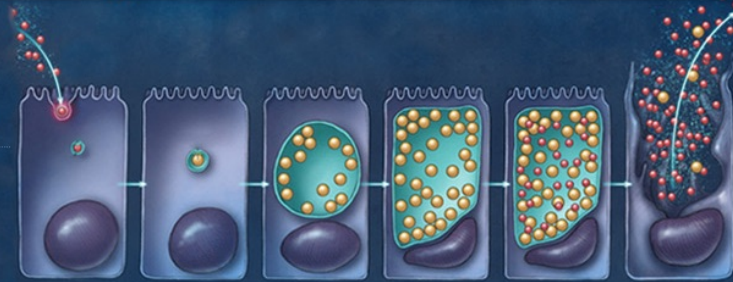


National STD Curriculum

A free educational website from the University of Washington STD Prevention Training Center.

[Contributors](#)

Funded by
Centers for Disease Control and Prevention (CDC)



National STD Curriculum Updates

- Seven new 2nd Edition lessons offer new CME, CME+MOC, CNE, and CE
- Nineteen 2nd Edition [question bank](#) topics, including newly added [Cervicitis](#), [HIV infection](#), and [Urethritis](#), also offer new CME, MOC, CNE, and CE
- 2nd Edition content includes new recommendations in the [CDC 2021 STI Treatment Guidelines](#)
- [Podcast series](#) explores the clinical implications of key literature including recent episodes on [Monkeypox](#) and treating [Neurosyphilis](#) and [Trichomoniasis](#). Expert interviews start this summer.

STD & STI 2nd Edition Lessons



Chlamydia

Chlamydial Infections

[Quick Reference >](#)

Rapidly access info about Chlamydia

[Self-Study](#) **2nd Edition** **CNE/CME**

Track progress and receive CE credit

[Question Bank](#) **CNE/CME**

Interactive board-review style questions with CE credit



Gonorrhea

Gonococcal Infections

[Quick Reference >](#)

Rapidly access info about Gonorrhea

[Self-Study](#) **2nd Edition** **CNE/CME**

Track progress and receive CE credit

[Question Bank](#) **CNE/CME**

Interactive board-review style questions with CE credit

Learning Portal and Information Resource

Lessons

Dual Functionality



Self-Study Lessons

- Individualized progress tracker
- Earn CME/MOC/CNE/CE
- Earn Certificates of Completion
- Sign in required
- Ideal for courses & trainings

Registered Learners

Quick Reference Lessons

- Highly organized interface
- Quick search
- On demand topics
- No sign in required
- Ideal for staying updated

All Learners

Self-Study Lessons

National STD Curriculum



Self Study >



Quick Reference >



Question Bank



Clinical Consultation



Master Bibliography

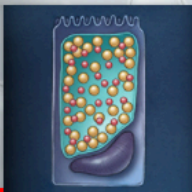


STD Podcast



2 STD Lessons 2nd Edition

Self-Study



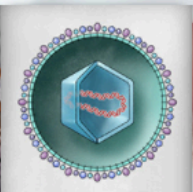
Chlamydia



Gonorrhea



Syphilis



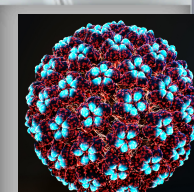
HSV



PID



Vaginitis



HPV

Self-Study STD Lessons for Clinicians

You are just a few steps away from free CE credits!

1 ★

Sign in or Register

A free account is required.

2

Study the Material

An entire module, or just a few topics at a time.

3

Take the CE Quiz

5 questions covering the topics in each module.

4

Claim CE Credit

Free CNE and Free CME and Free MOC available!

New Users

Create a free account to get started.

Required for CE

Register >

Returning Users



Email Address

Password


Forgot password?


Sign in >


Registered Learners

Self-Study Lessons

STD Lessons 2nd Edition Progress Tracker - 2nd Edition

 Certificate of Completion »

 CME Certificate »

 CNE Certificate »

	Lesson 1 Chlamydial Infections	Lesson 2 Gonococcal Infections	Lesson 3 Syphilis	Lesson 4 Genital Herpes	Lesson 5 Human Papillomavirus Infection	Lesson 6 Pelvic Inflammatory Disease	Lesson 7 Vaginitis
Topic 1	✓	✓	✓	✓	✓	✓	✓
Topic 2	✓	✓	✓	✓	✓	✓	✓
Topic 3	✓	✓	✓	✓	✓		✓
Topic 4	✓	✓	✓	✓	✓		✓
Topic 5	✓	✓	✓	✓	✓		✓
Topic 6	✓	✓	✓	✓	✓		✓
Topic 7	✓	✓	✓	✓	✓		
Topic 8	✓	✓	✓	✓	✓		
Topic 9	✓	✓	✓	✓	✓		
Topic 10	✓	✓	✓	✓	✓		
Topic 11	✓	✓	✓	✓			
Lesson Quiz	 CME	 CNE	 CNE	 CNE	 CNE ✓		 CNE

Certificates of Completion Available for Non-CE

Check-on-Learning Questions

National STD Curriculum

Self Study > Quick Reference > Question Bank > Clinical Consultation > Master Bibliography > STD Podcast

2 STD Lessons 2nd Edition

Chlamydia **Gonorrhea** Syphilis

Lesson 2. Gonococcal Infections - 23% complete
Topic 4. Microbiology, Pathogenesis, and Transmission

Topic 4. Microbiology, Pathogenesis, and Transmission

MICROBIOLOGY, PATHOGENESIS, AND TRANSMISSION

ORGANISM

Gonorrhea is a common bacterial sexually transmitted disease caused by *N. gonorrhoeae*, a gram-negative bacterium (diplococci) (Figure 7). Optimal growth of *N. gonorrhoeae* requires nutritional supplementation, such as with a Thayer-Martin medium. The organism enters epithelial cells via a number of structures located on its surface (Figure 8), rendering it capable of infecting mucosal and conjunctival tissue.^[11,12] This organism has a number of virulence factors, including type IV pili, lipooligosaccharide, and IgA protease, that collectively facilitate evasion of the host immune response.^[11,12,13] Infection with *N. gonorrhoeae*

Which one of the following best describes *Neisseria gonorrhoeae*?

- A gram-negative diplococcus that preferentially attaches to epithelial cells
- A gram-negative bacillus that preferentially attaches to dendritic cells
- A gram-positive diplococcus that preferentially attaches to interstitial cells
- A gram-positive bacillus that preferentially attaches to CD4 T-cell lymphocytes

Check-On-Learning Question

All Visitors/Learners

Quick Reference Lessons

 National **STD** Curriculum



Self Study >



Quick Reference ▾



Question Bank



Clinical Consultation



Master Bibliography



STD Podcast

For quick access viewing of content in Selected Topics

Chlamydial Infections >

Gonococcal Infections >

Syphilis >

Genital Herpes >

Human Papillomavirus Infection >

Pelvic Inflammatory Disease >

Vaginitis >

Syphilis Quick Reference **2nd Edition**

TOPICS

1. Introduction
2. Epidemiology in the United States
3. Microbiology, Pathogenesis, and Transmission
4. Clinical Manifestations
5. Laboratory Diagnosis
6. Screening for Syphilis
7. Treatment
8. Post-Treatment Follow Up
9. Management of Sex Partners
10. Counseling and Education
11. Summary Points

All Visitors/Learners



Syphilis

CME/CNE Earn CE credit for this module

Last Updated: June 13th, 2022

Authors: David H. Spach, MD, Meena S. Ramchandani, MD

Reviewer: Khalil G. Ghanem, MD, PhD

INTRODUCTION

Syphilis is a systemic infection caused by *Treponema pallidum*, a spirochete bacterium that is transmitted primarily through sexual activity or with vertical transmission during pregnancy. Cases of syphilis, including congenital syphilis, have risen substantially in recent years in the United States. In the absence of treatment, persons who acquire *T. pallidum* remain chronically infected and can develop an array of clinical manifestations. Syphilis characteristically progresses in stages (primary, secondary, latent, and tertiary), with episodes of active clinical disease interrupted by periods of latent infection; neurologic manifestations can occur at any of these stages (Figure 1).^[1,2] Chronic disease can result in significant morbidity, potentially affecting nearly every organ system, and rarely, can result in death. In addition, untreated syphilis in pregnant women can lead to fetal demise and devastating congenital infection for the neonate.

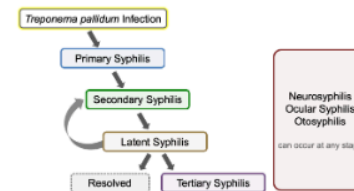


Figure 1. Natural History and Clinical Staging of Syphilis

EPIDEMIOLOGY IN THE UNITED STATES

2020 SYPHILIS SURVEILLANCE DATA

Although surveillance reporting of syphilis cases includes data for multiple syphilis stages, the reported cases for primary and secondary syphilis most accurately represent new infections. During the past 80 years in the United States, the incidence of syphilis has fluctuated (Figure 2).^[3] Since the year 2000, the reported number of syphilis cases in the United States has dramatically increased, peaking at 133,945 reported cases (of all stages) in 2020 (Figure 3).^[3] In 2020, a total of 41,655 cases of primary and secondary syphilis were reported, which represents a 75% increase from 2015 and the highest reported number of cases since 1992.^[3] In recent years, there reported cases of syphilis in women have increased, in conjunction with a sharp increase in the number of cases of congenital syphilis.^[3] The following summarizes several key epidemiologic features for syphilis as reported in the United States for the year 2020.^[3] Note: the Centers for Disease Control and Prevention (CDC)

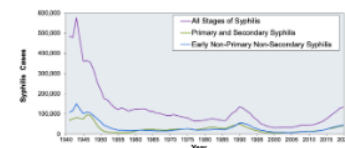


Figure 2. Syphilis Cases, United States, 1941-2020

Planned Monkeypox Content

- Comprehensive lesson with CE
- Podcast episodes
- Mini-lectures
- Information guide for healthcare professionals
- High-quality graphic illustrations depicting biology and lifecycle

Question Bank Topics



Self Study >



Quick Reference >



Question Bank



Clinical Consultation



Master Bibliography

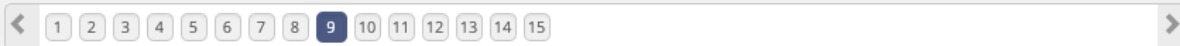


STD Podcast



Question Bank Topics.

Gonococcal Infections



A 29-year-old man is diagnosed with rectal *Neisseria gonorrhoeae* infection on a routine screening nucleic acid amplification test (NAAT). He has no symptom. The rectal NAAT is negative for *Chlamydia trachomatis*. In addition, pharyngeal swabs and urine NAATs are negative for gonorrhea and chlamydia. He weighs 73 kg and has no antibiotic allergies.

What regimen should be used to treat this rectal *N. gonorrhoeae* infection?

- Ceftriaxone 250 mg IM in a single dose
- Ciprofloxacin 500 mg orally as a single dose plus doxycycline 100 mg orally twice daily for 7 days
- Cefixime 400 mg orally once daily for 7 days plus azithromycin 1 gram orally in a single dose
- Ceftriaxone 500 mg IM in a single dose

[← Previous Question](#)

[Skip Question →](#)

[Check Answer](#)

Registered Learners

All Learners

Question Bank Topics

Question Bank Topics **2nd Edition**

- Bacterial Vaginosis
- Candidiasis - Vulvovaginal
- Cervicitis
- Chancroid
- Chlamydial Infections
- Epididymitis
- Gonococcal Infections
- Granuloma Inguinale (Donovanosis)
- Hepatitis A
- Hepatitis B
- Hepatitis C
- Herpes - Genital
- HIV Infection
- Lymphogranuloma venereum (LGV)
- *Mycoplasma genitalium*
- Pediculosis Pubis
- Proctitis, Proctocolitis, and Enteritis
- Scabies
- Syphilis
- Trichomoniasis
- Urethritis

The screenshot shows a web-based question bank interface. At the top, there are navigation tabs: NSTDC, Self Study, Quick Reference, Question Bank (selected), Clinical Consultation, Master Bibliography, and STD Podcast. Below the tabs, the page title is "Question Bank Topics" and the current question is "Gonococcal Infections". A navigation bar shows page numbers 1 through 15, with 9 highlighted. The question text reads: "A 29-year-old man is diagnosed with rectal *Neisseria gonorrhoeae* infection on a routine screening nucleic acid amplification test (NAAT). He has no symptom. The rectal NAAT is negative for *Chlamydia trachomatis*. In addition, pharyngeal swabs and urine NAATs are negative for gonorrhoea and chlamydia. He weighs 73 kg and has no antibiotic allergies. What regimen should be used to treat this rectal *N. gonorrhoeae* infection?" Below the question, a green message states "You chose this option correctly:" followed by a green checkmark and the text "Ceftriaxone 500 mg IM in a single dose". Below this is a "Summary" section. The summary text states: "For nonpregnant persons with uncomplicated gonococcal infections of the cervix, urethra, or rectum, the recommended treatment of gonococcal infections is a single dose of intramuscular ceftriaxone 500 mg, with or without oral doxycycline 100 mg twice daily for 7 days, with the doxycycline depending on whether chlamydia infection has been ruled out. Pregnant women and persons who cannot take the course of doxycycline should receive a single dose of azithromycin 1 gram orally instead of the 7-day course of doxycycline. In this case, testing for chlamydia was negative and thus a single intramuscular dose of ceftriaxone 500 mg alone would be the recommended treatment. Note that ceftriaxone 1 gram, given as a single intramuscular dose, should be used if the individual weighs 150 kg or more." Below the summary is a table titled "Table 1. 2021 STI Treatment Guidelines: Gonococcal Infections" with a "HIDE" button. The table has two main sections: "Recommended Regimen if Chlamydial Infection Excluded" and "Recommended Regimen if Chlamydial Infection Has Not Been Excluded". The first section shows "Ceftriaxone 500 mg* IM in a single dose for persons weighing <150 kg" with a note: "*For persons weighing ≥150 kg, 1 gram of IM ceftriaxone should be administered." The second section shows "Ceftriaxone 500 mg* IM in a single dose for persons weighing <150 kg" plus "Doxycycline 100 mg orally twice daily for 7 days" with a note: "During pregnancy, oral azithromycin 1 gram in a single dose is recommended to treat chlamydia." and another note: "*For persons weighing ≥150 kg, 1 gram of IM ceftriaxone should be administered." Below the table is a section titled "Alternative Regimen if Ceftriaxone is Not Available".

Question Bank Topics.
Gonococcal Infections

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

A 29-year-old man is diagnosed with rectal *Neisseria gonorrhoeae* infection on a routine screening nucleic acid amplification test (NAAT). He has no symptom. The rectal NAAT is negative for *Chlamydia trachomatis*. In addition, pharyngeal swabs and urine NAATs are negative for gonorrhoea and chlamydia. He weighs 73 kg and has no antibiotic allergies.

What regimen should be used to treat this rectal *N. gonorrhoeae* infection?

You chose this option correctly:
Ceftriaxone 500 mg IM in a single dose

Summary

For nonpregnant persons with uncomplicated gonococcal infections of the cervix, urethra, or rectum, the recommended treatment of gonococcal infections is a single dose of intramuscular ceftriaxone 500 mg, with or without oral doxycycline 100 mg twice daily for 7 days, with the doxycycline depending on whether chlamydia infection has been ruled out. Pregnant women and persons who cannot take the course of doxycycline should receive a single dose of azithromycin 1 gram orally instead of the 7-day course of doxycycline. In this case, testing for chlamydia was negative and thus a single intramuscular dose of ceftriaxone 500 mg alone would be the recommended treatment. Note that ceftriaxone 1 gram, given as a single intramuscular dose, should be used if the individual weighs 150 kg or more.

Table 1. 2021 STI Treatment Guidelines: Gonococcal Infections
Treatment of Uncomplicated Gonococcal Infection of the Cervix, Urethra, or Rectum **HIDE**

Recommended Regimen if Chlamydial Infection Excluded

Ceftriaxone
500 mg* IM in a single dose for persons weighing <150 kg
Note: *For persons weighing ≥150 kg, 1 gram of IM ceftriaxone should be administered.

Recommended Regimen if Chlamydial Infection Has Not Been Excluded

Ceftriaxone
500 mg* IM in a single dose for persons weighing <150 kg + Doxycycline
100 mg orally twice daily for 7 days
During pregnancy, oral azithromycin 1 gram in a single dose is recommended to treat chlamydia.
Note: *For persons weighing ≥150 kg, 1 gram of IM ceftriaxone should be administered.

Alternative Regimen if Ceftriaxone is Not Available

Registered Learners

All Learners

Question Bank Topics

The STD Question Bank features interactive board-review style questions that emphasize key points in the 2021 STD Treatment Guidelines.

Free CNE/CME/MOC Available!

Pick a topic below to begin.

Your progress and CE credits earned in the question bank will be reflected in the following certificates:



CNE Certificate

Score 80% or higher in a topic for the Non-CE certificate



2nd Edition Non-CE Certificate of Completion

Previous Non-CE Certificates: **1st Edition**

My Progress

My Dashboard

Tip The Progress Tracker gives you an overview of all of the questions. You can view it on your dashboard, or access it from any other page from the bottom of the screen.

Tip Use the Folder icon next to a topic to compare sets of answers. The icon only shows up for topics which have multiple sets of answers.

CE A tag will be displayed next to topics for which CE is claimed. **CNE/CME** displayed next to the score means that's the set of answers during which the CE was earned.

Question Bank Topics **2nd Edition**

Anogenital Warts CNE	<div style="display: flex; gap: 5px;"><div>1 ✓</div><div>2 ✓</div><div>3 ✓</div><div>4 ✓</div><div>5 ✓</div><div>6 ✓</div><div>7 ✓</div><div>8 ✓</div><div>9 ✓</div><div>10 ✓</div></div>	CNE 100%
Bacterial Vaginosis CNE	<div style="display: flex; gap: 5px;"><div>1 ✓</div><div>2 ✓</div><div>3 ✓</div><div>4 ✓</div><div>5 ✓</div><div>6 ✓</div><div>7 ✓</div></div>	CNE 100%
Candidiasis - Vulvovaginal CNE	<div style="display: flex; gap: 5px;"><div>1 ✓</div><div>2 ✓</div><div>3 ✓</div><div>4 ✓</div><div>5 ✓</div><div>6 ✓</div><div>7 ✓</div><div>8 ✓</div><div>9 ✓</div><div>10 ✓</div></div>	CNE 100%
Cervicitis CNE	<div style="display: flex; gap: 5px;"><div>1 ✗</div><div>2</div><div>3</div><div>4</div><div>5</div></div>	0%

Registered Learners

National STD Curriculum Podcast



Self Study >



Quick Reference >



Question Bank



Clinical Consultation



Master Bibliography



STD Podcast



National **STD** Curriculum **Podcast**

Launched
September
2020



Podcast Editor

Meena S. Ramchandani, MD, MPH

Assistant Professor of Medicine

Division of Allergy and Infectious Diseases

University of Washington

Public Health – Seattle & King County Sexual Health Clinic



Keep current on sexually transmitted diseases

This podcast series explores innovative and significant STD issues and discusses the clinical implications through:

- Literature Reviews
- Hot Topics
- Conference Summaries
- Expert Interviews



Self Study



Quick Reference



Question Bank



Clinical Consultation



Master Bibliography



STD Podcast



[Back to Episodes](#)

Literature Review



National STD Curriculum Podcast

Treatment Options for Trichomoniasis

April 19, 2022
Season 2, Episode 7

This episode focuses on some of the literature supporting seven days of metronidazole treatment for *Trichomonas* infection recommended in the CDC 2021 STI Treatment Guidelines.

Topics: [Trichomonas](#) [T. vaginalis](#) [Trich](#) [STD](#) [STI](#) [Trichomoniasis](#)



Meena S. Ramchandani, MD, MPH

Assistant Professor of Medicine
Division of Allergy and Infectious Diseases
University of Washington
Public Health - Seattle & King County Sexual Health Clinic

References

[Background](#) [↗](#)

[Paper #1](#) [↗](#)

[Paper #2](#) [↗](#)

[Paper #3](#) [↗](#)



00:00



09:38

Transcript

Read along with the audio or jump to a particular chapter.

In this episode:

[Download this Transcript as PDF](#)



[Introduction](#)



[Background](#)



[Paper #1](#)

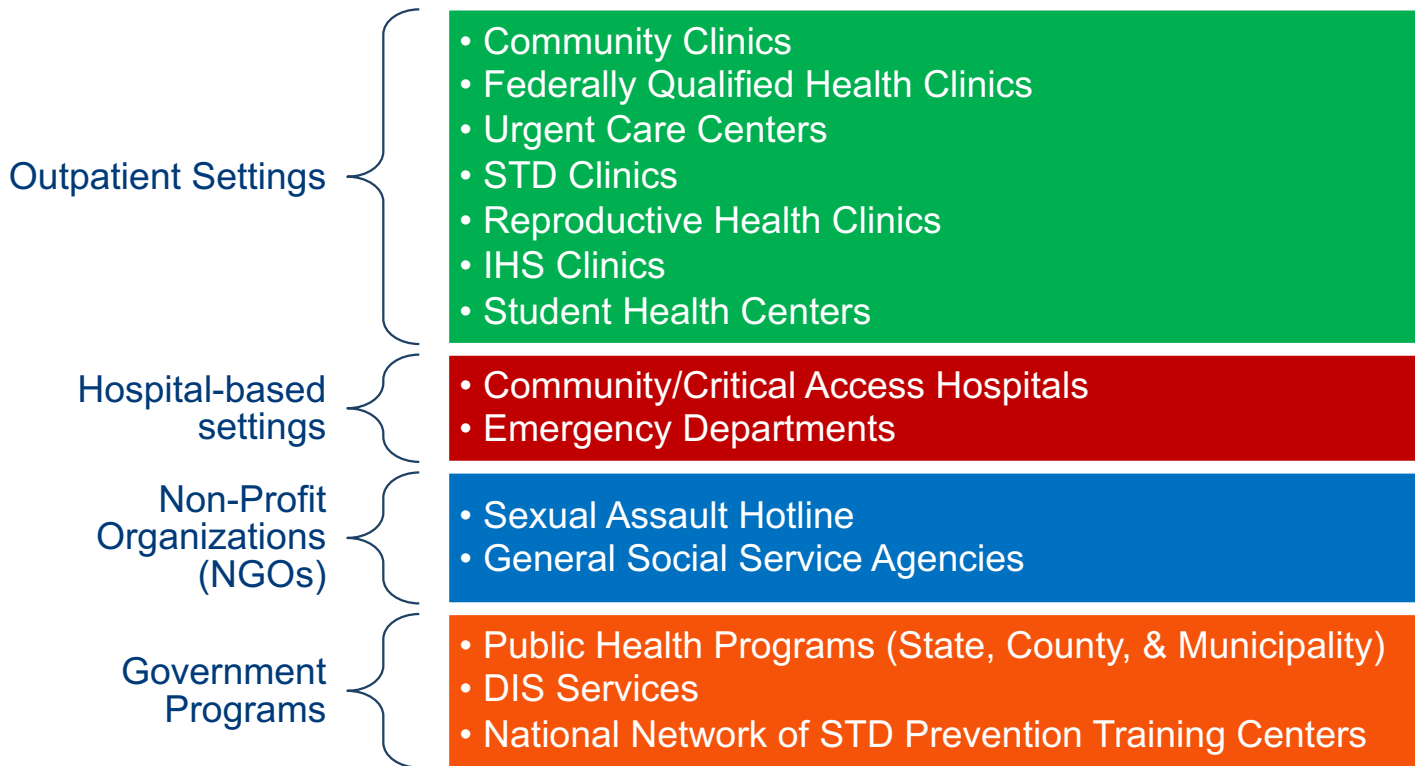
[00.00] Introduction

Hello everyone. My name is Meena Ramchandani. I'm an infectious disease physician at the University of Washington in Seattle. This podcast is dedicated to an STD [sexually transmitted disease] literature review for health care professionals who are interested in remaining up-to-date on the diagnosis, management, and prevention of STDs.

- Literature Reviews
- Hot Topics
- Conference Summaries
- Expert Interviews

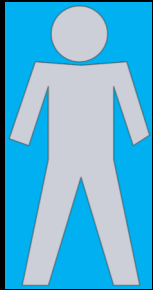
Learning Groups

Examples of Current Groups: Organizations

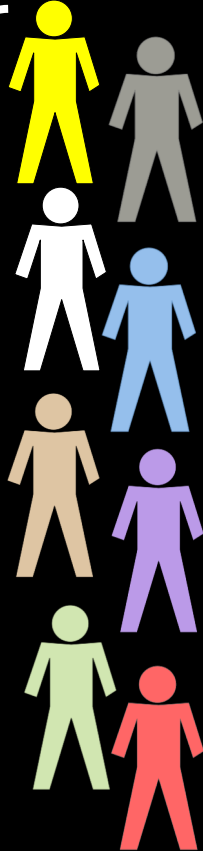


Learning Groups: Invite, Organize, & Track

Group Leader



Invite,
Organize
& Track



Progress is included. Use the tabs below to look at progress within the individual parts of the curriculum.

(days)

Current Learners
11

Curriculum Progress

Search:

	Chlamydia	Gonorrhea	Syphilis	HSV	HPV	PID	Vaginitis
	✓ 80%	✓ 80%	✓ 100%	✓ 80%	✓	✓	✓
	✓ 80%	✓ 80%	✓ 80%	✓ 100%	✓	✓	✓
	✓	✓	✓	✓	✓	✓	✓
				80%	✓	✓	✓
				80%	✓	✓	✓
				80%	✓	✓	✓
	✓ 100%	✓ 100%	✓ 100%	✓ 100%	✓	✓	✓

Gonococcal Infections

Progress: 100%

Accessed: March 24, 2022, 5:43 pm

Attempt 1: CNE 5/5 - 100%

Group Leader can assign topics



Four FREE online curricula on how to diagnose, manage, and prevent HIV, STDs, hepatitis C and hepatitis B





FREE CE Offered

IDEA Curricula	CME Credits/MOC Points CNE Contact Hours CE Contact Hours	Pharmacology CE for Advanced Practice Nurses
National HIV Curriculum hiv.uw.edu	97.50 97.50 Maintenance of Certification (MOC) Points	70.50
National STD Curriculum std.uw.edu	30.50 30.50 MOC	14.25
Hepatitis C Online hepatitisC.uw.edu	34.00	18.00
Hepatitis B Online hepatitisB.uw.edu	9.00	5.00

Acknowledgments

The **National STD Curriculum** is funded by a cooperative agreement from the Centers for Disease Control and Prevention (CDC-RFA-PS20-2004). This project is led by the University of Washington STD Prevention Training Center and Infectious Diseases Education and Assessment (IDEA) Programs.



The content in this presentation are those of the author(s) and do not necessarily represent the official position of the Centers for Disease Control and Prevention.