STI/PID

ED Clinical Pathway

Center for Clinical Excellence

Inclusion Criteria:

- Greater than or equal to 13 years with any of the following:
  - Sexually active
  - At risk for STI
  - Experiencing symptoms suggestive of STI

Exclusion Criteria:

- Less than 13 years
- Recent victim of sexual abuse or sexual assault
- Developmentally delayed

*AFAB: assigned female at birth
**AMAB: assigned male at birth

Possible STI symptoms or concern for exposure to STI?

Send sample (preferably from triage)
AFAB*:first catch urine for G/C/Trich, POCT HCG & clean urine for UA. May use vaginal swab in place of first catch urine for G/C/Trich
AMAB**:first catch urine for G/C/Trich
AFAB and **AMAB**: offer POCT HIV if available

HcG+ → Off Pathway

Offer testing for HIV, syphilis, hepatitis, HSV and other STIs as indicated

Perform external GU exam and speculum exam as clinically indicated +/- bimanual exam if AFAB with abdominal pain

AFAB and cervical motion, uterine or adnexal tenderness suggesting PID?

No → Provide treatment for G/C/T and other STIs as indicated
** Begin treatment in ED **

Yes → Provide treatment for PID and other STIs as indicated
** Begin treatment in ED **

Meets criteria for admission?

Yes → Admit to ID/ Adolescent

No →

Discharge Patient

- Provide prescriptions as needed
- Helping Hands
- PCP follow-up within 3 days
- Consider Adolescent Med follow-up based on family preference and/or additional reproductive health needs
- See Discharge Criteria and Planning
- Consider offering birth control options

HIV+ on POCT

Obtaining a Sexual History

Factors that Increase Vulnerability to STI

Ohio Age of Consent Laws

CDC STI Treatment Guidelines Quick Reference

CDC STI Treatment Full Guidelines

Consider confidential ordering, documenting, and discharge

Access to this sharepoint site is restricted to ED providers

Obtain consent/document confidential phone number to give test results

ED Discharge Criteria:

- Ability to obtain antibiotics if not already treated in ED
- Appropriate support system (e.g. PCP; caregiver/family)
- See Discharge Criteria and Planning

Inclusion & Exclusion Criteria

Inclusion Criteria:

- Greater than or equal to 13 years with any of the following:
  - Sexually active
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- Less than 13 years
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Possible STI Symptoms

- Abdominal pain
- Abnormal uterine bleeding
- Vaginal or penile discharge
- Rectal, oral or genital sores
- Testicular pain and/or swelling
- Vulvar itching
- Dysuria
- Vomiting
- Vaginal odor
- Scrotal pain or swelling
- Tender and swollen groin lymph nodes
- Rash on hands, feet, abdomen or chest

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Urine Sample Collection for STI testing

First catch urine:

- the first 10-30 mL of urine
- at least one hour after last void
- no cleaning prior to void

Vaginal/cervical swab:

- can be provider swab or patient self-swab (Aptima test only)
- 10% higher sensitivity compared to urine

Clean catch urine for urinalysis: mid stream sample obtained after cleaning

POCT HCG: can be obtained on any urine sample

HIV POCT: whole blood finger stick

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Factors that Increase Vulnerability to STIs

- Sexual activity before age 15 years
- More than one partner
- Multiple sequential sex partnerships of limited duration
- Sex partner with concurrent sexual relationships
- Inconsistent use of condoms
- Past history of STI
- Known exposure to STI
- Residing in a detention facility
- Involved in commercial sex exploitation and survival sex, and exchanging sex for drugs, food, money or housing
- Sexual minoritized youth including young men who have sex with males, bisexual youth, and transgender youth who are sexually active.
- Presence of substance abuse or mental health disorder
- Sexual abuse, childhood maltreatment

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Sexual History

5 P's Model for Sexual Health History

Partners

- Are you currently having sex of any kind?
- If no, have you ever had sex of any kind with another person?
- In recent months, how many sex partners have you had?
- What is/are the gender(s) of your sex partner(s)?
- Do you or your partner(s) currently have other sex partners?

Practices

- What kind of sexual contact do you have, or have you had? What parts of your body are involved when you have sex?
- Do you meet your partners online or through apps?
- Have you or any of your partners used drugs?
- Have you exchanged sex for your needs (money, housing, drugs, etc.)?

Protection from STIs

- If you use prevention tools, what methods do you use?
- How often do you use this/these method(s)?
- Have you received HPV, hepatitis A, and/or hepatitis B shots?
- Are you aware of PrEP, a medicine that can prevent HIV?
- Are you aware of DoxyPEP, a medicine that can reduce the likelihood of syphilis, gonorrhea and chlamydia after exposure?

Past history of STIs

- Have you ever been tested for STIs and HIV? Can we do that testing today?
- Have you been diagnosed with an STI in the past? When? Did you get treatment?
- Have you had any symptoms that keep coming back?
- Has your current partner or any former partners ever been diagnosed or treated for an STI? Were you tested for the same STI(s)? Do you know your partner(s) HIV status?

Pregnancy intention

- Do you think you would like to have (more) children at some point?
- When do you think that might be?
- How important is it to you to prevent pregnancy (until then)?
- Are you or your partner using contraception or practicing any form of birth control?

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HIV+ on POCT in ED

If HIV POCT test is positive while patient is still in the ED, ED physicians/ NPs should take the following steps:

1. Order confirmatory testing before patient leaves the ED:
   a. HIV 1 & HIV 2 AB/AG SCREEN
      - HIV Ab/Ag screen is run daily M-F
      - If the HIV Ab/Ag screen is positive, the lab will reflexively send the sample for HIV Antibody Differentiation Assay
   b. HIV-1 QUANT (AKA Viral Load)

Please send a 6 mL blood sample so there is enough blood available if confirmatory testing is needed

2. Discontinue any PEP or PrEP.
3. Consult ED social work.
4. Refer to FACES clinic.
5. Send patient's name and MRN by staff message within Epic to the PREP/HIV Prevention Services Pool. They will follow up all positive HIV+ POCT results as well as confirmatory testing results.
6. Be sure to complete all medical record documentation. Please document:
   - If the HIV+ results need to be communicated confidentially to patient
   - If parents are aware of HIV testing/risk factors
   - Preferred phone number(s) within the text of the medical documentation so results can be quickly and safely delivered.
7. No immediate drug therapy is needed.

If patient tests positive for HIV but leaves the ED before HIV POCT test results are able to be communicated, results should not be given over the telephone. Instead, **ED Outreach RNs** should send patient's name and MRN by Staff Message within Epic to the PREP/HIV Prevention Services Pool. The PREP/HIV Prevention Services Pool will follow up on the positive HIV+ POCT results as well as order confirmatory testing.

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Differential Diagnosis

Bacterial STIs
- Chlamydia
- Gonorrhea
- Syphilis
- Lymphogranuloma venereum
- Mycoplasma genitalium
- Chancroid

Viral STIs
- Hepatitis
- Herpes simplex virus
- Human papillomavirus
- HIV
- Molluscum contagiosum
- Zika virus
- Mpox

Parasitic STIs
- Trichomonas vaginalis
- Pubic lice
- Scabies

Non STIs:
- UTI/pyelonephritis
- Nephrolithiasis
- Bacterial vaginosis
- Ovarian or testicular torsion, mass, cyst, abscess
- Balanitis
- Phimosis/Paraphimosis
- Epididymitis
- Orchitis
- Appendicitis
- Constipation
- Candidiasis
- Retained vaginal foreign body
- Behcet’s disease
- Lipschutz ulcerations (non-sexually acquired vaginal ulcerations)

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Pelvic Inflammatory Disease

Presumptive treatment for PID should be initiated for sexually active young women and other women at risk for STIs if:

- The patient is experiencing pelvic or lower abdominal pain
- No cause for the illness other than PID can be identified
- One or more of the following three minimum clinical criteria are present on pelvic examination:
  - Cervical motion tenderness
  - Uterine tenderness
  - Adnexal tenderness

Criteria that enhance the specificity of the minimum criteria for PID:

- Oral temperature >38.3°C (>101°F)
- Abnormal cervical mucopurulent discharge or cervical friability
- Presence of abundant numbers of WBCs on saline microscopy of vaginal fluid
- Elevated erythrocyte sedimentation rate
- Elevated C-reactive protein
- Laboratory documentation of cervical infection with N. gonorrhoeae or C. trachomatis

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Testing and Results

Testing:

Gonorrhea, chlamydia and trichomonas:

- Urine: AFAB and AMAB: order URINE - CHLAMYDIA/GC/TRICHOMONAS AMPLIFIED PROBE PANEL
- Oral/pharyngeal/rectal: CHLAMYDIA and GC BY AMPLIFIED DETECTION

Herpes: HSV by PCR Superficial Site
Syphilis: RPR
HIV: HIV SCREEN, WHOLE BLOOD, POCT for ages 13y and older
HIV 1 & HIV 2 AB/AG SCREEN for ages under 13y and SANE patients
Hepatitis: HEPATITIS B SURFACE ANTIGEN, HEPATITIS C ANTIBODY

Results:

Patients who test positive for HIV while in the ED will have results communicated by physician/NP and confirmatory testing should be ordered before the patient leaves the ED. See **HIV+ on POCT** page.

If patient tests positive for HIV but leaves the ED before HIV POCT test results are able to be communicated, results should not be given over the telephone. Instead, ED Outreach RNs should send patient's name and MR by staff Message within Epic to the PREP/HIV Prevention Services Pool. The PREP/HIV Prevention Services Pool will follow up on the positive HIV+ POCT results as well as order confirmatory testing.

Positive tests for syphilis and/or gonorrhea will be communicated by a grant-funded, designated individual within the NCH primary care clinic, usually within 1-2 working days. The remainder of STIs with positive results not known at the time of ED discharge will be communicated by ED nurse outreach.

Patients will not be notified of negative results.

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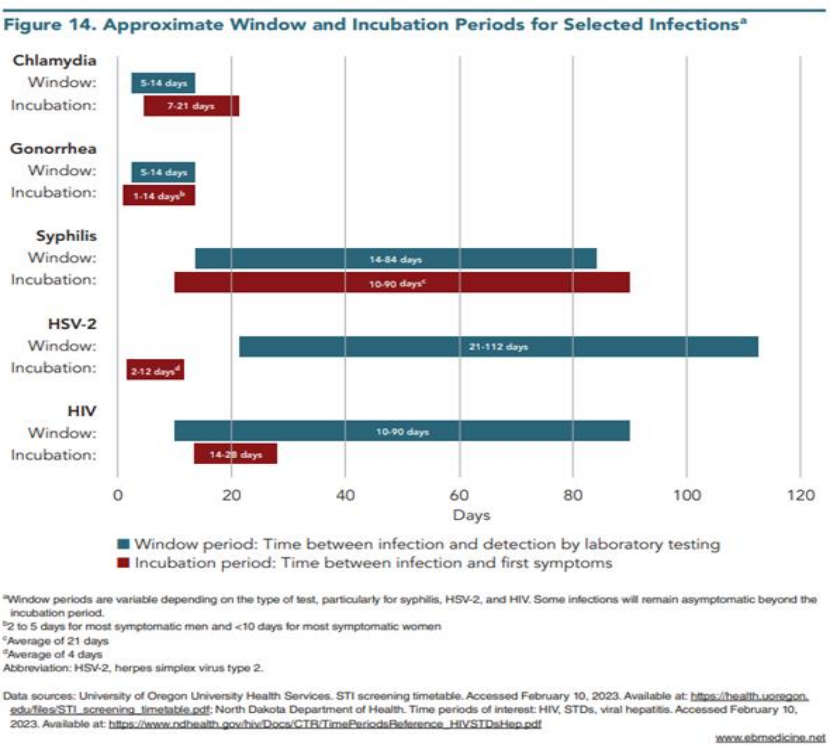

[a]Window periods are variable depending on the type of test, particularly for syphilis, HSV-2, and HIV. Some infections will remain asymptomatic beyond the incubation period.
[b]2 to 5 days for most symptomatic men and <10 days for most symptomatic women
[c]Average of 21 days
[d]Average of 4 days
Abbreviation: HSV-2, herpes simplex virus type 2.

Data sources: University of Oregon University Health Services. STI screening timetable. Accessed February 10, 2023. Available at: https://health.uoregon.edu/files/STI_screening_timetable.pdf; North Dakota Department of Health. Time periods of interest: HIV, STDs, viral hepatitis. Accessed February 10, 2023. Available at: https://www.ndhealth.gov/hiv/Docs/CTR/TimePeriodsReference_HIVSTDsHep.pdf

www.ebmedicine.net

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Admission Criteria

- Ill appearing
- Febrile > 39.5 C
- Severe pain
- Intractable vomiting
- Unable to tolerate PO
- Failed outpatient treatment
- Unable to exclude surgical emergency
- Concern for tubo-ovarian abscess
- Concern for patient safety

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Recommended Treatments

Adolescent and adult dosing: (For pediatric weight (< 45kg) or pregnant dosing regimens or for treatment regimens for bacterial vaginosis, candidiasis, HSV, epididymitis, HPV, pediculosis pubis, scabies see **CDC STI Treatment Guidelines** https://www.cdc.gov/std/treatment-guidelines/wall-chart.pdf)

Chlamydia:
Recommend: Doxycycline 100mg BID x 7 days
Alternatives: Azithromycin 1g PO once or
Levofloxacin 500mg PO daily x 7d

Gonorrhea (genital, rectal or oral):
Recommend: Ceftriaxone 500mg (<150kg), 1000mg (>/=150kg) IV/IM x 1
Alternatives: Gentamicin 240mg IM PLUS azithromycin 2g PO once or
Cefixime 800mg PO once (not for use in pharyngeal infections)

Trichomoniasis:
Women: Metronidazole 500mg BID x 7 days
Men: Metronidazole 2g PO once

Syphilis:
Primary, secondary, and early latent: 2.4 million units of benzathine penicillin G IM

PID Outpatient Treatment:
< 150kg
- Ceftriaxone 500mg IV/IM x 1
- Doxycycline 100mg BID x 14 days
- Metronidazole 500mg BID x 14 days

>/=150 kg
- Ceftriaxone 1000mg IV/IM x 1
- Doxycycline 100 mg BID x 14 days
- Metronidazole 500mg BID x 14 days

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PID Parenteral Treatment:
Ceftriaxone 1g IV q24hrs
PLUS
Doxycycline 100mg po/IV q12hrs
PLUS
Metronidazole 500mg BID q12hrs

Deterioration & Escalation of Care

Escalation of Care Protocol:

- Abnormal labs or imaging studies, if performed (that require inpatient level care evaluation/ treatment plans)
- Development of new symptoms or physical exam findings (that may warrant further evaluation)
- Lack of response to prior treatment

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Discharge Criteria & Planning

Discharge Criteria:

- Ability to obtain antibiotics if not already treated in ED
- Tolerating PO
- Pain/discomfort tolerable on PO pain medications
- Appropriate support system (e.g. PCP; caregiver/family) in place
- Appropriate follow up determined

Discharge Planning & Follow-Up:

- Referrals to ID/Adolescent clinic placed as needed for HIV, syphilis, gonorrhea
- Referrals to Adolescent/FACES clinic placed for DoxyPEP and PrEP (used in high risk populations)
- Social work involved if pt is **under the age of consent in Ohio**, concern for trafficking or other abuse
- Recommend partner notification and treatment
- STI patient education provided (Helping Hands)
- Emergency contraception prescribed if appropriate
- Consider prescribing contraception, dispensing of condoms and/or referral to NCH contraception clinic

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Patient & Caregiver Education

Helping Hands: HH-I-428 STIs +/-

- HH-I-38, Chlamydia
- HH-I-67, Gonorrhea
- HH-I-174, Herpes Simplex Virus
- HH-I-116, HIV Infection/AIDS
- HH-I-108, Trichomoniasis
- HH-I-102, Genital Warts
- HH-I-43, Hepatitis B
- HH-IV-46, Condoms
- HH-I-119, Vaginal Discharge
- HH-I-62 Pelvic Inflammatory Disease (PID)
- HH-I-190 Syphilis
- HH-I-713 Human Papillomavirus (HPV)

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Age of Consent in Ohio

OHIO AGE OF CONSENT/STATUTORY RAPE FACT SHEET

The legal age of consent to sex in Ohio is sixteen (Ohio Revised Code § 2907.04). Even if a teen and older individual claim they are both willing participants in the relationship or sexual encounter, in some situations it is still considered rape under law. To determine whether a suspect has violated Ohio's age of consent laws (also referred to as "statutory rape" laws), refer to the chart below.*

In cases where a relationship does not violate Ohio's statutory rape laws, parents may intervene with other charges that are not sex offenses, such as contributing to the unruliness or delinquency of a child (ORC § 2919.24) or charge of interference with custody (ORC § 2919.23).

Age Related Sex Offenses in Ohio

(See ORC § 2907.04 – Unlawful Sexual Conduct with Minor)

Victim/Survivor's Age	Suspect's Age	Legal?
Under 13 years old	**18 or older**	**No**
13 years old	**13-17**	**Yes****
	18-22	**No**
	23 and older	**No**
14 years old	**13-17**	**Yes****
	18-23	**No**
	24 and older	**No**
15 years old	**13-17**	**Yes****
	18	**No**
	19-24	**No**
	25 and older	**No**
16 years old	**13-17**	**Yes****
	18 and older	**Yes****

*Even if a suspect does not violate an age related offense, if the sexual acts were forced or coerced, or the perpetrator is in a position of power over the victim, like a teacher, coach, parent and/or guardian, they are in violation of the law.

**The act is legal unless the act was forced, coerced, or the perpetrator is in a position power over the victim, like a teacher, coach, parent and/or guardian.

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Clinical Pathway Development

This clinical pathway was developed using the process described in the NCH Clinical Pathway Development Manual Version 6, 2022. Clinical Pathways at Nationwide Children's Hospital (NCH) are standards which provide general guidance to clinicians. Patient choice, clinician judgment, and other relevant factors in diagnosing and treating patients remain central to the selection of diagnostic tests and therapy. The ordering provider assumes all risks associates with care decisions. NCH assumes no responsibility for any adverse consequences, errors, or omissions that may arise from the use or reliance on these guidelines. NCH's clinical pathways are reviewed periodically for consistency with new evidence; however, new developments may not be represented, and NCH makes no guarantees, representations, or warranties with respect to the information provided in this clinical pathway.

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