Alaska Infectious Disease ECHO





HCV-HIV-PrEP-STIs

The ANTHC Liver Disease and Hepatitis Program, HIV Clinical Services, the Behavioral Health Department and Southcentral Foundation's Pharmacists have partnered to host this ECHO, and it's funded by a grant from the Northwest Portland Area Indian Health Board.

We acknowledge the Dena'ina people, on whose traditional lands we gather. We also acknowledge the Creator and all Indigenous people of Alaska. Thank you for your past and present stewardship of the waters, plants, animals and spiritual practices of this place.



AK ID ECHO: HCV, HIV, PREP, STIS

Approved Provider Statements:

Alaska Native Tribal Health Consortium (ANTHC) is accredited by the Washington State Medical Association to provide continuing medical education for physicians.

ANTHC is approved as a provider of nursing continuing professional development by the Montana Nurses Association, an accredited approver with distinction by the American Nurses Credentialing Center's Commission on Accreditation.

The Alaska Pharmacists Association (AKPhA) in cooperation with ANTHC is accredited by the Accreditation Council for Pharmacy Education as a provider of continuing pharmacy education.

Contact Hours:

ANTHC designates this live activity for a maximum 12 AMA PRA Category 1 Credit(s) M. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

ANTHC designates this activity as meeting the criteria for one nursing contact hour credit for each hour of participation up to a maximum 12 hour(s).

To receive CPE credit, participants must complete an Evaluation/Attendance Form for each session attended. You will be required to enter your NABP e-profile ID number, & birthdate (mm/dd). CPE credit will be posted to the online CPE Monitor system within 60 days after completion of each activity. No credit will be reported to CPE Monitor for CEs that do not have a completed evaluation. There is no charge to process CPE credit for ANTHC employees and AKPhA members, but a fee may apply to participants not affiliated with either organization.

Conflict of Interest Disclosures:

Lisa Townshend-Bulson, faculty for this educational event, is the primary investigator in a study funded in part by Gilead Sciences. All of the relevant financial relationships listed for these individuals have been mitigated.

Requirements for Successful Completion:

To receive CE credit please make sure you have actively engaged in the entire activity, your attendance is recorded by the facilitator, and complete the course evaluation form found here: https://forms.gle/18t4EgvN2WdnM4P77





CHLAMYDIA AND GONORRHEA: EPI, SCREENING, TREATMENT AND EXPEDITED PARTNER THERAPY

- Nathan Wormington, STD Program Coordinator, State of Alaska
- Leah Besh, PA, Alaska Native Tribal Health Consortium



Gonorrhea and Chlamydia Disease Trends And Expedited Partner Therapy

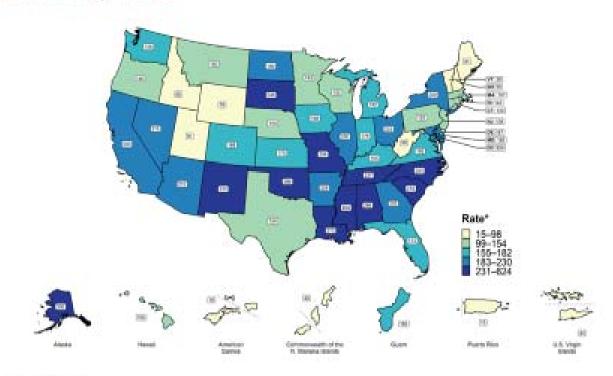




Presented by: Nathan Wormington STD Program Coordinator State of Alaska, DHSS, DPH, SOE



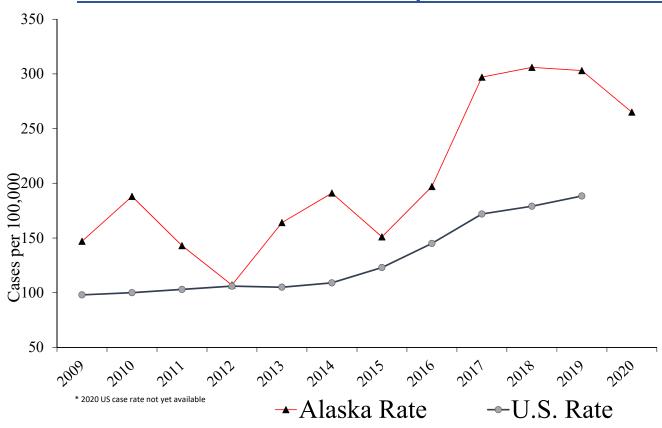
Gonorrhea — Rates of Reported Cases by State, United States and Territories, 2019





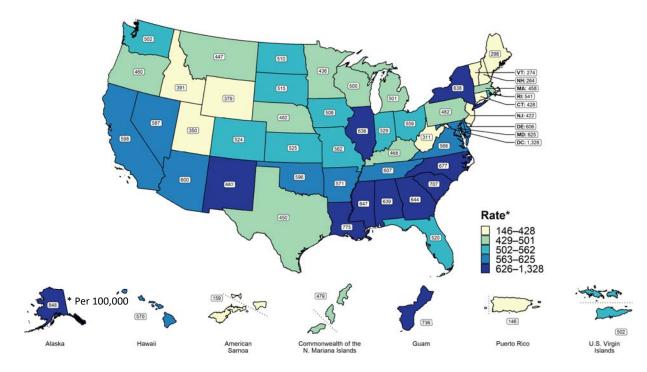


Gonorrhea Rates- Alaska Compared to United States



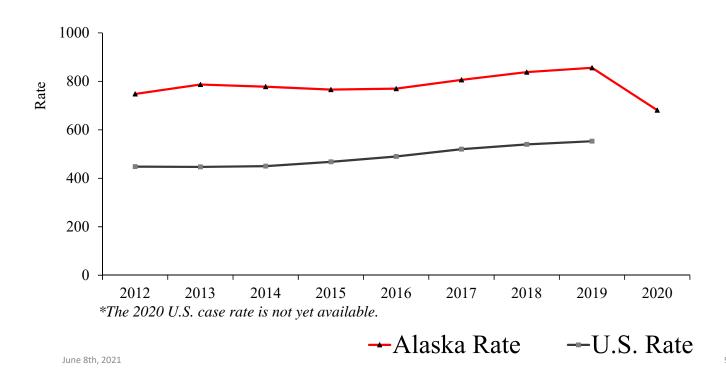
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Chlamydia — Rates of Reported Cases by State, United States and Territories, 2019

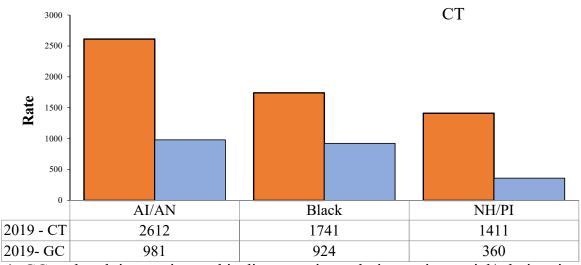




<u>Chlamydia Rates – Alaska Compared to United States</u>



2019 Case Counts for Gonorrhea and Chlamydia for the Top 3 Effected Races/Ethnicities $_{2019}$ -



Alaska's GC outbreak is ongoing and is disproportionately impacting racial/ethnic minority groups. In 2019, the HIV/STD Program's response to the ongoing syphilis outbreak and years of reductions in SOA Section of Public Health Nursing capacity have limited the ability to provide contact tracing for reported GC cases. Providers now play a critical role in counseling infected persons of the need for their sex partners to be tested and treated and increasing the use of EPT (expedited partner therapy).*

June 8th, 2021 10

^{*}http://www.epi.alaska.gov/bulletins/docs/b2020_10.pdf

EPT In Alaska

- Alaska Admin Code Title 12 SS 40.967 (29)(B)(C)

- Information required for pharmacists to fill prescription includes name, address of patient unless address readily available in the patient record. Alaska Admin. Code tit. 12, § 52.460.*
 Labels for prescriptions dispensed by Advanced Nurse Practitioners must include patient name
- and may include patient id # (if applicable). Alaska Admin. Code tit. 12, § 44.447.*

*This legal authority predates the effective date of the state's law that authorizes EPT. https://www.cdc.gov/std/ept/legal/alaska.htm





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June 8th, 2021

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June 8th, 2021

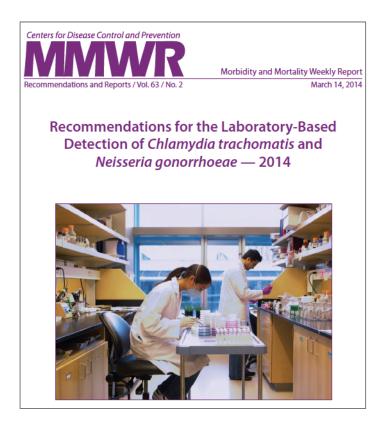
CHLAMYDIA AND GONORRHEA: SCREENING AND TREATMENT BASICS AND CHANGES

Presented by Leah Besh, PA, Alaska Native Tribal Health Consortium
The presentation slides are from Dr. Hillary Liss at University of Washington, MWAETC



Chlamydia & Gonorrhea: Diagnostic Testing

- Nucleic acid amplification tests (NAAT) recommended for men & women
- Optimal specimen: first-catch urine in men and vaginal swabs in women
- NAAT optimal for rectal and pharyngeal testing; FDA approved as of May 2019
- Cannot perform drug resistance testing on NAAT (need gonorrhea culture if concern)





CDC STD Screening Guidelines for Women

Sexually active adolescents < 25 years

Routine annual chlamydia and gonorrhea screening
Other STDs and HIV based on risk

Women ≥ 25 years

STD/HIV testing based on risk

New sex partner, more than one sex partner, a sex partner with concurrent partners, sex partner with an STI

Pregnant Women

Chlamydia and Gonorrhea (<25 years of age or at-risk) Retest in 3rd trimester if <25 or high-risk

HIV, Syphilis serology, Hep B sAg, Hep C (if high risk)



CDC STD Screening Guidelines: Other Populations

Men who have sex with women only

No routine screening

MSM

<u>Annual</u> HIV, syphilis, GC/CT <u>Every 3-6 months</u> if recent bacterial STI, condomless anal intercourse, anonymous sex partners, or substance use - methamphetamine

Transgender men and women

No specific recommendation
But can be at high risk, so consider every 3 months HIV, syphilis,
GC/CT



Extra-genital Screening: If You Just Check the Pee, You'll Miss GC and CT...



What about "Extragenital" Screening?

- Extragenital screening = testing for STIs at any body site other than genitourinary (urethral/urine/vaginal/cervix)
- Usually refers to rectal and oropharynx
- Typically for gonorrhea and/or chlamydia only
- Recommended routinely only for men who have sex with men (MSM)



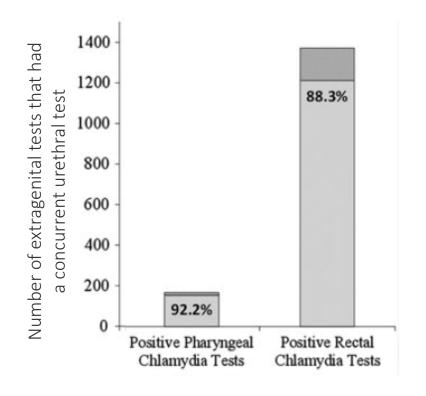
Importance of Extragenital GC/CT Infections

- Transmission
 - 30% of symptomatic gonococcal urethritis is attributable to oro-pharyngeal exposure¹
- HIV Transmission
 - Can potentiate acquisition, even after controlling for sexual behaviors²⁻⁴
- Treatment can differ
 - Pharyngeal GC⁵
 - Ceftriaxone > Cefixime
 - Rectal CT⁶
 - Doxy >>> Azithromycin

1. Barbee et al, STI, 2015; 2. Vaughan, BMC Med Res Methodol, 2015; 3. Kelly, AIDS Res Hum Retroviruses, 2015; 4. Jin, JAIDS, 1999; 5. Moran, STD 1995; 6. Kong, JAC, 2015



Extragenital CT/GC in MSM in the STD Surveillance Network, 2010-2012



- Concurrent negative urethral test
- Concurrent positive urethral test

STI Self-Testing Program



Available in English and Spanish Email aradford@uw.edu for free posters for your clinic



STDs predict future HIV Risk among MSM

Rectal GC or CT



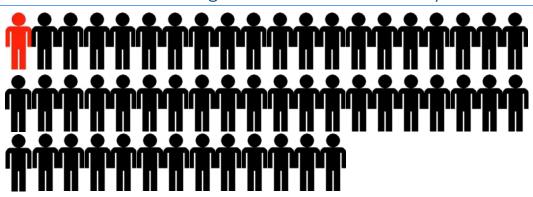
1 in 15 MSM were diagnosed with HIV within 1 year.*

Primary or Secondary Syphilis



1 in 18 MSM were diagnosed with HIV within 1 year.**

No rectal STD or syphilis infection



1 in 53 MSM were diagnosed with HIV within 1 year.*



^{*}STD Clinic Patients, New York City. Pathela, CID 2013:57;

^{**}Matched STD/HIV Surveillance Data, New York City. Pathela, CID 2015:61

On a related note...

Remember that anyone diagnosed with an STI can be considered for HIV pre-exposure prophylaxis (PrEP)!

What about extragenital screening for women?

- Not currently recommended by CDC STD Guidelines
 - BUT MORE PERMISSIVE LANGUAGE EXPECTED IN THE 2021 GUIDELINES
- Meta-analysis of 14 studies of rectal testing¹
 - Overall 6.0% rectal CT positivity
 - When urogenital CT detected → 68.1% also rectal positive
 - 2.2% isolated rectal CT
 - Rectal CT not associated with reported anal intercourse
- Can increase rates of chlamydia case-finding
- Should be treated if found



2015 CDC STD Treatment Guidelines: Uncomplicated CT

Recommended

- Azithromycin 1g PO, single dose, directly observed*
- Doxycycline 100mg PO BID x 7 d

Alternatives

- Ofloxacin 300 mg PO BID x 7 d
- Levofloxacin 500 mg PO Qday x 7 d
- Erythromycin 500 mg PO QID x 7 d

Routine test of cure not indicated, but... REPEAT testing in 3 months



^{*} Recommended in Pregnancy

Expected 2021 CDC STD Treatment Guidelines: Uncomplicated CT

Recommended

Doxycycline 100mg PO BID x 7 d

Alternatives

- Azithromycin 1g PO, single dose*
- Ofloxacin 300 mg PO BID x 7 d due to availability issues
- Levofloxacin 500 mg PO Qday x 7 d
- Erythromycin 500 mg PO QID x 7 d due to GI issues

Routine test of cure not indicated, unless Azithromycin used for rectal CT



^{*} Recommended in Pregnancy

Rectal Chlamydia Controversy

- Doxycycline > Azithromycin for Rectal infection
- Systematic review
 - 8 observational rectal infection studies, mostly in men
 - 82.9% efficacy for azithro, 99.6% for doxy
- Conclusion:
 - Available evidence is limited
 - BUT other regions recommending doxy>azithro for rectal infection (Europe, Australia)

Rectal CT in MSM: Finally a Randomized-Controlled Trial (RCT)

- Design: Randomized, double blind, placebo-controlled study of azithromycin 1g PO x 1 versus doxycycline 100mg PO BID x 7 days
- Population: 177 MSM in Boston and Seattle with rectal CT
 - 95% cisgender, 15% HIV-positive
- Primary Endpoint: Microbiologic cure at 4 weeks
- Result: Doxycycline is more effective than azithromycin for treatment of rectal CT

Chlamydia treatment: Oropharyngeal Infection

- CDC STD guidelines: same as urogenital
 - Azithromycin 1 g PO x 1
 - Doxycycline 100 mg PO BID x 7 d
- Fewer failures with doxycycline?
- Among 172 patients with oropharyngeal chlamydia:
 - 10% treatment failure with azithromycin
 - 2% treatment failure with doxycycline
- Conclusion: limited evidence, needs more study

Follow-up after Chlamydia Diagnosis

- 1) Counseling: Abstain from sex for 7 days after single-dose therapy or until the completion of 7-day treatment course by patient and partners
 - Particularly important reminder with single dose therapy
- Treat partners!
 - If exposed within last 60 days, or if >60 days, most recent partner
- 3) Test patient and partners for GC, HIV and syphilis
- 4) Report infection to Public Health
- 5) Retest 3 months \rightarrow frequent reinfection
- 6) TOC only recommended if adherence is in question, symptoms persist, reinfection is suspected, PREGNANCY
 - May get false positive if repeat NAAT at <3 weeks after completion of therapy
 - May change to include TOC if rectal CT treated with azithromycin



Morbidity and Mortality Weekly Report

Update to CDC's Treatment Guidelines for Gonococcal Infection, 2020

Sancta St. Cyr, MD¹; Lindley Barbee, MD^{1,2}; Kimberly A. Workowski, MD^{1,3}; Laura H. Bachmann, MD¹; Cau Pham, PhD¹; Karen Schlanger, PhD¹; Elizabeth Torrone, PhD¹; Hillard Weinstock, MD¹; Ellen N. Kersh, PhD¹; Phoebe Thorpe, MD¹

BOX. CDC recommended regimens for uncomplicated gonococcal infections, 2020

Regimen for uncomplicated gonococcal infections of the cervix, urethra, or rectum:

Ceftriaxone 500 mg IM as a single dose for persons weighing <150 kg (300 lb).

- For persons weighing ≥150 kg (300 lb), 1 g of IM ceftriaxone should be administered.
- If chlamydial infection has not been excluded, providers should treat for chlamydia with doxycycline 100 mg orally twice daily for 7 days. During pregnancy, azithromycin 1 g as a single dose is recommended to treat chlamydia.

Major Changes:

- 1) Remove co-administration of azithromycin
- 2) Increase ceftriaxone dose 250mg → 500mg IM
- 3) This is the <u>only</u> regimen recommended for pharyngeal infection





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Alternative regimens for uncomplicated gonococcal infections of the cervix, urethra, or rectum if ceftriaxone is not available:

Gentamicin 240 mg IM as a single dose plus azithromycin 2 g orally as a single dose OR

Cefixime 800 mg orally as a single dose. If treating with cefixime, and chlamydial infection has not been excluded, providers should treat for chlamydia with doxycycline 100 mg orally twice daily for 7 days. During pregnancy, azithromycin 1 g as a single dose is recommended to treat chlamydia.

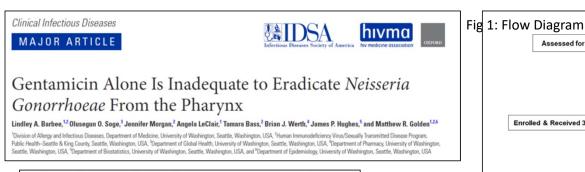
Changes:

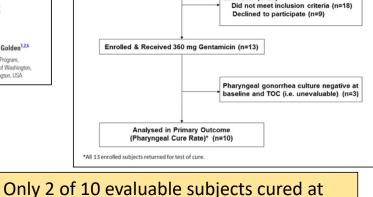
- 1) Gentamicin & azithromycin no longer recommended for pharyngeal GC
- 2) Cefixime dose increased

Issued December 18, 2020 https://www.cdc.gov/mmwr/volumes/69/wr/mm6950a6.htm



Gentamicin no longer recommended as an alternative for pharyngeal gonorrhea





Assessed for eligibility (n=40)

Excluded (n=27)

Table 3. Analysis of Pharmacokinetic/Pharmacodynamic Predictors of Cure of Pharyngeal Gonorrhea With 360 mg Intramuscular Gentamicin

Predictor	Cure (n = 2)	Failure (n = 8)	<i>P</i> Value
Gentamicin MIC, μg/mL, median	8	8	.486
Gentamicin C _{max} , μg/mL, mean	18.9	22.5	.470
Gentamicin weight-based dosing, mg/kg, mean	4.26	4.80	.596
C _{max} /MIC ratio, mean	2.36	3.71	.345
C _{max} /MIC ratio, geometric mean	0.851	1.23	.280

throat

20% Cure (95% CI: 2.5% - 55.6%)



Other Significant Changes

- Test of cure recommended for pharyngeal GC
 - Regardless of treatment regimen
 - At 7-14 days
 - With NAAT or culture (CDC says both if possible!)
 - Downsides
 - Risk of false positives
 - Cost
 - Additional visit
 - Swab shortages



2020 Updated Gonorrhea Treatment Guidelines

CEPHALOSPORIN ALLERGY RECOMMENDED THERAPY

Gentamicin 240 mg IM x 1

+

Azithromycin 2 g PO x 1

NOTES:

Urogenital infections only



Expedited Partner Therapy (EPT) or Patient-delivered partner therapy (PDPT)

- Appropriate for heterosexual patients with GC/CT whose partners' treatment cannot be ensured or is unlikely
 - Not appropriate for syphilis, maybe trichomonas
- Partners in the past 60 days
 - Or if no sex for >60 days, attempt to treat most recent partner(s)
- Legal in most states
- Not considered ideal for MSM
 - Concern for missing HIV and syphilis
 - BUT CDC EXPECTED TO BE MORE PERMISSIVE ABOUT EPT IN MSM IN 2021



Expedited Partner Therapy (EPT) Big Changes

- Partners should be highly encouraged to present for testing and treatment
- BUT if partners will not or cannot:

Empiric treatment for exposure to GC and CT: cefixime 800 mg PO x 1 AND doxycycline 100 mg PO x 7 days

EPT for exposure to GC alone: cefixime 800 mg PO x 1

EPT for exposure to CT alone: doxycycline 100 mg PO x 7 days

 Doxycycline has not been well-studied for EPT and if any concern about partner's adherence or possible pregnancy, azithromycin 1 gm po acceptable



Summary and Predictions

- Screen for chlamydia and gonorrhea don't forget the throat and rectum in MSM or anyone using these areas for sex! May see rectal screening guidelines in people with cervix in 2021...
- NAATs superior to culture for both CT and GC
- We expect doxy 100 mg BID x 7 days to be preferred for CT treatment (already preferred for rectal CT), azithro will be alternative except in pregnancy
 - Test of cure may be recommended if azithro used for rectal CT
- Ceftriaxone and cefixime dose increases for gonorrhea, no longer recommending co-administration of azithro.
- EPT/PDPT can be used for heterosexual individuals with GC/CT, consider in MSM
- Retest in 3 months for all



Syphilis management? Resistant gonorrhea? STD treatment?

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Acknowledgment

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The content in this presentation are those of the author(s) and do not necessarily represent the official views of, nor an endorsement by, HRSA, HHS, or the U.S. Government.



AK ID ECHO: DIDACTIC PRESENTATION SCHEDULE

- July 13: How to take an accurate sexual history
- August 10: PEP-Post Exposure Prophylaxis
- September 14: STI prevention programs, initiatives, harm reduction resources
- October 12: Trauma Informed Care
- November 9: Stigma with patient perspective
- December 14: HCV Epidemiology, Alaska Elimination Plan



ADDITIONAL LEARNING OPPORTUNITIES

ANTHC Liver Disease ECHO

- Third Thursday of every month from 12:00-1:00 PM AKDT
- · anthc.org/project-echo/alaska-liver-disease-echo

ANTHC LiverConnect

- Second Tuesday of every month 8:00-9:00AM AKDT
- · anthc.org/what-we-do/clinical-and-research-services/hep/liverconnect

Addiction Medicine ECHO

- Second and fourth Thursday of every month from 12-1:oo PM
- anthc.org/project-echo/addiction-medicine-echo

www.indiancountryecho.org/teleecho-programs

- · Harm Reduction ECHO Program
- Trans and Gender Affirming Care ECHO Program







AK ID ECHO: HCV-HIV-PrEP-STIs, team contacts

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Thank you!

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