Gonorrhea Outbreak Update and Updated STI Treatment Recommendations

Background
Alaska has been experiencing a gonorrhea (GC) outbreak since October 2017.1 In 2019, Alaska ranked 2nd nationally for GC cases.2 From 2009 to 2019, the national GC rate increased by 92%; correspondingly, Alaska’s GC rate increased by nearly 200% since 2009 (Figure).3

In April 2020, the Centers for Disease Control and Prevention (CDC) provided new guidance for STI care in reduced-capacity settings, resulting from the COVID-19 pandemic.4 In July 2021, CDC published the new STI treatment guidelines, which included updated testing and treatment guidelines for GC.5

This Bulletin provides an update on the GC outbreak and an overview of the new CDC STI guidance.

Methods
Case data were reviewed from the Section of Epidemiology’s (SOE) National Electronic Disease Surveillance System (NEDSS) Base System (NBS). Population data were obtained from the Alaska Department of Labor and Workforce Development.

Results
In 2020, 1,982 GC cases were reported to SOE, yielding an incidence rate of 272 cases per 100,000 persons, which represents a 10% decrease since 2019 (303 cases per 100,000 population) (Figure).

Figure. Gonorrhea Rate by Year — Alaska and the United States, 2009–2020

<table>
<thead>
<tr>
<th>Year</th>
<th>Alaska Rate</th>
<th>U.S. Rate</th>
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<tbody>
<tr>
<td>2020</td>
<td>141 cases/100,000 pop.</td>
<td>104 cases/100,000 pop.</td>
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<tr>
<td>2019</td>
<td>145 cases/100,000 pop.</td>
<td>114 cases/100,000 pop.</td>
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<tr>
<td>2018</td>
<td>159 cases/100,000 pop.</td>
<td>125 cases/100,000 pop.</td>
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<td>2017</td>
<td>199 cases/100,000 pop.</td>
<td>156 cases/100,000 pop.</td>
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<td>2016</td>
<td>291 cases/100,000 pop.</td>
<td>232 cases/100,000 pop.</td>
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<tr>
<td>2015</td>
<td>250 cases/100,000 pop.</td>
<td>209 cases/100,000 pop.</td>
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<tr>
<td>2014</td>
<td>225 cases/100,000 pop.</td>
<td>187 cases/100,000 pop.</td>
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<tr>
<td>2013</td>
<td>215 cases/100,000 pop.</td>
<td>182 cases/100,000 pop.</td>
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<tr>
<td>2012</td>
<td>208 cases/100,000 pop.</td>
<td>175 cases/100,000 pop.</td>
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<tr>
<td>2011</td>
<td>205 cases/100,000 pop.</td>
<td>171 cases/100,000 pop.</td>
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<tr>
<td>2010</td>
<td>202 cases/100,000 pop.</td>
<td>168 cases/100,000 pop.</td>
</tr>
<tr>
<td>2009</td>
<td>203 cases/100,000 pop.</td>
<td>164 cases/100,000 pop.</td>
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*Note: the 2020 U.S. rate is not yet available.

Of the 1,982 GC cases:
- 1,005 (51%) were in males and 977 (49%) were in females;
- the age range was 14–82 years;
- rates by age were highest in persons aged 20–24 years and 25–29 years (1,087 and 749 per 100,000 persons, respectively);
- rates by race were highest in American Indian/Alaska Native persons, followed by Black/African Americans, and Native Hawaiian/Pacific Islanders (816, 719, and 256 cases per 100,000 persons, respectively); and
- rates by region were highest in the Northern, Anchorage/Mat-Su, and Southwestern regions (785, 341, 223 cases per 100,000 persons, respectively).

Discussion
Alaska’s GC outbreak is ongoing; however, in 2020, the rate of reported cases decreased by 10%. This decrease is greater than the nationwide trend but may not truly represent reduced infection burden for various reasons. For example, due to the high burden of syphilis in Alaska currently, reduced partner services activities were conducted for GC cases. Moreover, the COVID-19 pandemic negatively impacted access to care and availability of care, which might have resulted in underdetection and underreporting of incident cases. Finally, some patients reported delaying care due to concerns for COVID-19 exposure in the clinic setting and others reported atypical problems with access to care. Despite the pandemic and social distancing, STI numbers continue to persist statewide.

Due to care limitations during the COVID-19 pandemic, CDC provided additional guidance for the use of syndromic management and expedited partner therapy (EPT) when facility-based services and in-person patient-clinician contact are limited.4

In July 2021, the CDC updated the STI Treatment Guidelines with new recommendations for GC treatment due to the emergence of Neisseria gonorrhoeae resistance to azithromycin.6 The new guidelines recommend an increased dosage of ceftriaxone as monotherapy for treatment of confirmed GC infection.7 EPT dosage was also updated.8 Refer to the treatment guidelines and provider resources section for more complete information.9

Recommendations
1. Promptly treat patients with confirmed GC infection with ceftriaxone 500 mg IM in a single dose. If chlamydial infection has not been excluded, then treat for chlamydia with doxycycline 100 mg PO BID x 7 days (unless pregnant, see guidelines).3
2. Conduct multi-site (oral, anal, genital) testing, in accordance with patients’ reported risk(s) and/or exposure(s).5
3. Offer all patients seeking testing and/or treatment complete STI screening (HIV, multi-site GC/CT, syphilis, and hepatitis).5
4. Routinely elicit a thorough sexual and risk assessment on all sexually active patients.5
5. In the absence of in-person clinical care due to COVID-19, treat patients based on symptoms and presumptively treat their sex partner(s) with EPT.4
6. If treated with alternative oral regimens, offer follow-up in 5–7 days if symptoms do not improve; encourage complete HIV/STI rescreening once in-person clinical care resumes.9
7. Inform patients to notify their sexual partner(s) of their exposure risk and review the risk of re-infection if partner(s) are untreated.
8. Review patient-centered and individualized risk-reduction techniques during testing and treatment encounters.9
9. Patients with pharyngeal gonorrhea should return 7–14 days after initial treatment for a test of cure by using either culture or NAAT.1
10. Re-test patients for re-infection 3 months after treatment.5

References
5. CDC. Sexually Transmitted Infections Treatment Guidelines, 2021. Atlanta: U.S. DHHS; July 2021 Available at: https://www.cdc.gov/std/treatment-guidelines/provider-resources.htm
6. CDC. Provider Resources for the Sexually Transmitted Infections Treatment Guidelines, 2021. Atlanta: U.S. DHHS; Available at: https://www.cdc.gov/std/treatment-guidelines/provider-resources.htm

(Contributed by: Nathan Wormington, BS and Susan Jones, RN, MN, Alaska Section of Epidemiology)