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## Ongoing Syphilis Outbreak Update

### Background

The Alaska Section of Epidemiology (SOE) last informed providers of an ongoing syphilis outbreak in Alaska in late 2013.<sup>1,2</sup> Confirmed cases continue to be reported. The purpose of this *Bulletin* is to highlight the behavioral characteristics associated with the outbreak, and to report the disease investigation outcomes. Our hope is to engage the health care community in a collective effort to reduce syphilis in Alaska.

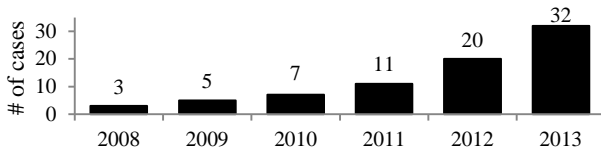
### Methods

Syphilis case data were obtained from the SOE reportable conditions database and the Sexually Transmitted Disease-Management Information System.

### 2013 Summary Results

A total of 32 new confirmed cases of syphilis were reported to SOE in 2013. This includes 31 cases of primary, secondary, and early latent syphilis cases among adults; and one case of congenital syphilis (CS), which resulted in stillbirth.<sup>2</sup> These 32 cases represent a 60% increase over the 20 cases reported in 2012 (Figure).

**Figure. Primary, Secondary, Early Latent, and Congenital Syphilis, Alaska 2008–2013**



Of the 31 primary, secondary, and early latent syphilis cases,

- 26 (84%) were in males, 21 (81%) of whom identified as gay, bisexual, or other men who have sex with men (MSM);
- seven (23%) were in persons who were co-infected with chlamydia or gonorrhea;
- four (13%) were in persons diagnosed with human immunodeficiency virus (HIV) infection;
- 12 (39%) were in whites, 12 (39%) were in Alaska Native persons, and 7 (23%) were in persons of other races; and
- 24 (77%) occurred in Anchorage residents, two (6%) in Fairbanks residents, and five (16%) in residents of other Alaska communities.

### Disease Investigation Findings

Public health personnel attempted to interview all infected adults to identify risk factors and additional cases. From the 29 (94%) patients who consented to be interviewed, 102 sexual partners or persons determined to be at increased risk for acquiring or transmitting syphilis were identified.

Of the 29 infected persons who were interviewed,

- 18 (62%) reported multiple or anonymous partners,
- 14 (48%) found sexual partners through internet sex-seeking sites or mobile device apps (e.g., Craigslist, Grindr, Adult FriendFinders, and Adam4Adam),
- 9 (31%) reported using condoms “sometimes” or “never”,
- 9 (31%) had been incarcerated at the time of or within 1 year of their syphilis diagnosis, and
- 12 (41%) reported having sex while intoxicated or high.

Of the 102 partners named,

- 79 (77%) were male and 23 (23%) were female,
- 3 (3%) were pregnant females,
- 11 (10%) could not be located and 2 were deceased, and
- 89 (87%) were located and notified of their exposure.

Of the 89 individuals who were notified of their exposure,

- 9 (10%) tested positive and required treatment,

- 33 (37%) tested negative and required prophylactic treatment because they were tested  $\leq 90$  days of exposure,
- 24 (27%) tested negative and did not require treatment,
- 9 (10%) had already been treated by a clinician and did not require additional treatment,
- 1 (1%) was prophylactically treated without testing, and
- 13 (15%) refused testing and treatment.

### 2014 Preliminary Results

Through April 2014, 22 new cases of primary, secondary, and early latent syphilis were identified; 10 (46%) were detected through partner notification activities. All cases were in males. Twenty (91%) cases were among MSM, 16 (80%) of whom used internet sites and mobile device apps to find partners. Two infected persons were co-infected with HIV, one of whom was subsequently diagnosed with and treated for neurosyphilis. Two infected persons refused interviews and one refused both interview and treatment. Of the 71 named partners, 35 (49%) tested negative, 20 (57%) of whom required prophylactic treatment; two refused clinical examination and treatment.

### Discussion

An outbreak of syphilis has continued through 2013 and into 2014, and public health staff have responded with systematic case finding and partner notification efforts. Though this outbreak is primarily affecting the MSM population, five women were newly infected with syphilis in 2013. All women were of child-bearing age; one woman was pregnant at the time of her infection, and gave birth to a stillborn infant who was diagnosed with congenital syphilis.

Public health investigations have resulted in the detection of 46% of the new cases so far in 2014. Unfortunately, disease control efforts have been hindered by the inability or reluctance of some infected persons to identify all exposed partners and the reluctance of some partners to seek clinical services. Robust clinical and public health collaboration is critical for controlling this growing epidemic.

### Recommendations for Health Care Providers

1. Immediately report to SOE all confirmed and suspected syphilis cases, and pregnancy in females with syphilis, via fax (561-4239) or telephone (561-4234 or 800-478-1700).
2. Routinely obtain a sexual history on sexually-active patients. Ask about the number and gender of sexual partners, frequency of anonymous sexual encounters, risky sexual encounters associated with illicit drug or alcohol use, and the use of sex-seeking websites and mobile apps.
3. Perform both non-treponemal (RPR) and treponemal (FTA or TP-PA) tests on anyone suspected of having syphilis.
4. Offer HIV, gonorrhea, and chlamydia testing to all patients with suspected syphilis infection.<sup>3</sup>
5. Promptly treat patients with primary, secondary, or early latent syphilis with *Bicillin L-A (benzathine penicillin G) 2.4 million units* in a single intramuscular dose.<sup>3</sup>
6. Contact SOE staff for consultation regarding interpretation of syphilis serology, staging, and partner management (call 907-269-8000 Mon–Fri 8AM–5PM).

### References

1. Alaska Epidemiology *Bulletin*. “Syphilis Outbreak Alaska, 2011-2012.” No. 4, February 21, 2012. Available at: [http://www.epi.alaska.gov/bulletins/docs/b2012\\_04.pdf](http://www.epi.alaska.gov/bulletins/docs/b2012_04.pdf)
2. Alaska Epidemiology *Bulletin*. “Syphilis Outbreak Update – Alaska, 2011-2013. No. 25, September 26, 2013. Available at: [http://www.epi.alaska.gov/bulletins/docs/b2013\\_25.pdf](http://www.epi.alaska.gov/bulletins/docs/b2013_25.pdf)
3. STD Treatment Guidelines, 2010. MMWR. 2010; 59 : (RR-12). Available at: <http://www.cdc.gov/std/treatment>