

QUARTERLY REPORT

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1st Quarter March 2017

To report a communicable disease (24 hours a day, 7 days a week)

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This report contains preliminary data that is subject to change.

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Vital Statistics Quarter Ending: March 2017	1st Quarter 2017 2016		Year to Date 2017 2016	
BIRTHS	1209	1287	1209	1287
Delivery in Hospital	1188	1256	1188	1256
Teen Deliveries (10-17)	21	16	21	16
DEATHS TOTAL	744	755	744	755
Medical Investigation	78	61	78	61
Homicide	7	3	7	3
Suicide	13	14	13	14
Accident – MVA	1	4	1	4
Accident – Other	22	21	22	21
Natural / Undetermined / Pending	35	19	35	19
Non-Medical Investigation (all natural)	666	694	666	694
Infant Deaths	4	0	4	0
Fetal Deaths	6	2	6	2
COMMUNICABLE DISEASES E-Coli: 0157	0	0	0	0
Hepatitis A	0	1	0	1
Acute Hepatitis B	0	0	0	0
Chronic Hepatitis B	13	6	13	6
Meningococcus	1	0	1	0
Pertussis	3	4	3	4
Tuberculosis	3	3	3	3
SEXUALLY TRANSMITTED DISEASE PID (Pelvic inflammatory Disease)	0	2	0	2
Chlamydia	419	413	419	413
Gonorrhea	106	115	106	115
Syphilis	22	13	22	13
Early Syphilis*	10	6	10	6
HIV/AIDS	3	2	3	2

A Great Pox Upon Us: Syphilis Rates Soar Karen Landers MD MPH, Marion County Health Officer

April is Sexually Transmitted Disease (STD) Awareness Month. Now is the time to recognize the public health implications of the steep rise in syphilis rates in the U.S. In 2000, syphilis reached historic lows with less than 6000 cases reported to the Centers for Disease Control and Prevention (CDC). In 2015, the U.S. experienced the highest number and rate of reported primary and secondary (infectious) syphilis in more than 20 years (23,872 cases). Syphilis rates increased in every region, in a majority of age groups, and across every race/ethnicity. While men who have sex with men (MSM) continue to represent the majority of syphilis cases, women accounted for one in ten U.S. syphilis cases in 2015. In 2014, 1 in 5 women with syphilis was pregnant. After a steady decline from 2008-2012, data show a sharp increase in congenital syphilis. The number of congenital syphilis cases in the U.S. in 2015 was the highest it's been since 2001. Health care providers play a pivotal role in identifying infectious syphilis, reducing its transmission in the community, and preventing the devastating consequences of congenital syphilis infection. Here's your quick guide to the diagnosis, treatment, and follow-up of syphilis:

Diagnosis

The diagnosis of syphilis is dependent on taking a sexual history to identify risk factors, physical exam to identify clinical signs, and serology testing, as the causative agent, *Treponema pallidum*, cannot be cultured.

The **sexual history** should include the 5 Ps:

Partners (how many, anonymous, found online?) Practices (same sex, oral, anal, condom use?) Pregnancy Prevention Protection from STDs Past history of STDs (including HIV infection?)

Clinical findings may include: Primary Stage: painless anogenital ulcer(s) Secondary Stage: generalized macular-papular rash which may include palms/soles, Continued

 $\label{eq:stability} * Note \ \ an \ Early \ Symplific cases \ require \ disease \ Investigation$

mucosal patches (mouth, anogenital), patchy alopecia, condylomata lata (mucosal warts). **Neurosyphilis** (any stage): headache, ocular symptoms/findings, ataxia, meningitis.

Laboratory confirmation is made on the basis of both non-specific tests such as Rapid Plasma Reagin (RPR), and specific treponemal tests (FTA, TP-PA, EIA, CIA).

• Syphilis screening should be done annually for all MSM; for those with high risk behaviors (anal sex, multiple, anonymous partners, substance abuse, co-infection with HIV) screening more frequently (every 3 months) is recommended.

- All pregnant women should be screened 3 times: at entry to prenatal care, beginning of 3rd trimester (28 weeks) and at delivery.
- All qualitatively reactive RPR tests need to reflex to a quantitative titer (e.g., 1:2, 1:4, 1:8, etc.).
- A positive RPR on initial screening and a positive treponemal test (FTA, TP-PA) is considered laboratory confirmation of syphilis infection (past or present).
- All positive treponemal tests performed on initial screening (EIA, CIA) must reflex to an RPR.

• Discordant results (e.g., positive EIA/CIA and negative RPR) need further testing with a second different treponemal test (FTA, TP-PA).

• A negative RPR and two different positive treponemal tests indicate current or past infection which either the presence of clinical symptoms or a past history of infection/treatment may help to differentiate.

• Signs and symptoms consistent with neurosyphilis require testing of the CSF (Venereal Disease Research Laboratory, VDRL, is the preferred test).

<u>Treatment</u>

The treatment of syphilis is dependent on the stage at the time of diagnosis which is in turn dependent on the presence or absence of clinical signs/symptoms or a reactive RPR/four-fold increase in titer.

• The recommended treatment for all stages of syphilis is penicillin (neurosyphilis requires IV penicillin for 10-14 days; long acting Benzathine penicillin G appropriate for the stage is also recommended).

- Early syphilis is defined as signs/symptoms of primary or secondary syphilis or a reactive RPR/four- fold increase in RPR titer that has occurred in the **past year** if no signs/symptoms are present.
- The treatment of early syphilis is 2.4 million units of long-acting Benzathine penicillin G administered intramuscularly (IM).
- Latent syphilis is defined as a reactive RPR of unknown duration, (but longer than one year) in the absence of any clinical signs/ symptoms of syphilis. The treatment of latent syphilis is 7.2 million units of long-acting Benzathine penicillin G IM administered as three doses of 2.4 million units each at 1 week intervals.
- Doxycycline may be used as an alternative treatment if penicillin-allergic, but is <u>NOT</u> considered optimal first line therapy (requires 2-4 weeks of treatment depending on stage).
- Penicillin G is the only known effective antimicrobial for preventing maternal transmission to the fetus and treating fetal infection. Pregnant women with syphilis who report anaphylactic penicillin allergy must be referred for desensitization and treatment with penicillin.

Follow-up and Sex Partner Management

Effective treatment of syphilis is monitored by repeat quantitative RPR tests at specific intervals based on stage and risk factors.

- All patients diagnosed with primary and secondary syphilis also need testing for HIV infection.
- Partners of early syphilis who have had sexual contact within 90 days preceding the diagnosis should be treated presumptively for early syphilis **even** if serologic tests are negative (may be incubating).
- Serologic evaluation is generally recommended at 6 and 12 months after treatment of early syphilis.
- A four-fold decline in quantitative RPR titer is considered evidence of adequate treatment (e.g., 1:64 to 1:16, 1:16 to 1:4, 1:8 to 1:2, etc.).
- More frequent serologic testing is recommended for persons with early syphilis who are also HIV-infected (3, 6, 9, 12, and 24 months).
- Adequate syphilis treatment in early syphilis may result in reactive RPR tests reverting to negative or to a low stable titer e.g., 1:4 or 1:2 (serofast)
- Treponemal tests will always remain positive in patients diagnosed with syphilis and treponemal antibodies do not predict
- treatment response; these tests should <u>NOT</u> be used to screen previously infected syphilis cases. RPRs are the serologic test of choice to use in monitoring or screening patients with known past history of syphilis infection.

• A four-fold rise or more in an RPR titer may indicate new infection or treatment failure and requires clinical evaluation/ retreatment.

DID YOU KNOW?

Among US adults aged 18 to 69 years, 42.5% are infected with a genital human papillomavirus (HPV) according to recently released data from the 2013-2014 National Health and Nutrition Examination Survey (NHANES). About one-fourth of men and one-fifth of women were found to be infected with a high-risk type of HPV (associated with oral or anogenital cancers). Immunization with 2 doses of the 9-valent HPV vaccine before the age of 15 is recommended for boys and girls to prevent HPV infections and cancers caused by high-risk HPV types.