Syphilis: A Public Health Advisory
Syphilis - The Great Imitator
Syphilis

- A sexually transmitted infection (STI) caused by the bacteria Treponema pallidum
- Spread from person to person by physical contact during vaginal, oral and anal sex and from mother to baby in utero
- Treatable and curable with antibiotics
- Cases increasing in Columbus and Franklin County!
"Early" Stages of Syphilis

Primary Syphilis

- A painless sore or ulcer ("Chancre") may be located on the genitals, oropharynx, anus, or other area of direct contact
- The chancre will last 1-5 weeks and heal without treatment
- Can easily pass infection on to sex partners!
“Early” Stages of Syphilis

Secondary Syphilis

- Maculo-papular skin rash lasting 2 – 6 weeks (average of 4 weeks)
- Can involve the palms of the hands, soles of the feet, or any part of the body
- Other symptoms include fever, swollen lymph glands, headache, hair loss, and muscle aches
- May also see mucous patches in oral cavity and condylomata lata (raised moist wart-like lesion in groin and/or perianal area)
- Symptoms will go away with or without appropriate treatment
- Highly infectious stage!
“Early” Stages of Syphilis

Early Latent Syphilis

- Infection of less than 1 year duration.
- Patient is asymptomatic, but still infected!
- Usually occurs after the secondary symptoms have disappeared.
“Early” Stages of Syphilis

Early Neurosyphilis

- Can present during Primary, Secondary & Early Latent stages.
- Can be asymptomatic, but can also present with symptoms of meningitis, cranial neuropathies, uveitis/optic neuritis/vision loss (ocular syphilis), sensorineural hearing loss / tinnitus (otosyphilis) and strokes (meningovascular syphilis).
“Late” Stages of Syphilis

Late Latent Syphilis

- Infection of greater than 1 year duration
- Similar to Early Latent Syphilis, patient is asymptomatic, but still infected!
“Late” Stages of Syphilis

Tertiary Syphilis & Late Neurosyphilis

• Late complication of untreated infection
• Can present many years (including decades) after initial infection.
• Clinical findings can include benign syphilitic granulomas (“gummas”), cardiovascular syphilis (e.g. syphilitic aortitis), tabes dorsalis and general paresis.
Syphilis

Epidemiology – Franklin County

• For January – August 2014….

• The rate of early syphilis is 16.7 per 100,000 (178 cases).

• The rate of early syphilis among males was 28.8 per 100,000.
  – The rate among black males was almost 6 times that among white males.
  – Among black males, more syphilis occurred in the 20-34 age range.

• The rate of early syphilis among women was 5.3 per 100,000.

• Comparing early syphilis cases between January-August 2013 and 2014:
  – Total cases increased by 34%
  – Cases among females increased by 81%
  – Cases among males increased by 27%
  – Cases among MSM increased by 23%

Early syphilis includes early latent, primary and secondary.
Sources:
Syphilis (Primary & Secondary) – Franklin County
Number of Cases by Year (2004-2014*)

*2014 – Projected count estimate based on data reported for January through June
Syphilis Epidemiology

Of those diagnosed with early Syphilis*:

Past Observations (Jan-August 2013):
- Males: 88%
- MSM**: 68%
- African Americans: 42%
- HIV Co-infected: 50%
- Met sex partner on internet: 37%
- Females: 12%

Current Trends (Jan-August 2014):
- Males: 84%
- MSM**: 66%
- African Americans: 53%
- HIV Co-infected: 44%
- Met sex partner on internet: 31%
- Females: 16%

*Includes early latent, primary, and secondary
**Of Males

Cases of Congenital Syphilis (born to Mothers with early Syphilis):

Past Observations (Jan-Dec 2013):
2

Current Trends (Jan-August 2014):
6

Source: Ohio Department of Health. STD Surveillance Program. Data as of 09/28/2014
Congenital Syphilis: Columbus Public Health, Sexual Health Program.
Syphilis: Who should be screened?

- All HIV positive patients.
- All sexually active MSM patients.
- All pregnant women in Franklin County should be screened at least three times:
  - (1) Initial intake
  - (2) 28 - 32 weeks
  - (3) At delivery
- Any woman who delivers a still-born infant after 20 weeks gestation.
- All individuals seeking care/treatment for an STI.
Syphilis Diagnosis

Syphilis serologic screening algorithms

Traditional
- Quantitative RPR
  - RPR+
    - TP-PA or other trep test
      - TP-PA+: Syphilis (past or present)
      - TP-PA-: Syphilis unlikely
  - RPR-

Reverse sequence
- EIA or CIA
  - EIA/CIA+
    - Quantitative RPR
      - RPR+
        - TP-PA: Syphilis (past or present)
      - RPR-
        - TP-PA:
          - TP-PA+: Syphilis (past or present)
          - TP-PA-: Syphilis unlikely

For questions, please consult with local Infectious Disease Specialist
Syphilis Treatment for Adults

• **Primary, Secondary & Early Latent Syphilis**
  – Benzathine Penicillin G 2.4 MU IM x 1
  – Doxycycline 100 mg BID x14 days (PCN allergy)

• **Late Latent Syphilis**
  – Benzathine Penicillin G 2.4 MU IM q weekly x 3
  – Doxycycline 100 mg BID x28 days (PCN allergy)

• **Tertiary Syphilis, Neurosyphilis & Congenital Syphilis**
  – **Infectious Disease Consult Recommended!**
Syphilis Case Management
In Columbus and Franklin County

**PROVIDERS:**
Diagnose or treat a case of primary, secondary, or early latent syphilis

**LAB:**
Positive Non-treponemal test (i.e. RPR or VDRL) and/or Treponemal-specific test (i.e. IgG, FTA, TPPA)

**Report to Columbus Public Health (CPH)**

**CPH SEXUAL HEALTH TEAM**
Disease Intervention Specialist (DIS):
Obtain case information

**Report to Ohio Department of Health [ODH]**
Ohio Disease Reporting System [ODRS]

**Follow-up with provider**

**Interview Patient:**
- Assure patient is treated and staged appropriately
- Identify all sex partners for up to 12 months, sex partners within last 90 days are to be presumptively treated

Per Ohio Administrative Code 3701-3-02 to 3701-2-07 and 3701-3-20
Syphilis Case Management

- No sex for at least 1 week after treatment of Primary & Secondary Syphilis
  - 2 weeks for those with who are treated with 14 days of Doxycycline
- Follow-up testing with RPR
  - Primary & Secondary Syphilis → 6 & 12 months for HIV-negative and 3, 6, 9, 12 & 24 months for HIV-positive
  - Latent Syphilis → 6, 12 & 24 months for HIV-negative and 6, 12, 18 & 24 months for HIV-positive
- For patients diagnosed with “Early” Stage Syphilis, identify and test all sex partners from up to last 12 months, sex partners within last 90 days are to be tested and presumptively treated
- Encourage condom use prevents syphilis and other STIs
- Report per Ohio Administrative Code to Columbus Public Health
- Refer to Sexual Health Program
  - 645-7772
Syphilis Resources

• Columbus Public Health Syphilis Control
  – 645-7772
  – www.publichealth.columbus.gov

• Centers for Disease Control & Prevention
  – http://www.cdc.gov/std/

• Ohio Administrative Code