



STI Masterclass

Dr. Luciana Rubinstein
Consultant Physician
Tudor Centre
November 2010

Talk

- STIs incidence
- *Chlamydia trachomatis*
- *Neisseria gonorrhoea*
- Syphilis, Herpes
- Health Advisor's role
- Tudor Centre
- HIV services

Number of new diagnoses of selected STIs, GUM clinics, United Kingdom: 2008



% change

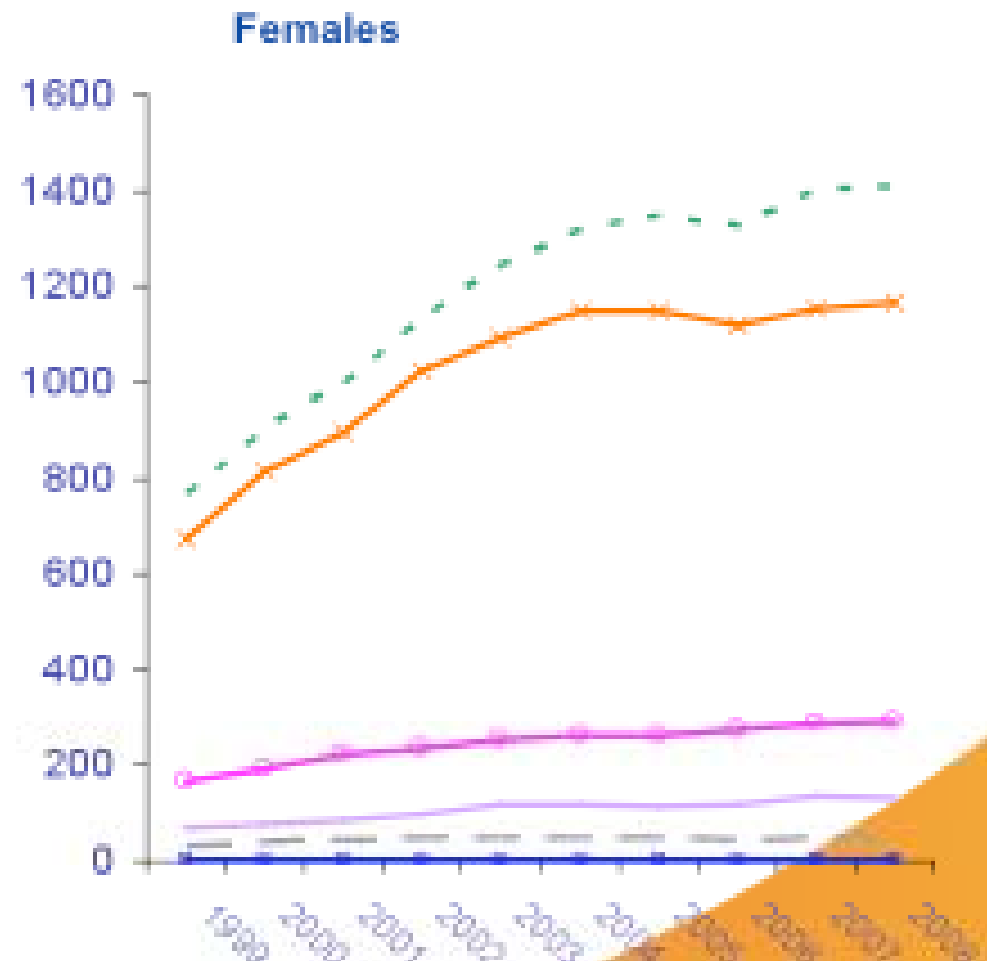
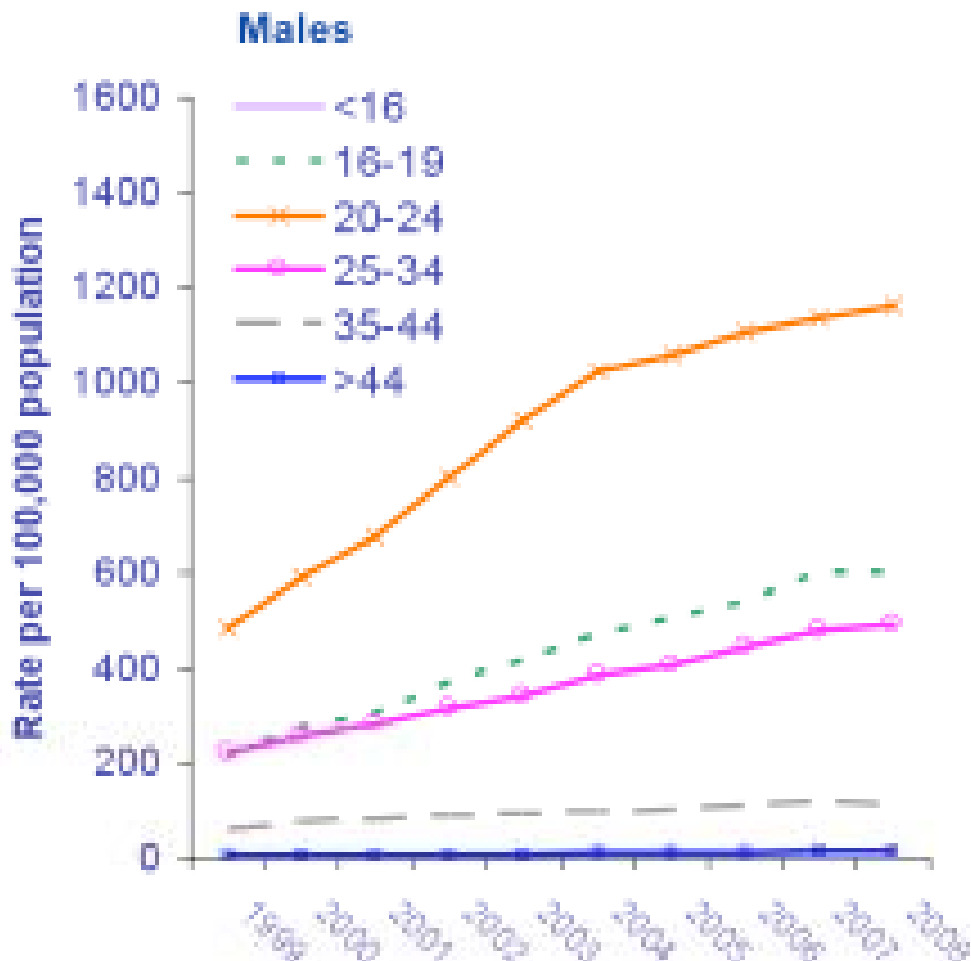
| | 2008 | 2007-2008 | 1999-2008 |
|----------------|----------------|--------------|---------------|
| Chlamydia | 123,018 | 1% | 116% |
| Genital warts | 92,525 | 3% | 29% |
| Genital herpes | 28,957 | 10% | 65% |
| Gonorrhoea | 16,629 | - 11% | 1% |
| Syphilis | 2,524 | - 4% | 1,032% |

Routine GUM clinic returns

Chlamydia trachomatis

- Most common curable STI
- 5-10% of woman age 20-24 infected
- Asymptomatic (70% in woman, 50% in man)
- Risk factors:
 - age under 25
 - new sexual partner in past year
 - lack of condom use

Rates of diagnoses of uncomplicated genital chlamydial infection by sex and age group, GUM clinics, United Kingdom: 1999 – 2008



Routine GUM clinic returns

Clinical Features

- Post coital or intermenstrual bleeding
- Lower abdominal pain
- Vaginal discharge
- Cervicitis or contact bleeding
- Dysuria, urethral discharge
- Anal discharge, proctitis
- Conjunctiva infection
- Pharyngeal infections

Complications

- Pelvic inflammatory disease (PID)
- Infertility
- Ectopic Pregnancy
- Chronic pelvic pain
- Fitz-Hugh-Curtis syndrome
- Neonatal infection: conjunctivitis, pneumonia
- Epididymorchitis
- Reiter's syndrome

Diagnosis

- Nucleid acid amplification technique (NAATs)

Υ90-95% sensitive

- Cervical, urethral, vulvo-vaginal swabs

- First catch urine

- Rectal, pharyngeal and conjunctival

Management

- Information, health education, support
- Avoid sexual intercourse
- Screening for other STIs
- Contact tracing
- Follow up post treatment
- Test of cure not routinely recommended

Treatment

- Azithromycin 1g, stat
- Doxycycline 100 mg, bd, 7/7
- Erythromycin, 500 mg, bd, 10-14 days
- Ofloxacin, 400 mg, od, 7/7

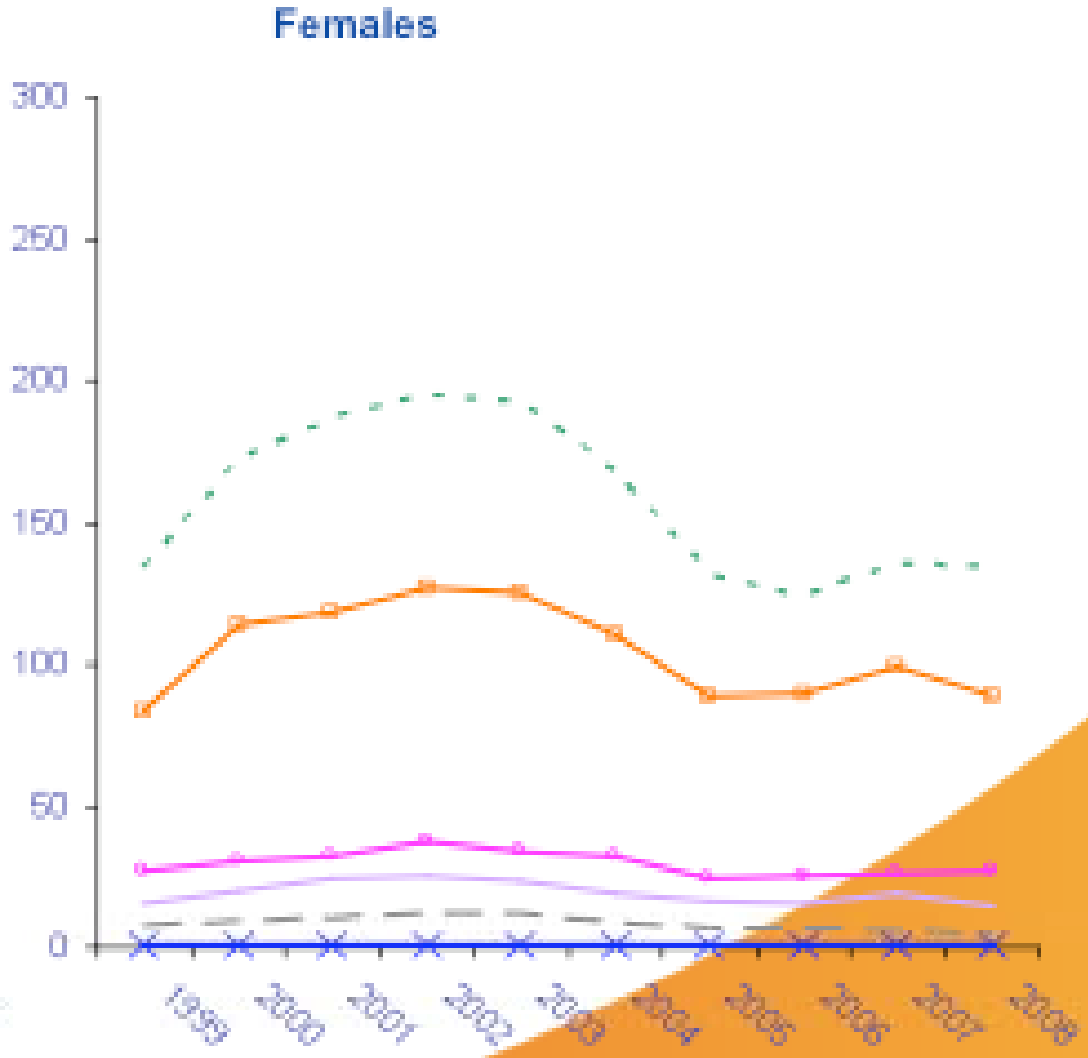
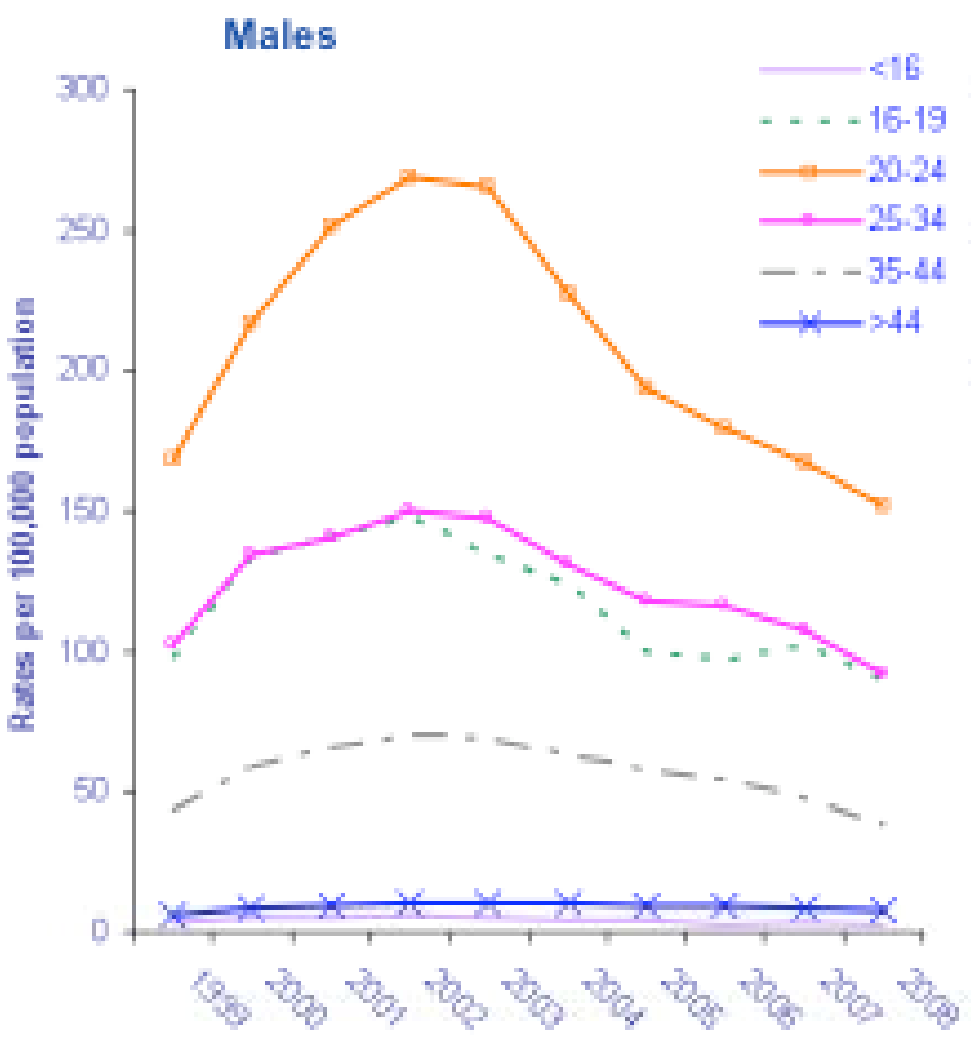
Pregnancy and Breast Feeding

- Azithromycin 1g, stat
- Erythromycin 500 mg, qds for 7/7 or bd for 14/7
- Test of cure recommended
- NAATS may remain positive up to 5 weeks post treatment

Neisseria gonorrhoea

- Gram negative, intracellular, diplococcus
- Sites of infection: urethra, endocervix, rectum, pharynx, conjunctiva
- Transmission: direct inoculation of infected secretions from one mucous membrane to another

Rates of diagnosis of uncomplicated gonorrhoea by sex and age group, GUM clinics, United Kingdom: 1999 – 2008



Routine GUM clinic returns

Clinical Features - Men

- Asymptomatic (<10%)
- Urethral discharge, dysuria
- Anal discharge, pain
- Pharyngeal infection

Υ Signs: mucopurulent discharge, epididymal tenderness

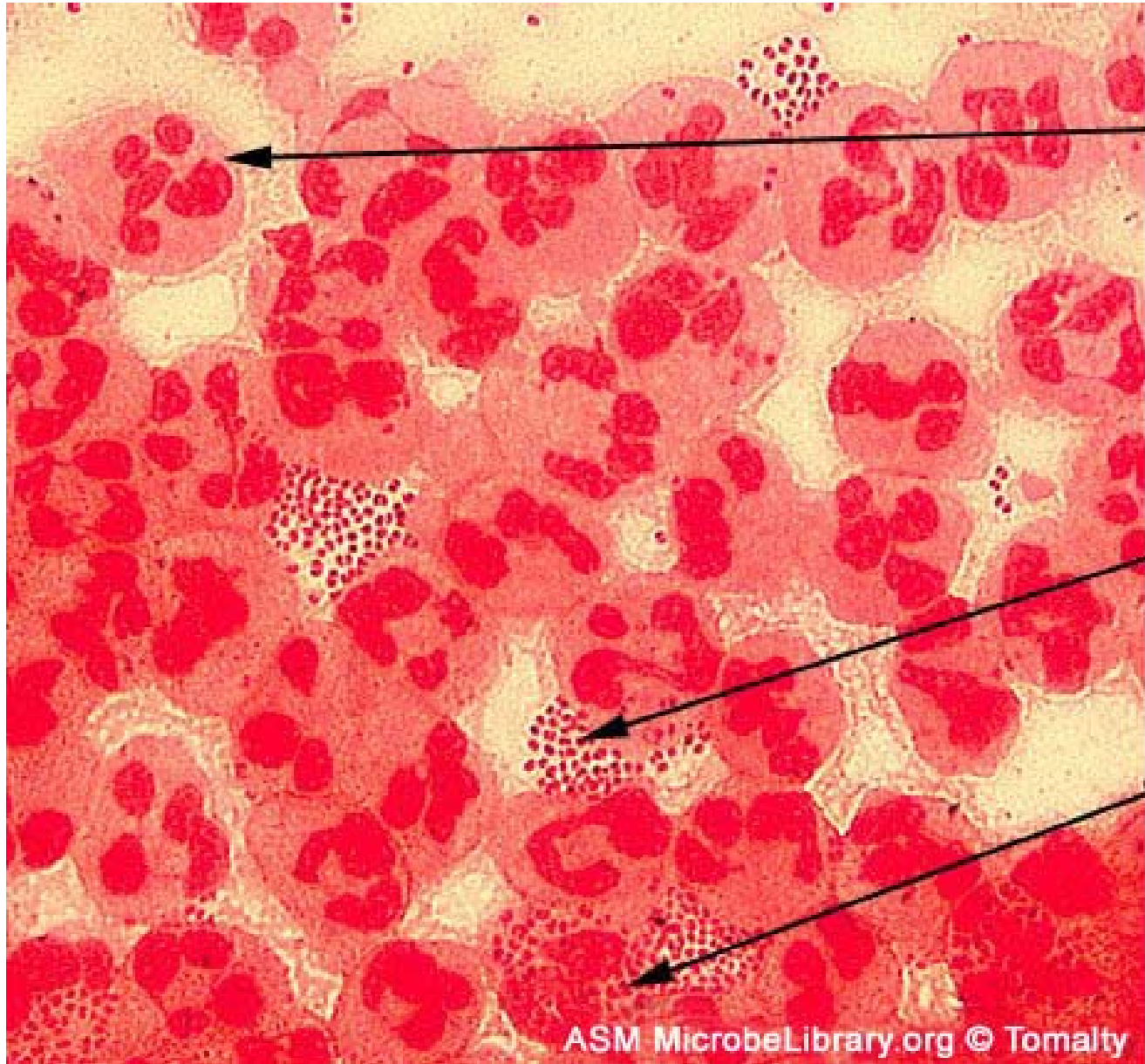


Clinical Features - Women

- Asymptomatic (50%)
- Increased vaginal discharge
- Abdominal pain
- Dysuria
- Intermenstrual bleeding, menorrhagia
- Mucopurulent discharge, cervical bleeding
- Pelvic tenderness

Diagnosis

- Gram stain microscopy
- Culture
- NAATs - more sensitive than culture, not 100% specific
- Urine



polymorphonuclear leukocyte

Extracellular gram-negative diplococci

Intracellular gram-negative diplococci

Complications

- Epididymal, prostate infection
- Pelvic Inflammatory Infection
- Haematogenous dissemination - skin lesions, arthralgia, arthritis, tenosynovitis
- Disseminated gonococcal infection (<1%)

Management

- General information
- Screening for other STIs
- Avoid sexual intercourse
- Contact tracing
- Indications for epidemiological treatment:
- Positive slides
- Contacts of positive patients

Management

- Co-infection with *C.trachomatis*
- Add Azithromycin 1g, stat
- Υ Follow up after treatment:
 - Confirm compliance
 - Ensure resolution of symptoms
 - Explore possibility of re-infection
 - Consider test of cure

Treatment

- Ceftriaxone 250mg, IM, stat
- Cefixime 400 mg PO, stat
- Spectinomycin, 2g, IM stat
- Alternative regimens - used when sensitivity is known
- Ciprofloxacin 500mg, PO, stat
- Ofloxacin 400mg, PO stat
- Ampicillin 3g, plus probenecid 1g

Syphilis

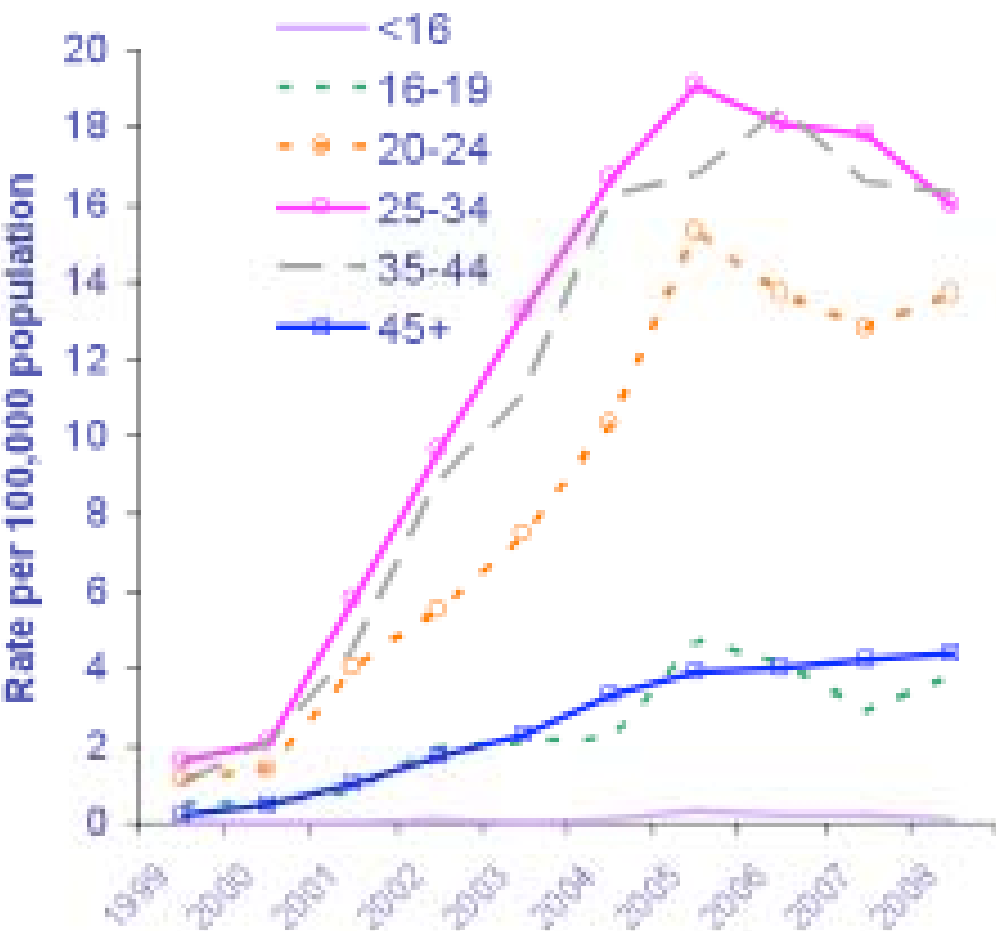
- *Treponema pallidum subsp pallidum*
- Transmission by direct contact, during pregnancy or via infected blood

Classification:

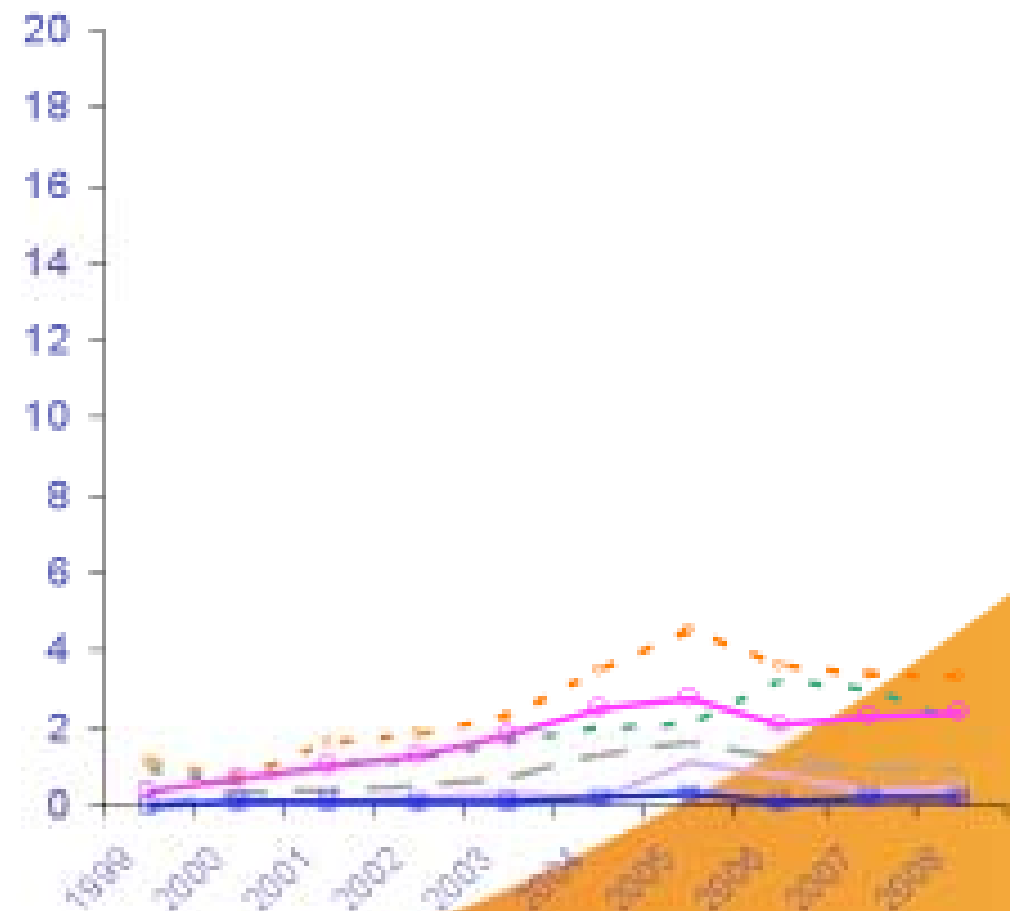
- Early - primary, secondary, early latent
- Late - late latent and tertiary (gummatous, cardiovascular and neurological)
- Congenital - early and late

Rates of diagnoses of infectious syphilis (primary & secondary) by sex and age group, GUM clinics, United Kingdom: 1999 – 2008

Males



Females



Routine GUM clinic returns

Clinical Features

- Primary - ulcer and lymphadenopathy
- Secondary - rash, lymphadenopathy, alopecia, uveitis, meningitis, glomerulonephritis, etc.
- Latent syphilis - asymptomatic, positive serology
- Symptomatic late syphilis - neurosyphilis, cardiovascular syphilis, gummatous syphilis
- Congenital syphilis - rash, hepatosplenomegaly,

Diagnosis/management

- Clinical suspicion
- Dark ground on primary lesions
- Serology
- Screening during antenatal care
- CXR, lumbar puncture
- Treatment and contact tracing - indicated by stage of disease
- May need cardiology, neurology input

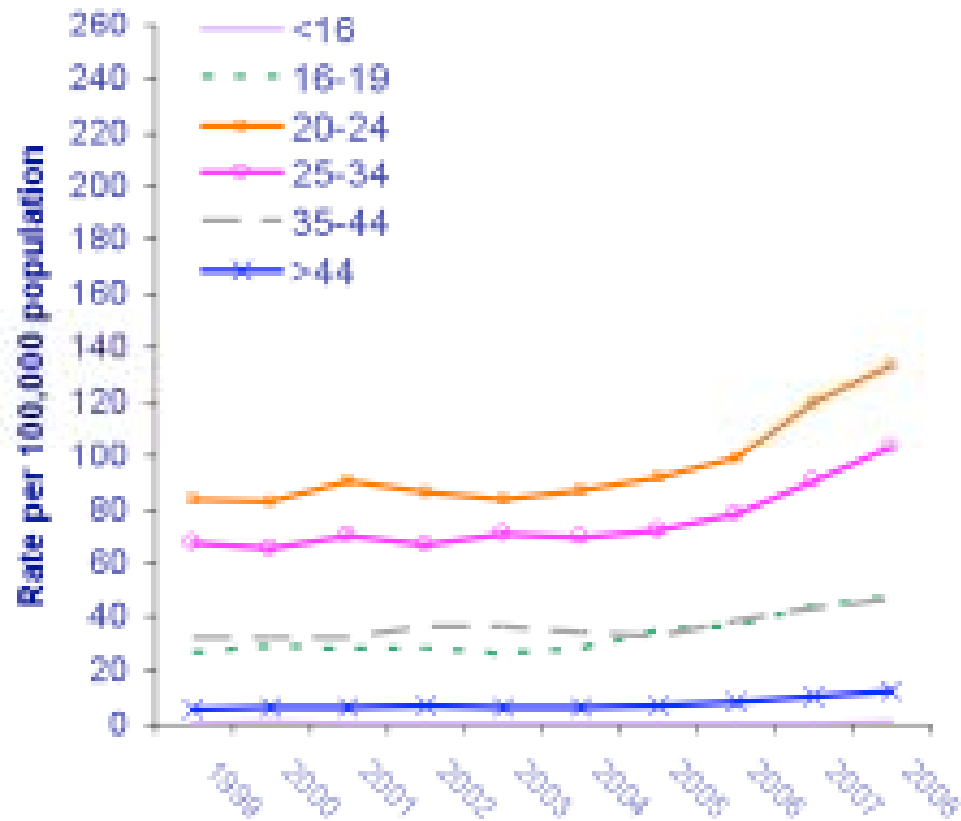
Herpes

- Herpes simplex virus type 1 and 2
- 80% of seropositives are unaware of previous infections
- Virus becomes latent in local sensory ganglia. Periodic reactivation
- Median recurrence rate= 0.34/month for HSV2

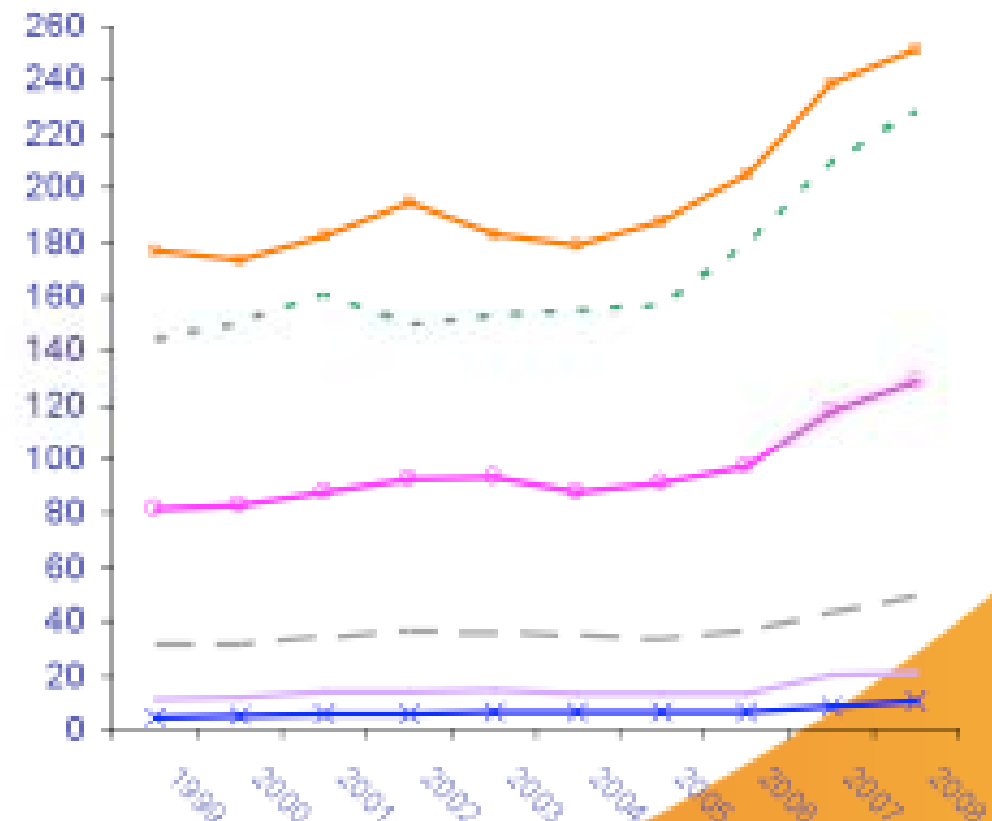
Rates of diagnoses of genital herpes (first attack) by sex and age group, GUM clinics, United Kingdom: 1999 – 2008



Males



Females



Routine GUM clinic returns

Clinical Features

- Asymptomatic
- Painful ulceration, dysuria, discharge
- Systemic symptoms - fever, malaise, headache
- Painful inguinal lymphadenopathy
- Complications: urinary retention, auto-inoculation, secondary infections, aseptic meningitis



Diagnosis and Management

- Cell culture, real time PCR
- Serology - difficult interpretation, useful in specific situations
- General advice
- Antiviral drugs for first episodes, **as soon as possible**
- Reduce severity and duration of episodes
- No benefit on topical therapy



Young @ Tudor

New Sexual Health Clinic

Every Monday from 6th October 2008

If you are under 18 years old you can attend our walk-in clinic – no need to book an appointment

Monday 3.00pm – 5.30pm
The Tudor Centre
The Hillingdon Hospital
Pield Heath Road
Uxbridge
Middlesex UB8 3NN

It's free and confidential. For further information please call 01895 279537.

The Hillingdon Hospital 
NHS Trust

The Hillingdon Hospital 

NHS Trust