



HIV, STIs and epidemiological synergy

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STIs and HIV transmission

- **Ulcerative STIs (herpes, syphilis) increase risk of acquiring and transmitting HIV in cohort studies**
- **Urethritis (gono, chlamydia) leads to increased HIV in semen, treatment of urethritis leads to reduction**
- **In heterosexuals, population based improvement of STD services in Tanzania lead to 40% reduction in HIV incidence**
- **STI treatment and prevention may be an effective means of HIV prevention**

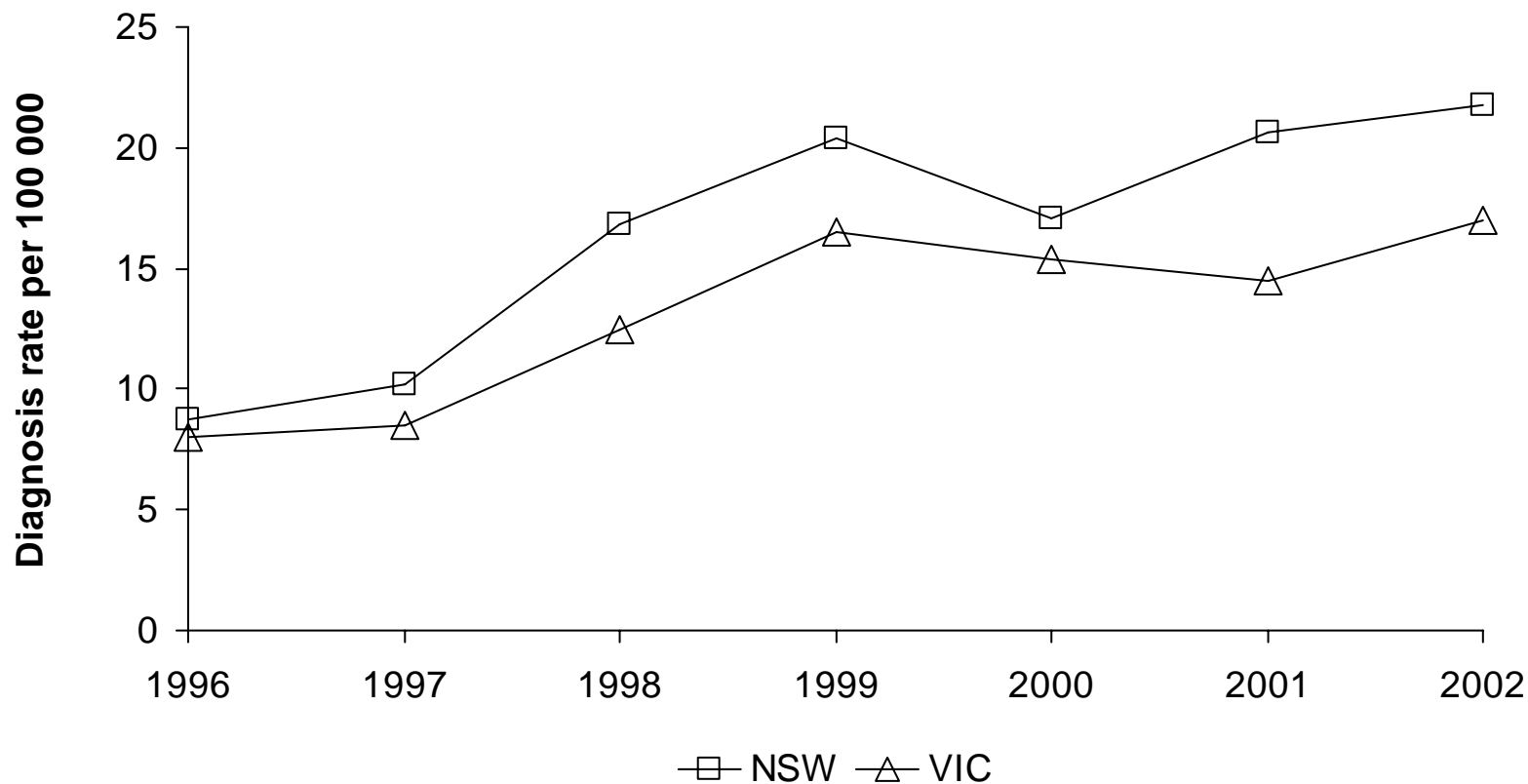


- **Surveillance data in NSW and Victoria**
- **Data from HIM**
- **Syphilis re-emergence and risk factors in Sydney**
- **What can we do?**

Surveillance data in NSW and Victoria

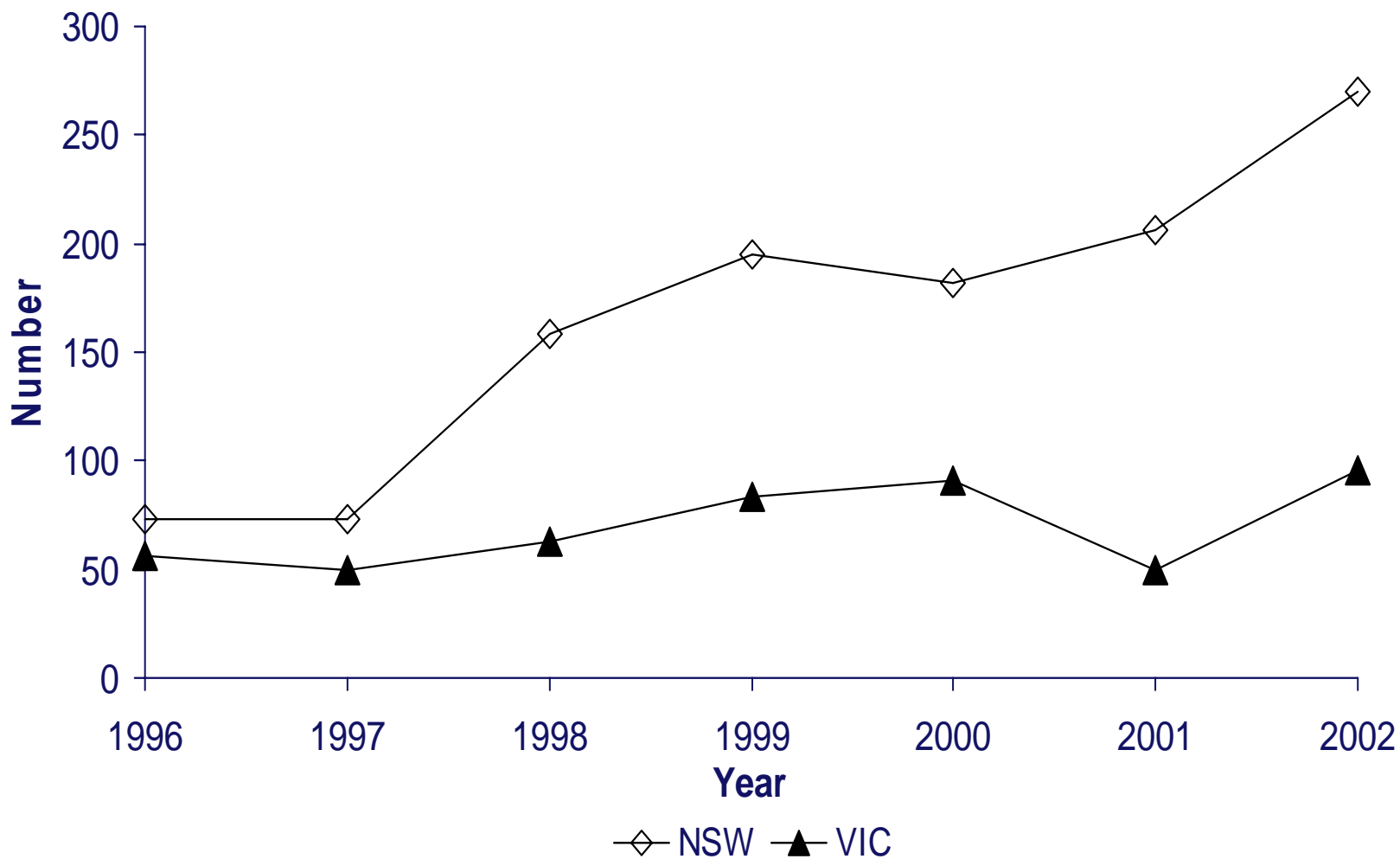


Gonorrhoea by year and State/Territory



Surveillance data in NSW and Victoria

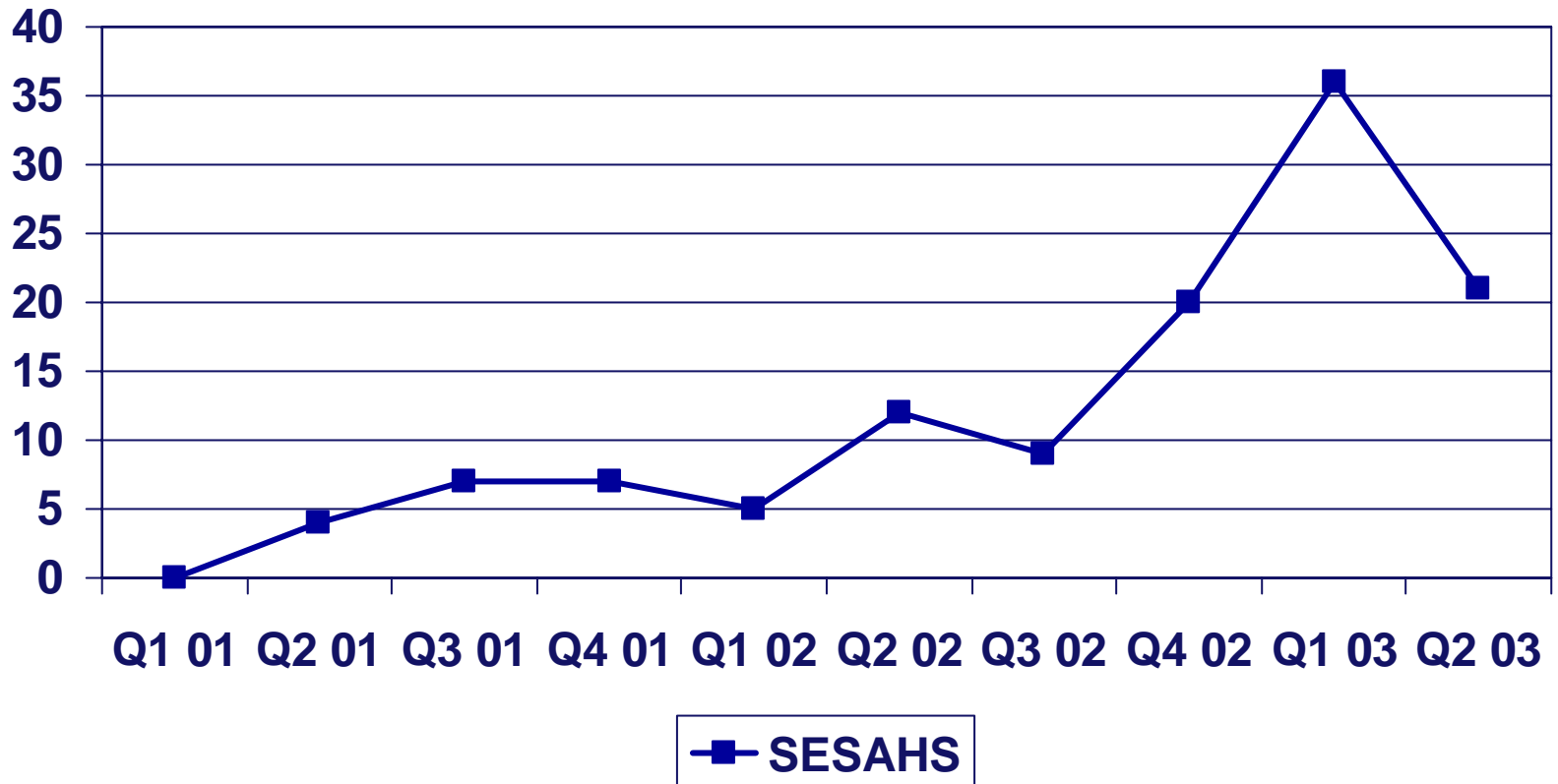
Gonococcal rectal isolates among men





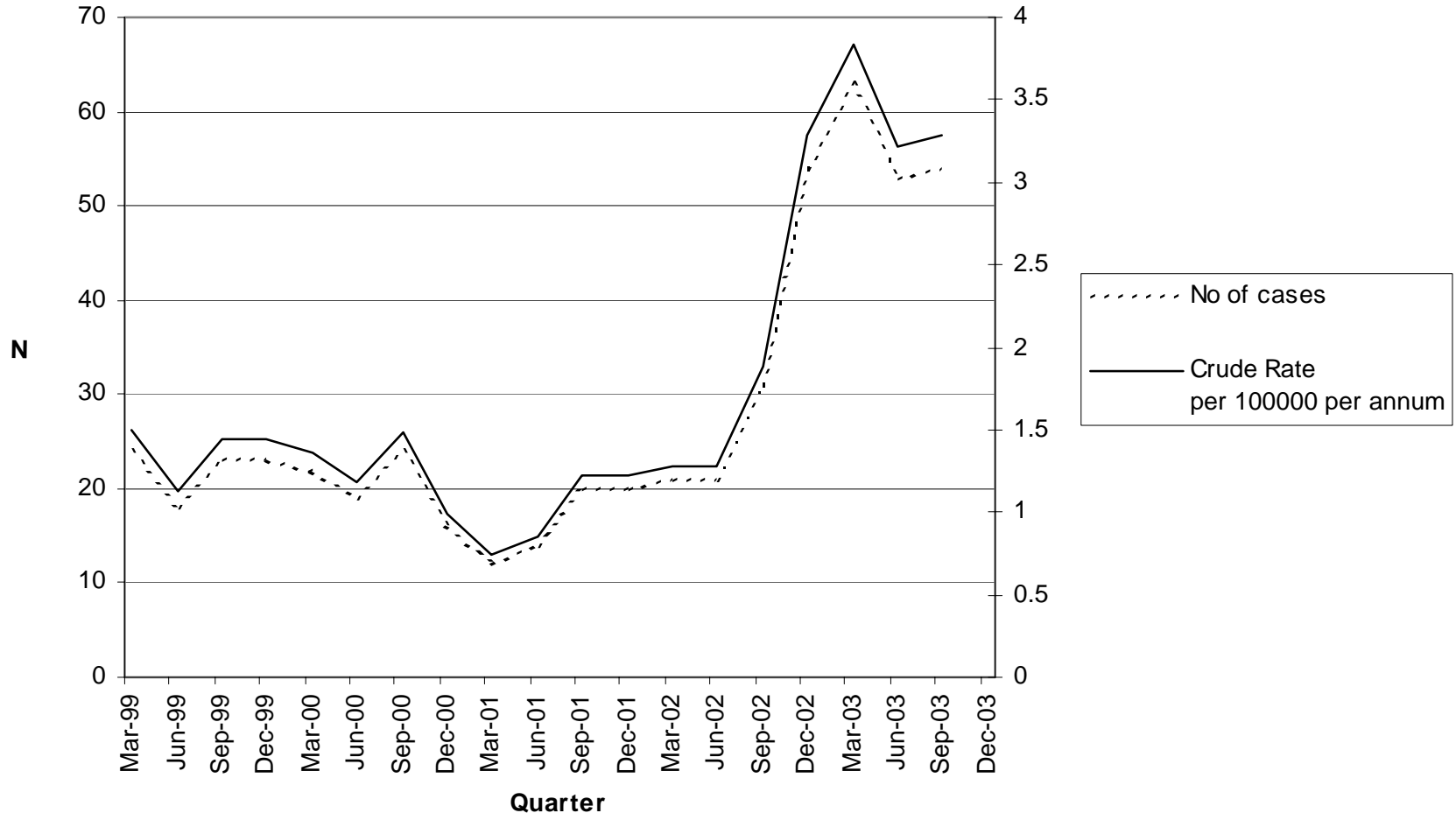
Early syphilis in South-Eastern Sydney, 2001-03

Notified cases per quarter



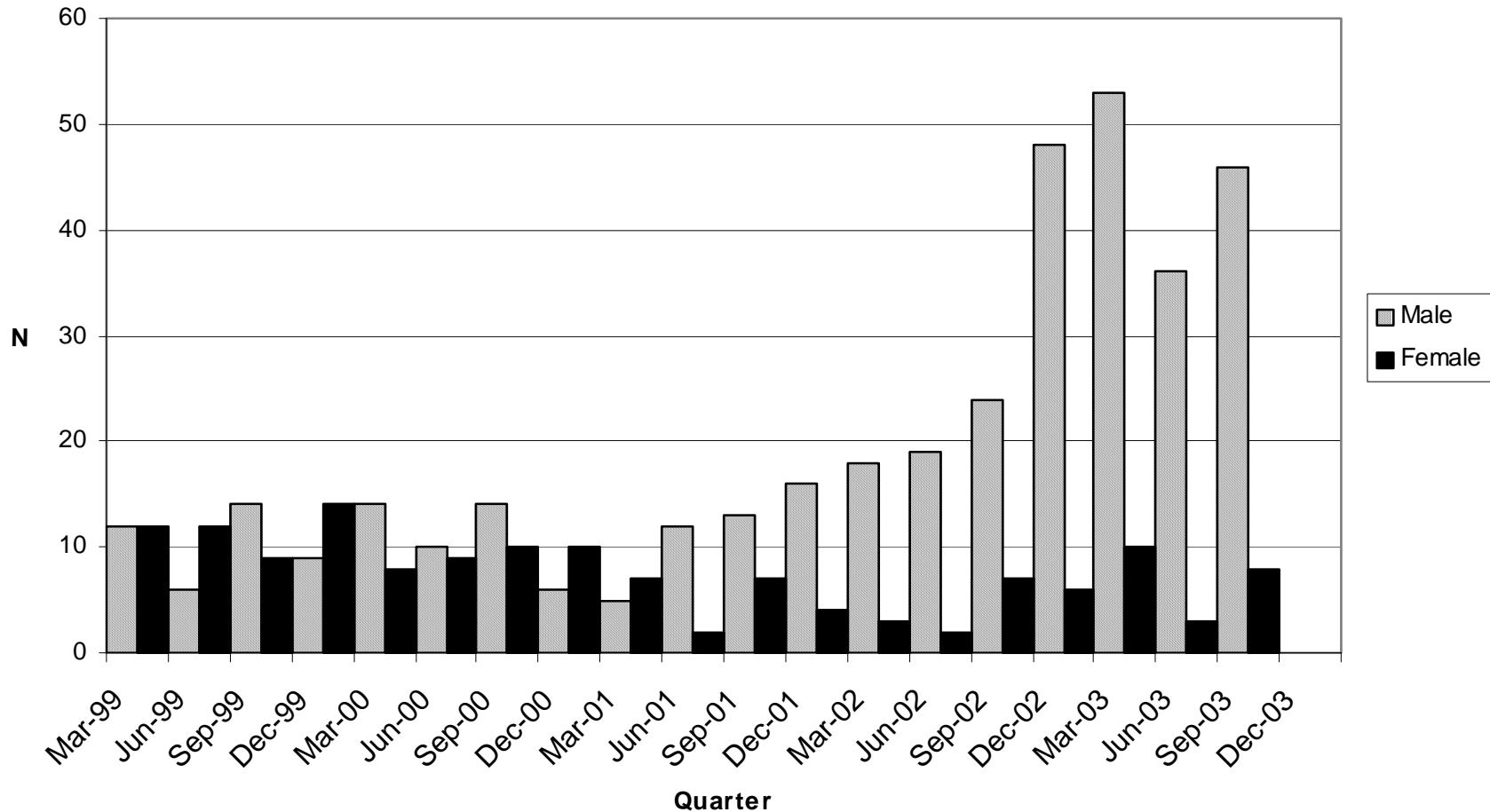
121 cases to mid 2003

Infectious Syphilis Notifications for NSW (excluding congenital infections). N and Crude Rate per 100000. 01 January 1999 to 30 Sept 2003.



Source: NSW Blood Borne Viruses & Bacterial STI Notification Data (Preliminary Data – October 2003)

Infectious Syphilis Notifications for NSW (excluding congenital infections), by Sex. 01 January 1999 to 30 Sep 2003.



Source: NSW Blood Borne Viruses & Bacterial STI Notification Data (Preliminary Data – October 2003).

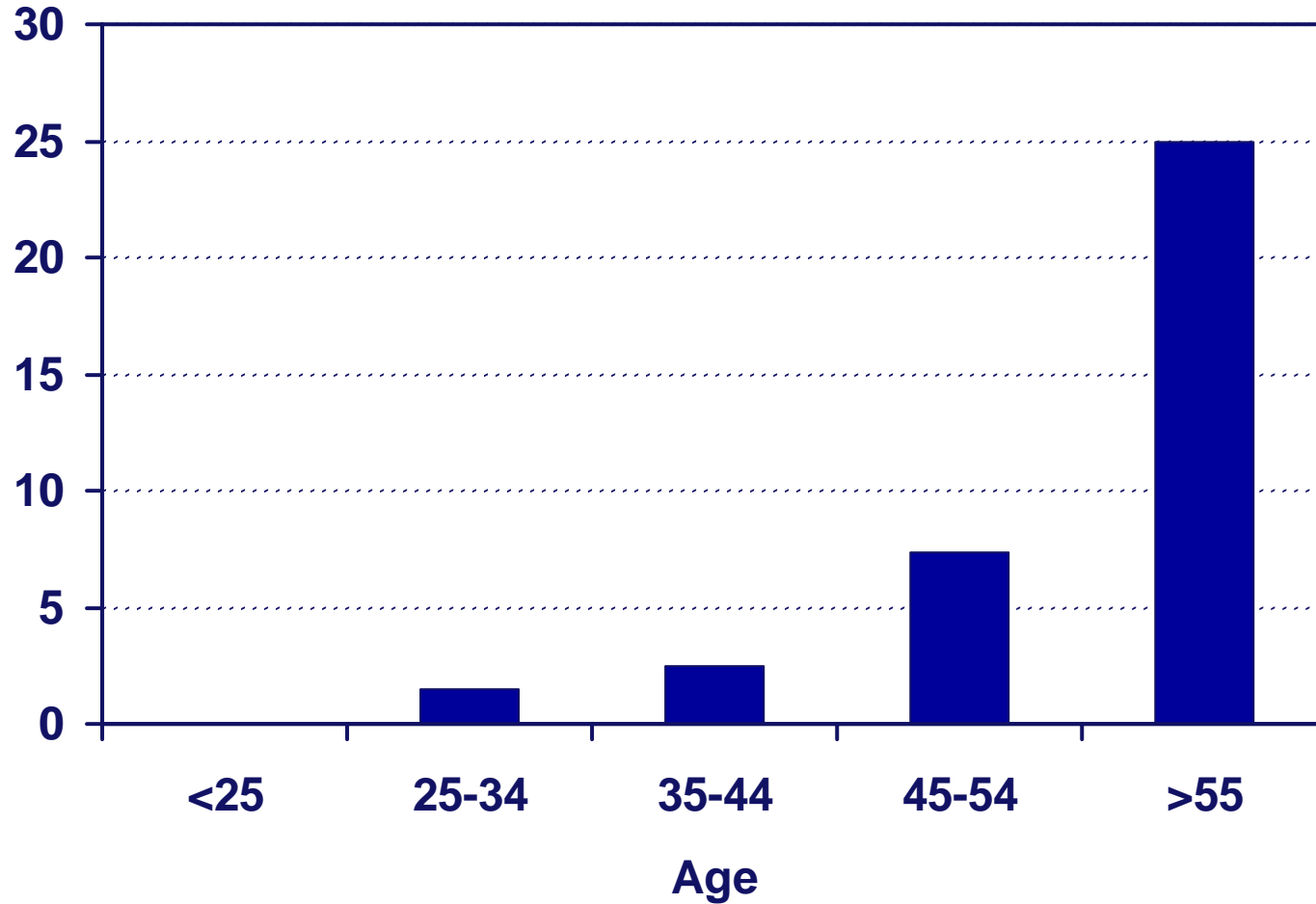


- **HIV negative men**
 - 450 men per year 2001-04,
 - follow to 2005
- **Behaviour**
 - 2 annual interviews (6 monthly by telephone)
 - sexual and injecting risk behaviour
- **Blood and STI testing**
 - Annual blood for HIV, HAV, HBV, syphilis
 - Storage for HSV2
 - Since early 2003, annual anus/throat/urine testing for GC/CT
 - Project on interaction between HIV and STIs

Prevalent syphilis in the HIM study by age



Percentage(%)



Incident syphilis: partners in past six months



	Total	N	%	RR	95% CI
0-1	152	0	0.0	---	
2-10	306	1	0.3	1	---
11-50	221	6	2.7	8.5	1.0-72.2
>50	47	2	4.3	13.6	1.2-157.1

P trend=0.002

Gonorrhoea and chlamydia



- 1044 tested by May 2004

	Total	Urine		Throat		Rectum	
		pos	%	pos	%	pos	%
GC	1044	4	0.4	83	8.0	13	1.3
CT	1044	10	1.0	10	1.0	46	4.4

Syphilis study, Sydney: key results



- **3 Oxford Street practices, 2 sexual health centres, Jan-Dec 2003**
- **57 cases early syphilis**
 - **54% HIV positive**
 - **50% believe they contracted it through oral sex**
 - **26% asymptomatic**
- **After controlling for HIV status**
 - **more sexually active and much heavier drug users**
- **Association with use of “dry” sex venues, not saunas**



Will syphilis reach the levels of the 1970's?

- **Decreasing contacts (sex partners)**
- **Condom use (partially effective)**
- **Decreasing the period of infectivity**
 - **Early diagnosis and treatment**

Responses



- **NSW guidelines for screening in gay men (2002)**
 - **Screen for hep A and B and vaccinate**
 - **At least annual screening for**
 - **Syphilis**
 - **HIV**
 - **Gonorrhoea and chlamydia at urethra, pharynx and anus**
 - **Endorsed by College of Sexual Health Physicians**
- **Community-based campaigns to encourage screening**



LOOK WHAT'S BACK!

Syphilis is making a comeback.

It's a disease that's been around for centuries, but it's making a comeback. In fact, it's the only one of the four major sexually transmitted infections (STIs) that's on the rise. And it's not just in the U.S. — it's spreading around the world. In fact, it's the only one of the four major STIs that's on the rise. And it's not just in the U.S. — it's spreading around the world. In fact, it's the only one of the four major STIs that's on the rise. And it's not just in the U.S. — it's spreading around the world.

STI

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