STIs: Practical Aspects of Management

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Sexually Transmitted Infections

- BACTERIAL STIs:
  - CHLAMYDIA
  - GONORRHOEA
  - SYPHILIS
  - Mycoplasma genitalium
- PROTOZOAL STIs:
  - Trichomonas
- VIRAL STIs:
  - HPV- warts
  - HSV – genital ulcers
  - Molluscum contagiosum
  - Hepatitis A,B,C
  - HIV
- OTHER VAGINAL DISCHARGE SYNDROMES:
  - Bacterial vaginosis
  - Candidiasis
  - Foreign bodies
  - (DIV)
- INFESTATIONS:
  - Scabies
  - Pubic lice
- NOTIFIABLE STIs
  - Congenital syphilis
  - Neonatal Gc eye infections
  - Acute hepatitis A,B,C
  - AIDS

Epidemiology

Public Health

Ro = β.c.D

β (transmission)

VACCINATE
Condoms
Suppressive Rx
nPEP
STI cofactors
Behaviour

C (contact rate)

Sex education
Moral restrictions
Legality
Venues
Community devt

D (duration)

Screening
Health seeking
Access
Diagnosis
Treatment
Contact tracing

Primary Care-oriented resources

NZSHS

THE NEW ZEALAND SEXUAL HEALTH SOCIETY INCORPORATED

SEXUAL HEALTH FOR ALL

The New Zealand Sexual Health Society

Thursday 9 to Saturday 11 September

JAMES COOK HOTEL, WELLINGTON

32nd Annual Conference 2010

OUR PAST, PRESENT AND FUTURE

NZSHS

THE NEW ZEALAND SEXUAL HEALTH SOCIETY

SEXUAL HEALTH FOR ALL

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Introduction

The New Zealand Sexual Health Society (NZSHS) Incorporated is a group of professionals working or interested in the field of Sexual Health. Membership is multidisciplinary and includes doctors, nurses, counsellors, educators, health promoters and others in Public Health working in the field of sexually transmissible infections, including HIV/AIDS, and sexual and reproductive health.

The New Zealand Sexual Health Society Inc. was formerly the New Zealand Venereological Society (NZVS). This change occurred in 2006 to more fully express the wider aims of this society.

The Society become Incorporated in April 2010.

Guidelines on the diagnosis and treatment of sexually transmitted infections can be found here as well as pdf's of presentations from our 2008 conference in Dunedin.

Objectives of the society

- To advocate for and promote Sexual Health for all in New Zealand.
- To promote high standards of clinical practice within Sexual Health in New Zealand
- To promote the speciality of Sexual Health amongst colleagues and peers
- To encourage research within New Zealand with regard to Sexually Transmissible Infections (STIs).

The Society organises an annual conference, which includes an Annual General Meeting (AGM) and an academic programme. The Society's executive committee is elected at the AGM. Members must be financial to participate in the AGM or at Special General Meetings.

Activities

- Promoting STI/HIV prevention and Sexual Health for all through education
- Acting as advocates for those most at risk of STIs and HIV/AIDS
- Ongoing central lobbying to ensure an continued commitment to the tenets of Sexual Health including free, confidential and widely available specialist clinical services
- Regular education forums for health professionals to provide ongoing education and support
- Advisory role to the Ministry of Health and other government agencies in relation to proposed legislative or policy changes affecting Sexual Health
- Monitoring the epidemiology of STIs and HIV/AIDS, and hence lobbying for appropriate intervention strategies
- Promoting the implementation of health education programmes
- Promoting the development of national guidelines for STI management
- Informing and updating NZSHS members through the NZSHS Bulletin

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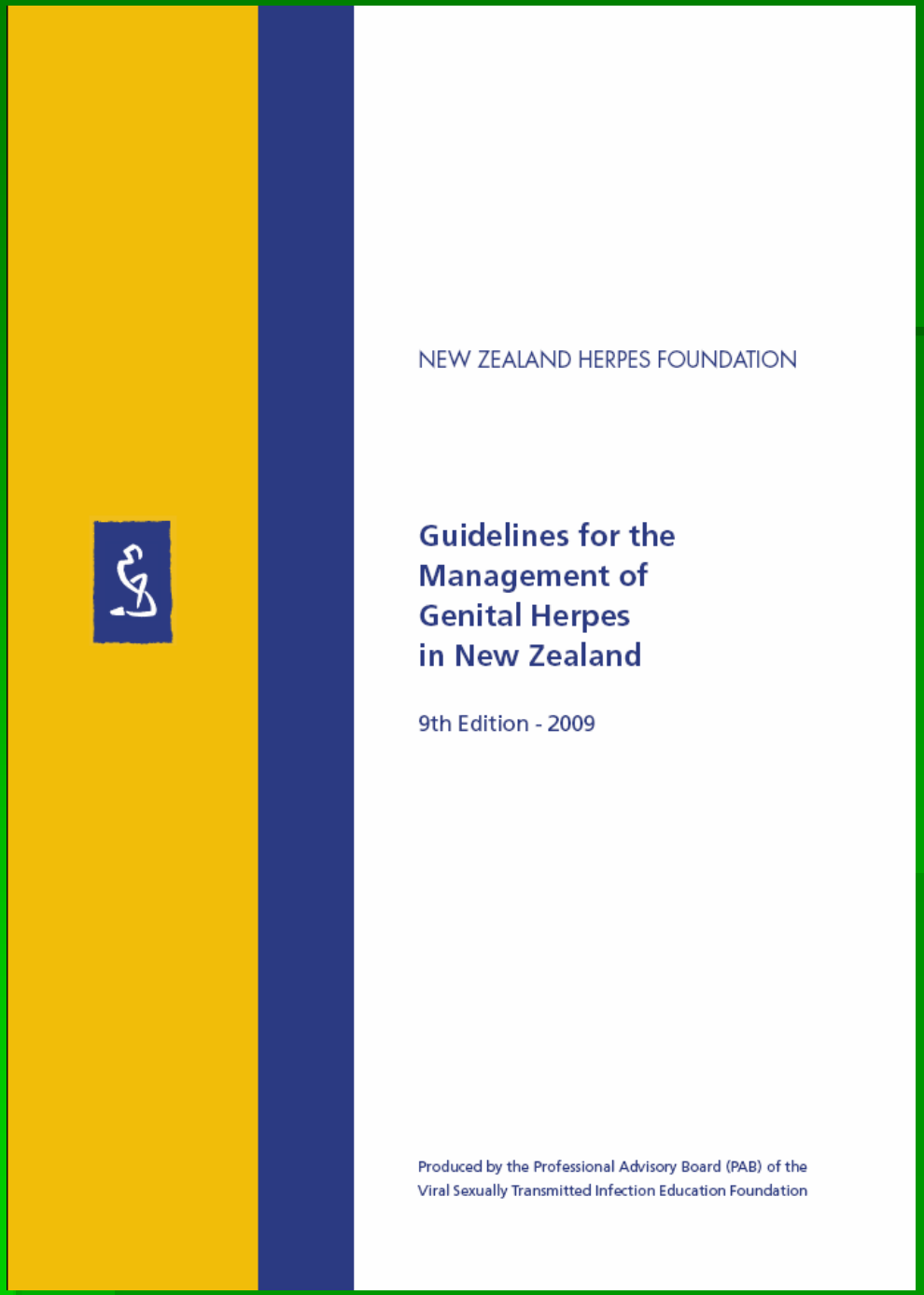
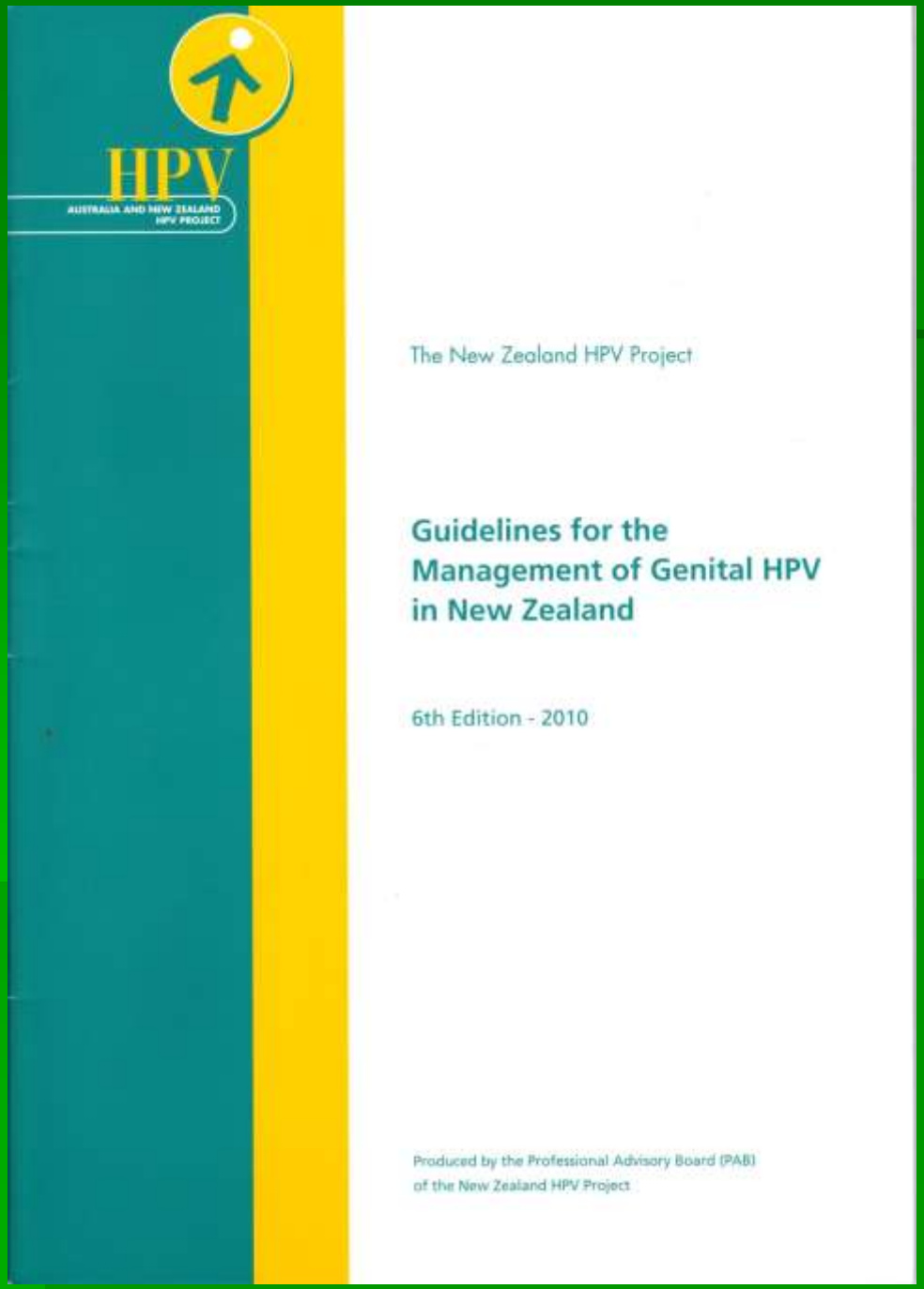
www.nzsh.org



www.herpes.org.nz



www.hpv.org.nz

General Practitioners and HIV

This supplement incorporates recommendations of the National HIV Testing Policy, 2006

Introduction

The manifestations of human immunodeficiency virus (HIV) first became apparent in the early 1980s with reports of an epidemic of unexplained cases of immunodeficiency, first in the United States of America (USA) and then elsewhere in the Western world. Epidemiological evidence suggested that the cause was transmissible through sexual or blood contact or both, and in 1984 the agent was identified as a retrovirus which is now known as HIV.

In Australia, by the end of 2008, 28 330 new diagnoses of HIV infection had been notified since the start of the epidemic, in addition to 10 348 cases of acquired immunodeficiency syndrome (AIDS) and 6765 AIDS-related deaths.[1] The prevalence of HIV infection is highest in men who have sex with men (MSM) in Australia. There is a very low prevalence of HIV infection in Australia in those whose only risk behaviour is heterosexual contact compared to many countries in the Asia-Pacific region. Hence, the risk of HIV infection occurring through heterosexual contact or sexual assault in Australia is low compared to that in high HIV prevalence countries, though it does still occur.

Early diagnosis of patients with HIV infection allows regular monitoring and timely intervention in terms of therapy when required which may markedly alter the natural history of HIV infection. Knowledge of the clinical signs and symptoms of primary HIV infection, as well as performing HIV testing with consent when appropriate, enable earlier HIV diagnosis by clinicians and provide patients with opportunities for receiving appropriate referral, support and education on transmission prevention, in addition to therapy when required.

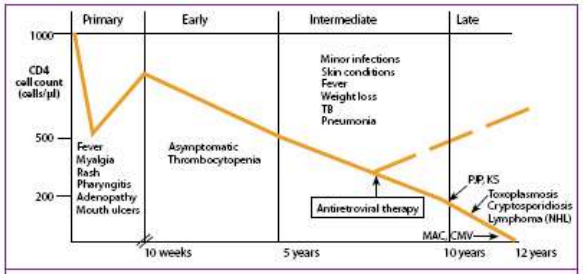
The Virus

HIV is a single-stranded ribonucleic acid (RNA) virus. It has an outer envelope that surrounds two copies of single-stranded RNA as well as a number of viral proteins. The HIV replication commences when the envelope 120 glycoprotein (gp 120) attaches to CD4 receptors expressed on the surface of lymphocytes. Attachment allows fusion of the membranes of virus and cell at viral entry. The RNA is converted to deoxyribonucleic acid (DNA) which migrates to the cell nucleus and integrates as proviral DNA into the host cell DNA.[2]

Natural History

Following infection with HIV, there is a period of high-level viraemia associated with a reduction in the CD4 cell count. A host immune response then develops, partially controlling viral replication, but is unable to clear HIV from the body. The majority of patients develop a mononucleosis-like HIV seroconversion illness characterised by fever, pharyngitis, lymphadenopathy, rash, splenomegaly and aseptic meningitis. Other patients with HIV infection may either be asymptomatic or have subclinical illness. Symptoms of acute infection resolve as the immune system mounts an antiviral response that causes the viral load to decrease markedly. Simultaneously, there

FIGURE 1 HIV Natural History

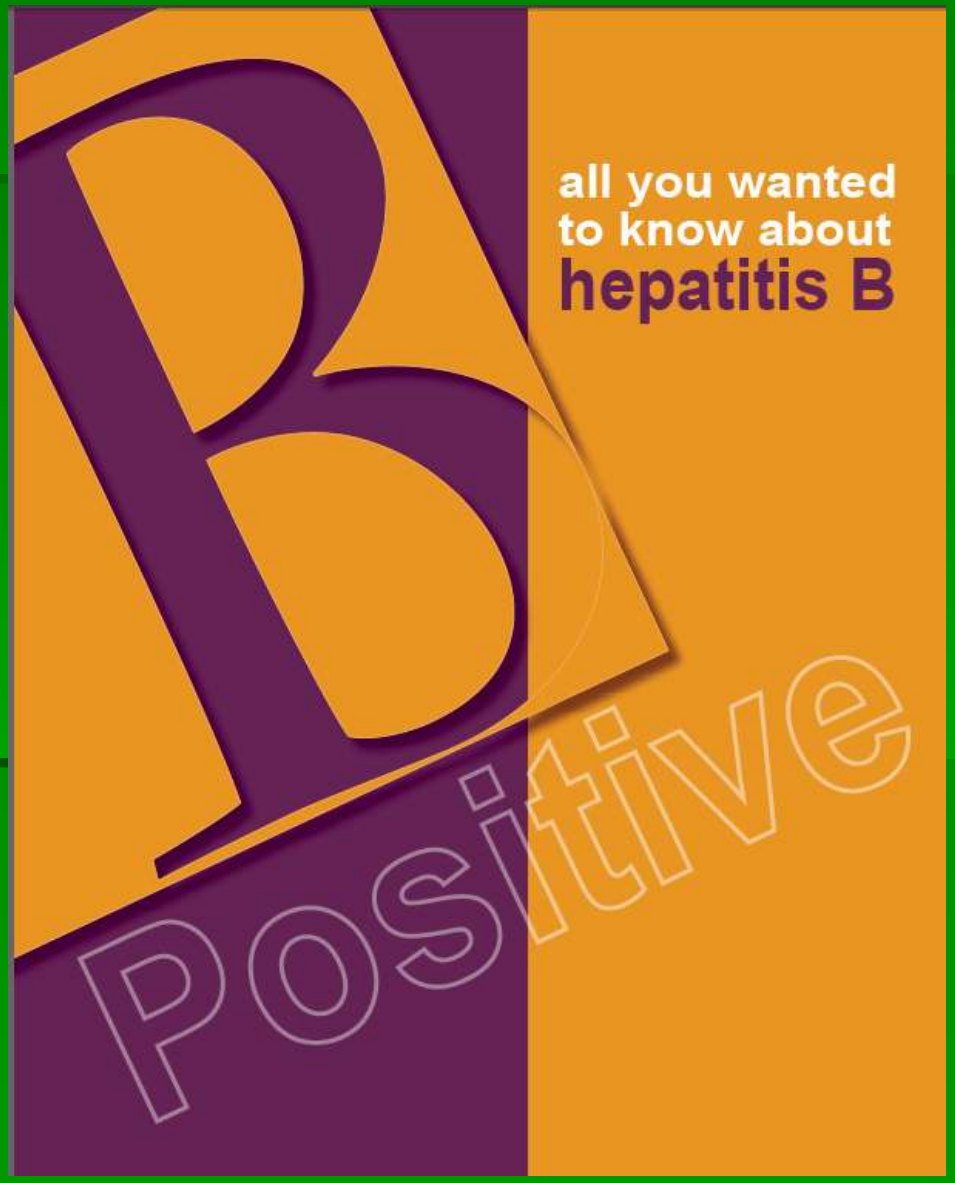


MAC: Mycobacterium avium complex •CMV: cytomegalovirus •KS: Kaposi sarcoma •PJP: Pneumocystis jiroveci pneumonia •TB: tuberculosis

FIGURE 1 The various stages of HIV infection depicting the development of different opportunistic infections with advanced immunodeficiency and the impact of antiretroviral therapy on CD4 cell count recovery.

ashm

www.ashm.org.au



BEST PRACTICE

25

DECEMBER 2009

Infectious gastroenteritis
Generalised anxiety disorder
HIV

Smoking associated cancers

bpac nz
better medicine

Other resources

- NZ Doctor: Sexual Health Column
- Doctors for Sexual Abuse Care: Management of sexual assault manual, training + publications
- Ministry of Health website: HIV testing
- Sexual Health Clinics
- Infectious Diseases/Microbiology

All STIs

- Treat empirically in symptomatic individuals
- Advise abstinence until client + partner/s completed Rx
- Provide condoms
- Contact trace
- RESCREEN at epidemiologic interval (3 months)
- Do NOT do tests of cure unless pregnant*
- A sexual health screen includes blood tests for HBV (Ab and Ag), syphilis and HIV +/- others as appropriate

Chlamydia: Emergent Trends

- Azithromycin is safe throughout pregnancy
- Opportunistically screen all clients <25 yrs with a female low vaginal swab or male FVU
- Treat ANY lower abdominal pain as PID with 14 days of Chlamydia, GC + anaerobic antibiotic cover (syndromic Rx)
- Treat rectal chlamydia with doxycycline and *do a TOC as LGV proctitis has appeared in NZ
- Adult chlamydial conjunctivitis can now be treated with a single stat dose of azithromycin

DISEASES COMMONLY ASSOCIATED WITH SEROTYPES OF C. TRACHOMATIS

SEROTYPE	DISEASE
A, B, Ba, C	Endemic trachoma
B, D–K	Genitourinary disease
L1, L2, L3	LGV

- LGV has emerged as an “anorectal syndrome” in MSMs (as opposed to the classic inguinal syndrome)
- This usually presents as an acute proctitis but some cases may be asymptomatic or mildly symptomatic

A. Robertson *et al* Sexual Health 2008

Chlamydia: The Future

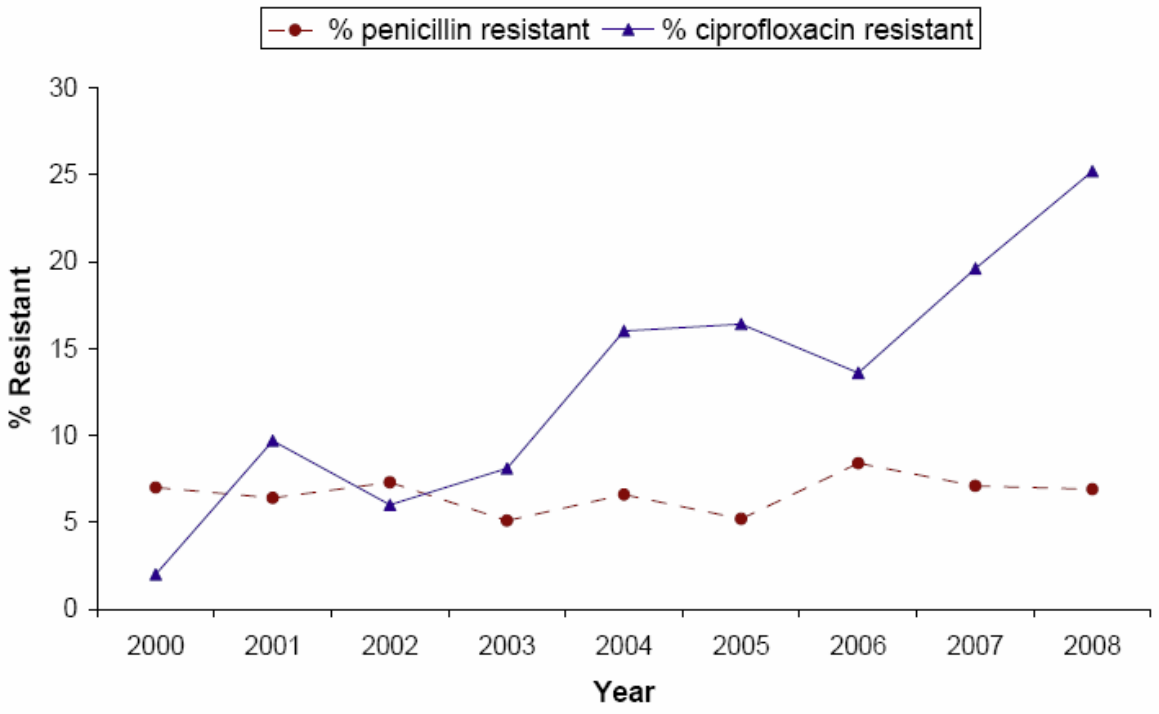
- Variant strain nvCT emerged in Sweden 2006
- Arrested immunity hypothesis? Unproven
- Vaccine? A long way off
- New laboratory tests – eg genotyping for LGV
- Push for integrated antenatal screening guidelines!!!

(140 cases of Chlamydia and 6 cases gonorrhoea reported in infants < 1 year in 2009)

Gonorrhoea: Emergent Trends

- Ceftriaxone is now first line treatment for gonorrhoea

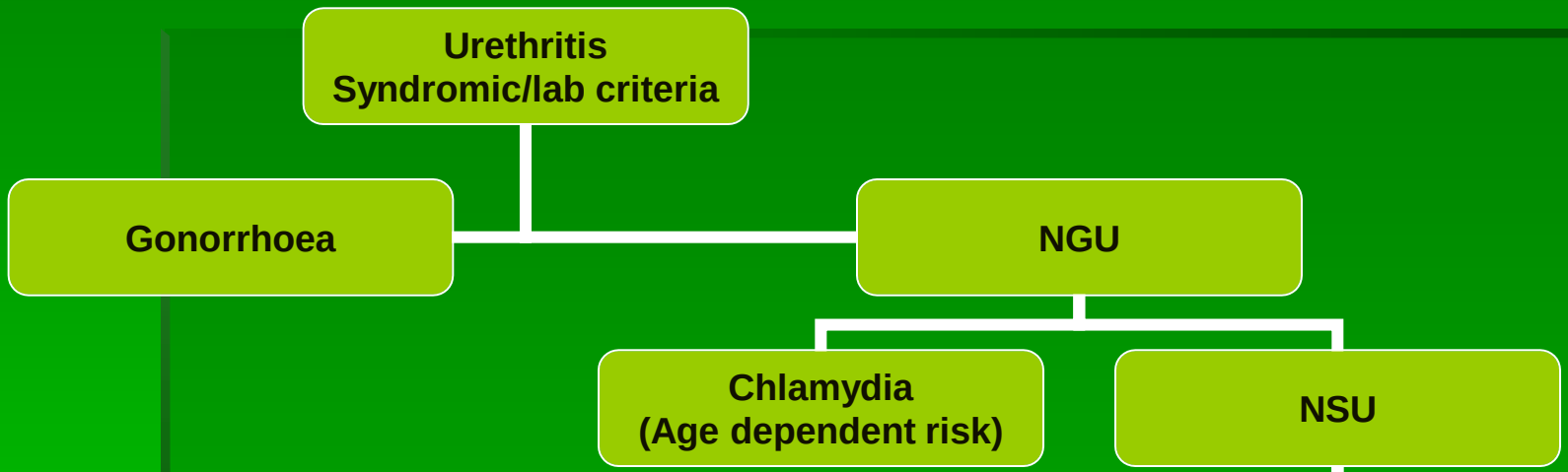
Figure 14. Prevalence of penicillin and ciprofloxacin resistance among *N. gonorrhoeae*, 2000 to 2008



Syphilis: Emergent Trends

- Infectious syphilis has risen ++ in NZ amongst MSMs with a secondary rise in the heterosexual population both from sex overseas and now within NZ
- The majority is in Auckland + Wgtn + ChCh
- Oral route of infection is emerging as important, age > 40 years, European ethnicity
- HIV coinfection is increasingly common
- Urgent enhanced surveillance is required
- Refer for advice
- Repeatedly screen HIV+ve individuals

NSU



Persistent NSU occurs in 10-20%

Any treatment of persistent NGU should cover *T vaginalis* and *M genitalium*

First line treatment for persistent /recurrent NGU is
Azithromycin 500mg stat, then 250mg daily for next 4 days
plus
Metronidazole 400mg twice daily for 5 days

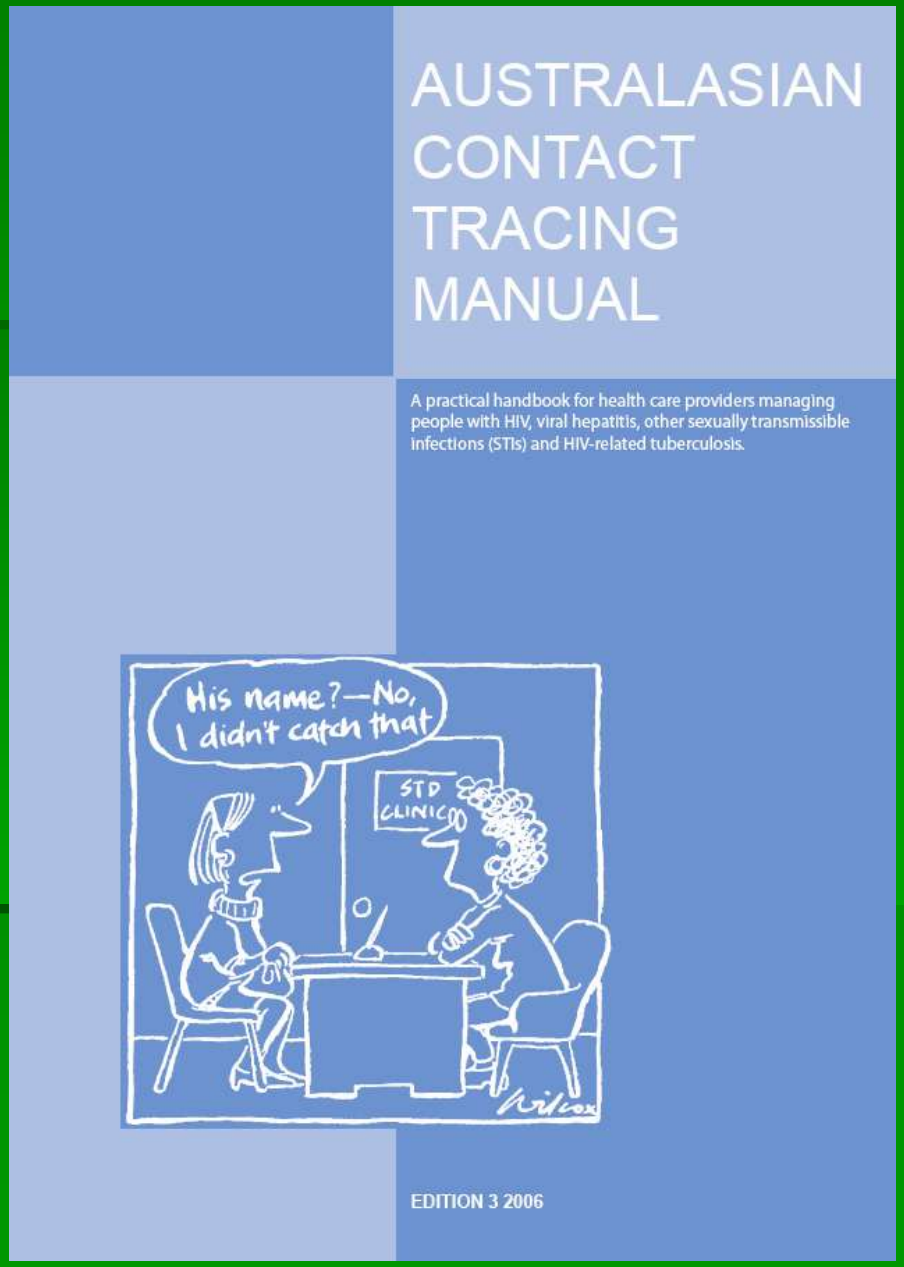
www.bashh.org

Contact Tracing

- Patient (index case referral)
- Provider referral

Other Strategies

- Patient-delivered testing
- Patient-delivered treatment
- Presumptive treatment

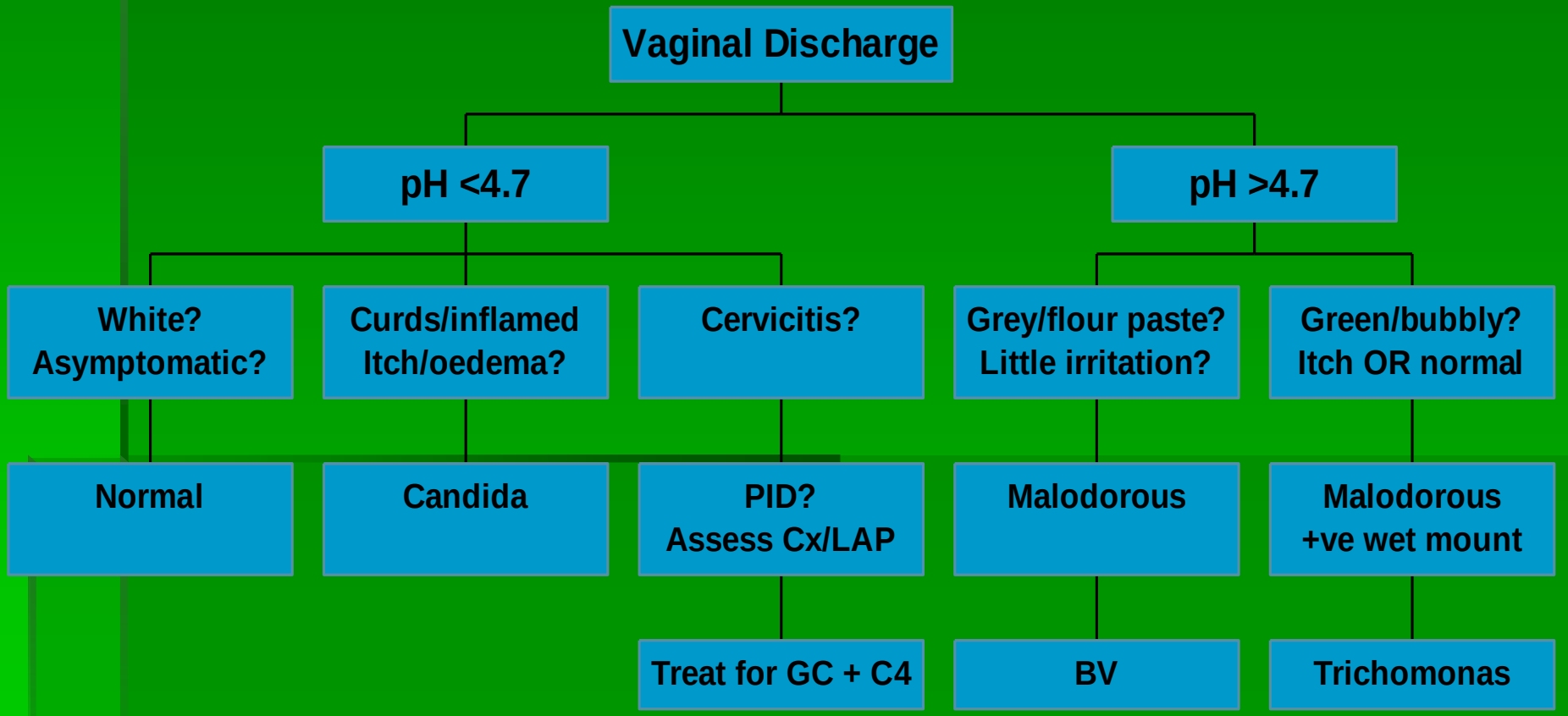


www.ashm.org.au

Summary

- For patient referral method provision of written material (contact sheets) and basic skills training is preferred
- Have a check in place to ensure partner/s attendance
- Treat contacts IRRESPECTIVE of negative test results
- Text messaging services are acceptable to adolescents
- The legality of PDPT is not established, so caution
- For provider referral utilise health advisors/public health

Useful Clinical Algorithm



Thank you

Acknowledgements

Dr Edward Coughlan