

# **Cervical HPV screening. 9 months on.**

Dr Jason Stone

# Overview

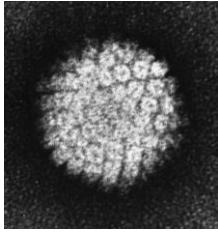
- HPV virus and cervical cancer
- Screening protocol recap
- Recurring issues after 9 months:
  - Co-Test for LSIL follow up
  - Co-Test for Symptoms
  - Co-Test for Test of Cure
  - Testing of under 25's
  - Register

- **NOT:**

- (size 44 Arial Bold)

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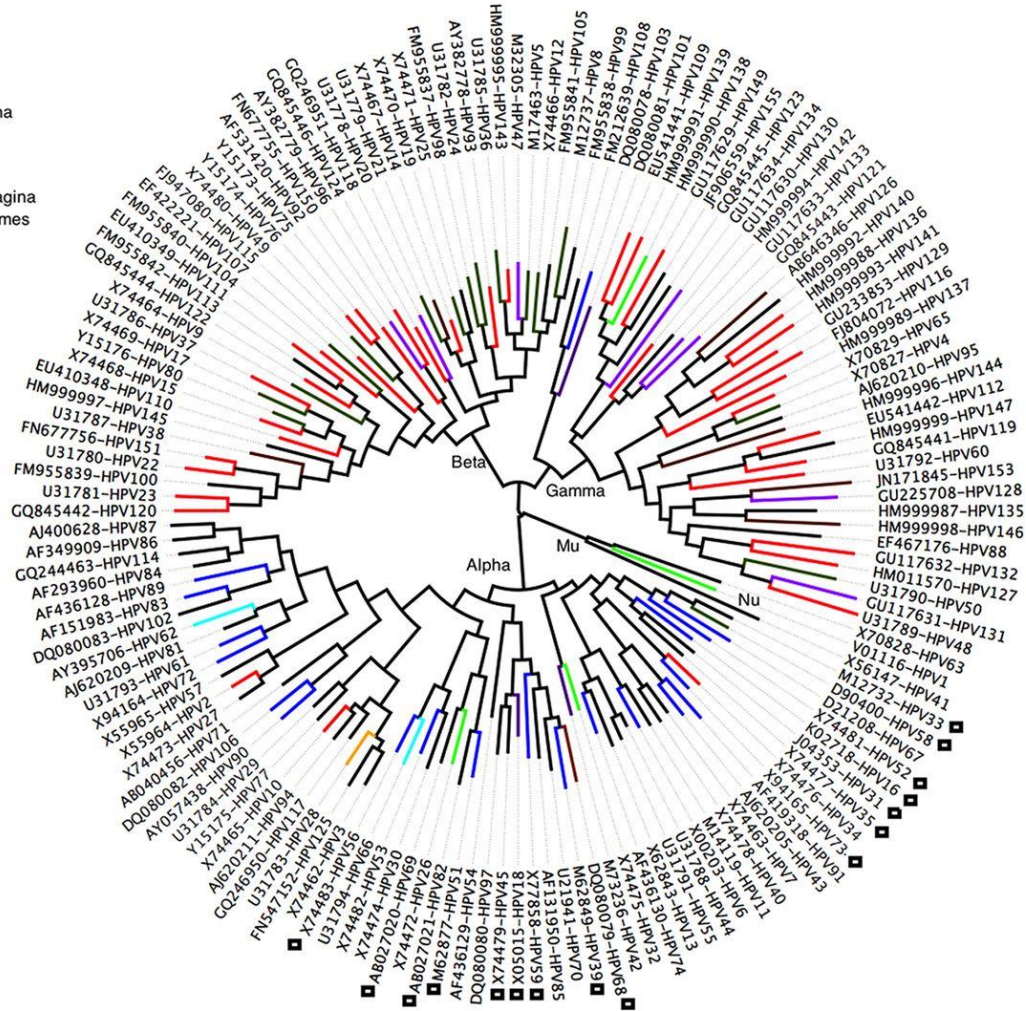


# Human Papilloma Virus

- >170 genotypes
- Specific to site
- Most infections transient and harmless
- Only 14 types known to cause carcinoma (oncogenic)
- Especially type 16 and 18



0.07

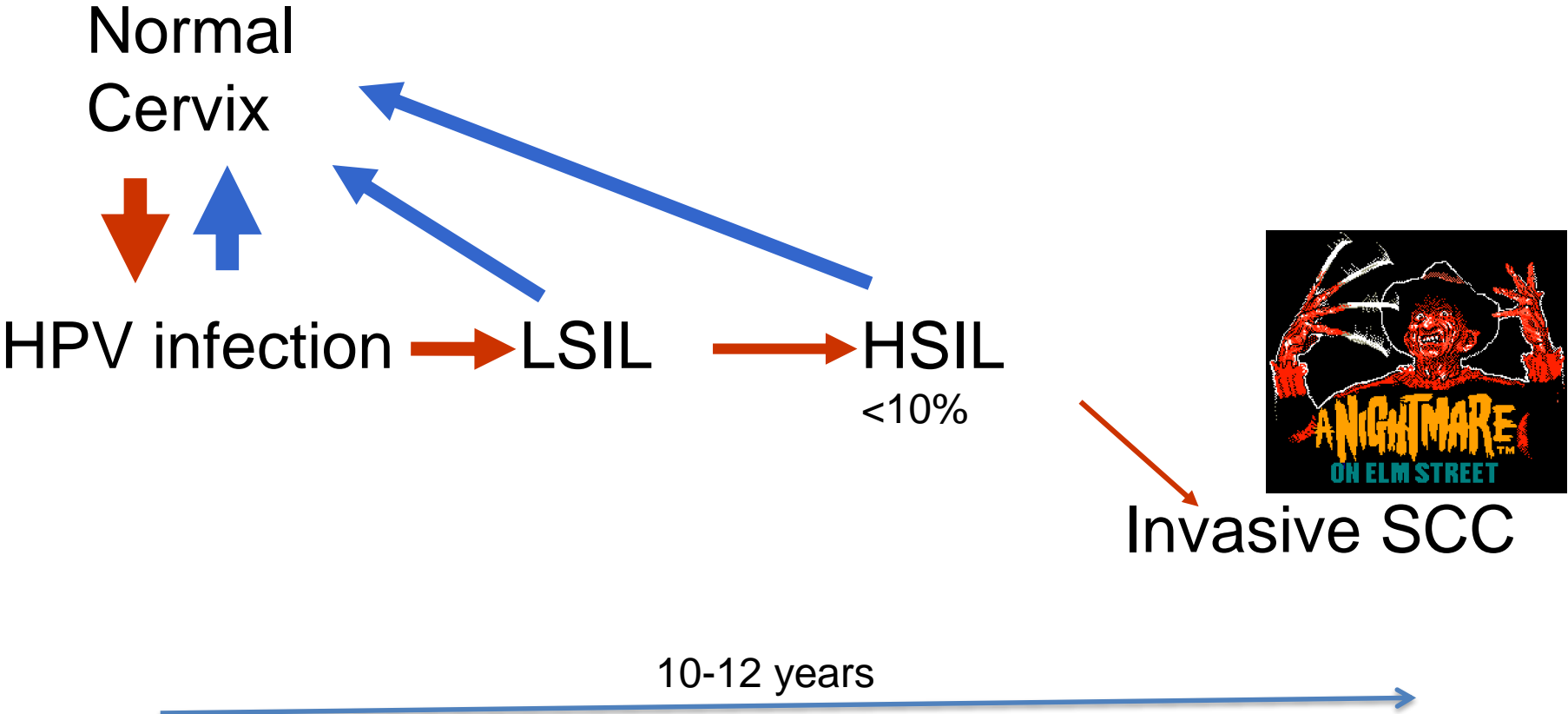


# Genital HPV

- About 30 subtypes affect GU tract
- 80% of sexually active adults exposed in lifetime
- Most infections are before 30yrs old
- 90% of HPV resolve within 1-2 years
- Only a few get persistent HPV infection
  
- If persistent *oncogenic* subtype, can lead to squamous cancer and adenocarcinoma
- **Persistent oncogenic** HPV infection is key risk factor



# Ca cervix – Natural history



# Why test for oncogenic HPV?

1. Look for those at increased risk – **“Screening”**
2. Decide when to return to routine screening after Rx for HSIL– **“Test of Cure”**

Medicare rebate ***only*** for “Screening” and “Test of Cure”



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# Ca cervix – Natural history

Normal  
Cervix

HPV screening

HPV Test of Cure

HPV infection

LSIL

HSIL

<10%

Invasive SCC

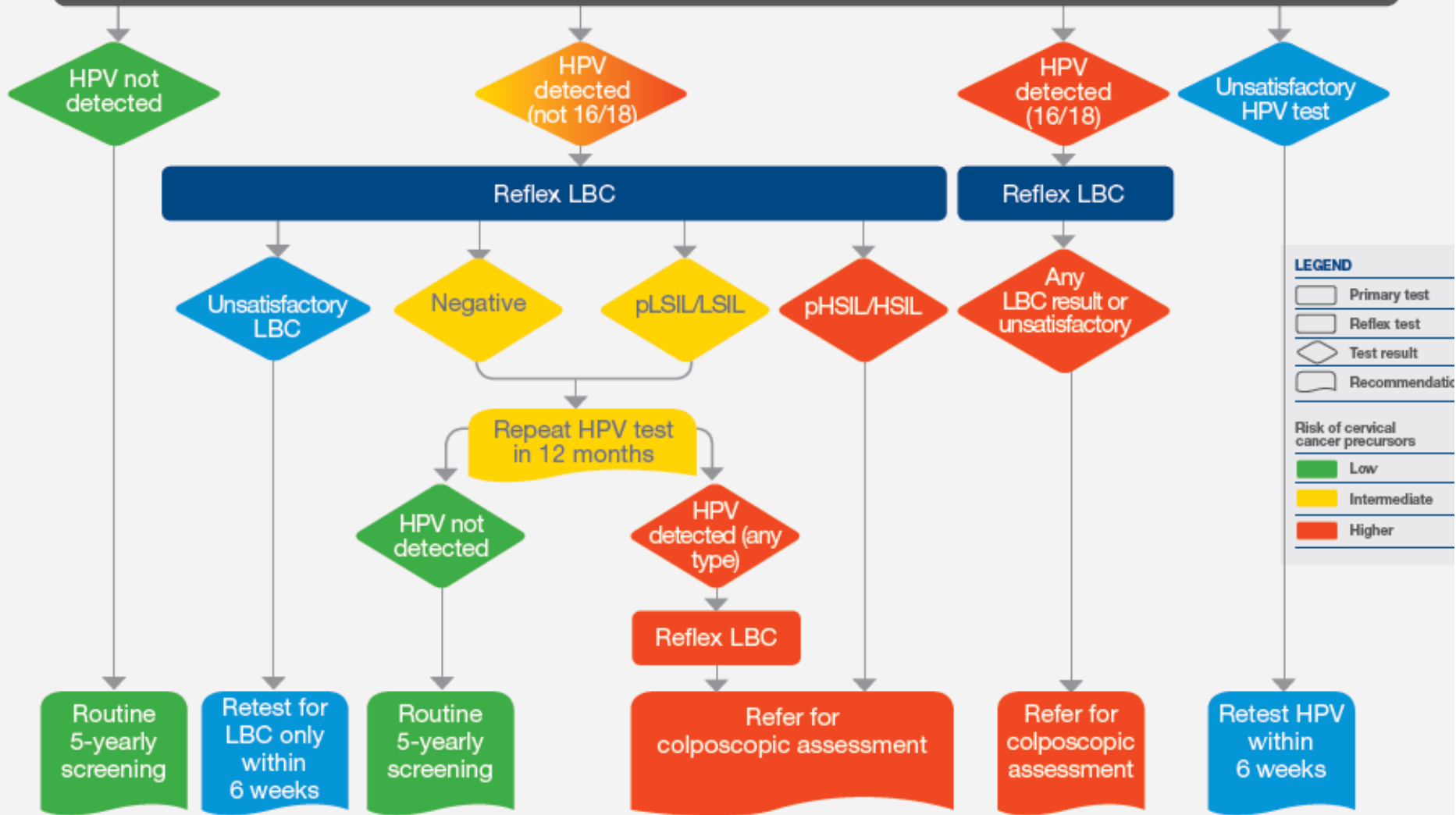


## 4 possible results of HPV test:

1. **Unsatisfactory**
2. No oncogenic HPV detected
3. **Positive** for oncogenic HPV 16/18
4. **Positive** for *other* oncogenic HPV



# Oncogenic HPV test with partial genotyping



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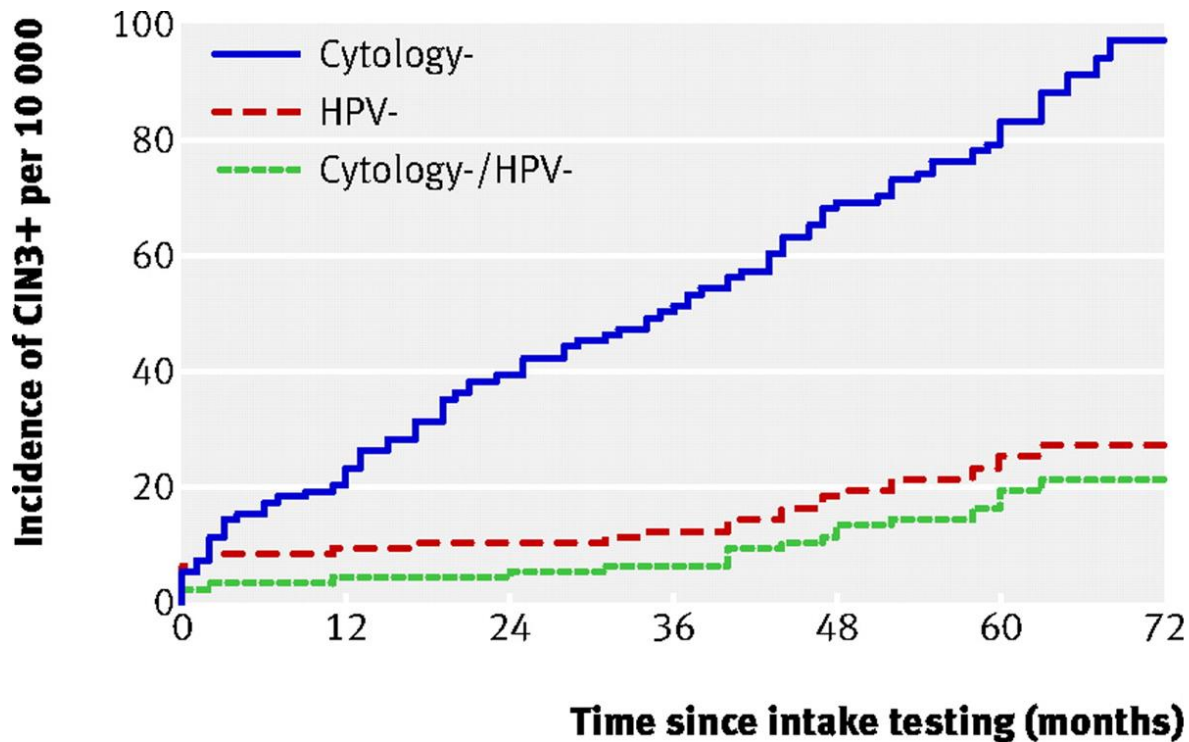
## Recurring issue no 1. Overuse of “Co-Test”

- **Reflex cytology** = lab performs a cytology exam on sample *if* the HPV test is positive

Vs

- **Co-Test** = HPV test *and* Cytology

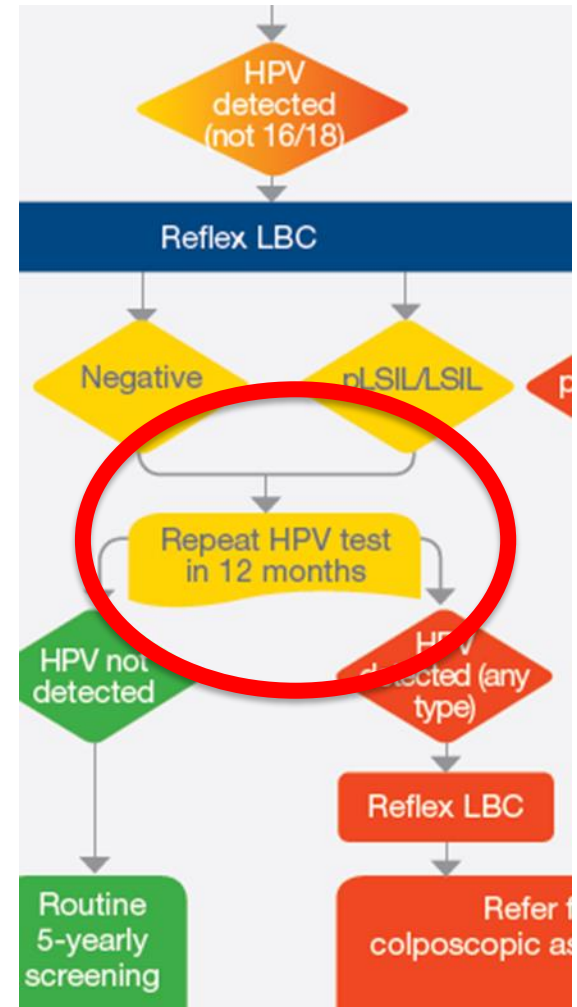
# The evidence for HPV screening



Dillner J et al. BMJ. 2008  
Many others

# Co-Test indications

- **NOT:**
  - Follow up of last year's pLSIL/LSIL
  - (intermediate risk)





# Co-Test indications

- Symptomatic
- Test of Cure
- Previous endocervical adenocarcinoma in situ (AIS)
- Previous DES exposure

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## Symptomatic (1)

- **REC18.1: Women with abnormal vaginal bleeding**

Women at any age who have signs or symptoms suggestive of cervical cancer should have a co-test, and referral for appropriate investigation to exclude genital tract malignancy should be considered.

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## Symptomatic (2)

- Post-coital bleeding (>1 episode)
- Unexplained intermenstrual bleeding
- Post menopausal bleeding
- (*persistent* bloody/offensive discharge or deep pelvic pain or suspicious cx)
- **NOT:**
  - Menorrhagia
  - Contact bleeding
  - Hormonal breakthrough bleed
  - Discharge
  - Thrush/itch
  - Family history

## Symptomatic (3)

- Therefore Symptomatic gets recommendation line in pathology report saying:
- “in view of clinical history.....specialist referral advised...”



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## Test of Cure

- **REC10.7: Test of Cure after treatment for HSIL (CIN2/3)**

A woman who has been treated for HSIL (CIN2/3) should have a co-test<sup>†</sup> performed at 12 months after treatment, and annually thereafter, until she receives a negative co-test on two consecutive occasions, when she can return to routine 5 yearly screening.





## Test of Cure

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# Test of Cure

- 12 months = 12 months
- Even if HSIL treated 20 years ago
- Colposcopy/biopsy of LSIL  $\neq$  treated HSIL

- **NOT:**

- 3 months, 6 months, 9 months.....
- LSIL

## Inappropriate order of HPV test

- **Not:**

- Not for non-cervical sites
- Not for males
- Not on biopsy histology samples
- Not as part of general STI workup

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# Quiz

- 23 year old wants Cervical Screening Test.
- Last smear 4 years ago  
(was negative)
- What do you do?





National Cancer Screening Register / HPV Positivity Rates

Print this page

# HPV positivity rates

> For Participants

> For Healthcare Providers

## HPV Detection Rate Benchmarking

One of the key elements of quality assessment for the National Cervical Screening Program is

# HPV positivity rates. National benchmark

- Current Overall National Benchmark Rate: **8.6%**

*screening cases only*  
*≥ 25 years old*

- Pre-1980 cohort: **6.1%** (>28yo)
- Post-1980 cohort: **14.1%** (<28yo, but still ≥ 25 yo)

# QML Pathology, 7 weeks since 1st July 2018

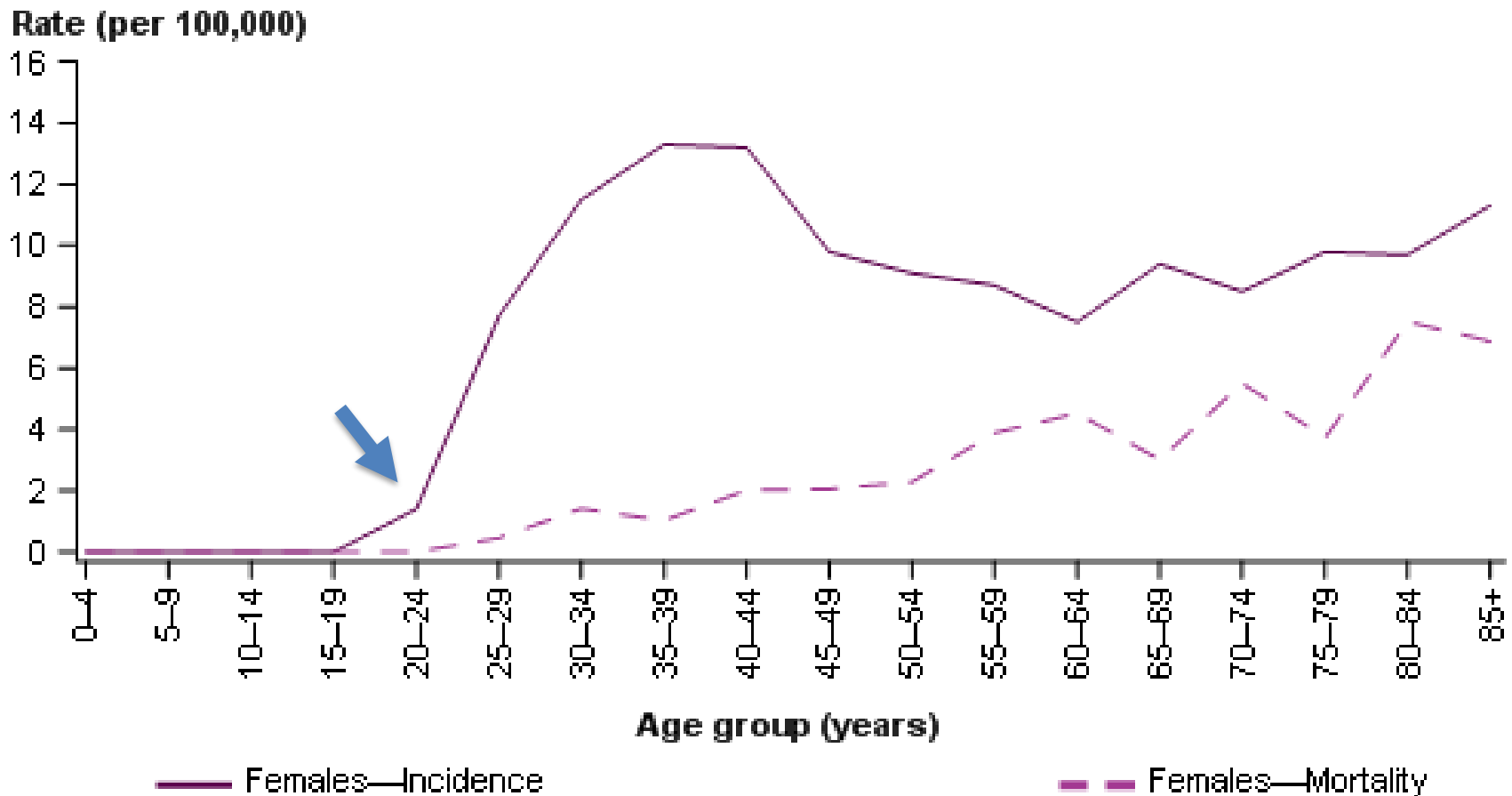
Number of HPV tests	Number positive	Percentage positive
122	48	39%
136	47	34%
107	36	33%
86	22	25%
127	33	26%
104	39	37%
117	34	29%

*screening cases only*  
**< 25 years old**

**259 cases (32.4%)**



# Age-specific incidence and mortality rates for cervical cancer, Australia, 2017



# Queensland data for under 25's

- Queensland data
  - 1984 - 2012 (28 year time period)
  - All invasive cervical cancer ages 13-25 years
  - 56 cases
  - Only 15 picked up on routine screening
- 
- Aust N Z J Obstet Gynaecol. 2017 Aug;57(4):469-472.

**Table A6.2: Incidence of cervical cancer, by age, 2014**

	20–24	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–64	65–69
New cases	12	70	113	98	123	89	86	58	57	59
Crude rate	1.5	8.0	13.2	12.6	14.6	11.3	10.9	8.1	8.8	10.5

*Note:* 'Crude rate' is the number of new cases of cervical cancer per 100,000 women; rates based on fewer than 20 new cases should be interpreted with caution.

*Source:* AIHW Australian Cancer Database 2014.

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# Testing in Under 25?

- HPV infection is **very common** in U 25's
- 32.4% are HPV positive !!!!! (QML Pathology snapshot data 2018)
- Therefore lots of women are getting repeat samples, and colposcopy referrals, for a condition that will spontaneously regress for most
- Colposcopy is not without complications:
  - Procedural
  - Psychological
  - Obstetrics
  - Cost

# Quiz

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- Last smear 4 years ago  
(was negative)
- What do you do?



## What to do with the under 25's ?

- **If symptomatic** – especially post coital bleeding = **Co-Test**
- If previous abnormality being followed up, then manage as per follow up
- Otherwise, **don't routinely do Cervical Screening Test.**
- STD testing, contraception, safe sex discussion etc,
- **But do not do HPV test...**
- (exception: if age 20-24, and commenced sexual activity before 14 years old)

# Retrospective “symptoms”

- “in view of clinical history.....specialist referral advised...”





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# Register

- Recall from 2016 not yet kicked in
- Advise you to start recalling your 2016 routine screen patients
- (over 25's only)

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# Further information...

Guidelines available at:

Google: “wiki cervical screening au”

The screenshot shows the Cancer Guidelines Wiki website. At the top left is the Cancer Council Australia logo. The main title is "Cancer Guidelines Wiki". A search bar contains the text "Search Cancer Guidelines Wili" and a "SEARCH" button. Below the search bar is a navigation menu with items: Home, About, Cancer Council guidelines, Methodology, Hosted cancer guidelines, and Prevention Policies. The main content area is titled "Cervical cancer screening" and includes a table of contents on the left with items: Foreword, Introduction, Summary of recommendations, 1. Cervical cancer in Australia, 2. The rationale for primary HPV screening, and 3. Terminology. The main text area displays the title "National Cervical Screening Program: Guidelines for the management of screen-detected abnormalities, screening in specific populations and investigation of abnormal vaginal bleeding" and a "Foreword" section. A "Cite this guideline" button is visible. At the bottom right, there is a graphic for the "NATIONAL CERVICAL SCREENING PROGRAM" with the subtitle "A joint Australian, State and Territory Government Program". The bottom of the image shows a Windows taskbar with icons for Chrome, PowerPoint, and system tray icons.

**Thank you – Any questions?**



- Feedback welcomed,  
thanks

