Moving to HPV testing for primary cervical screening

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Time to screen

National Cervical Screening Programme

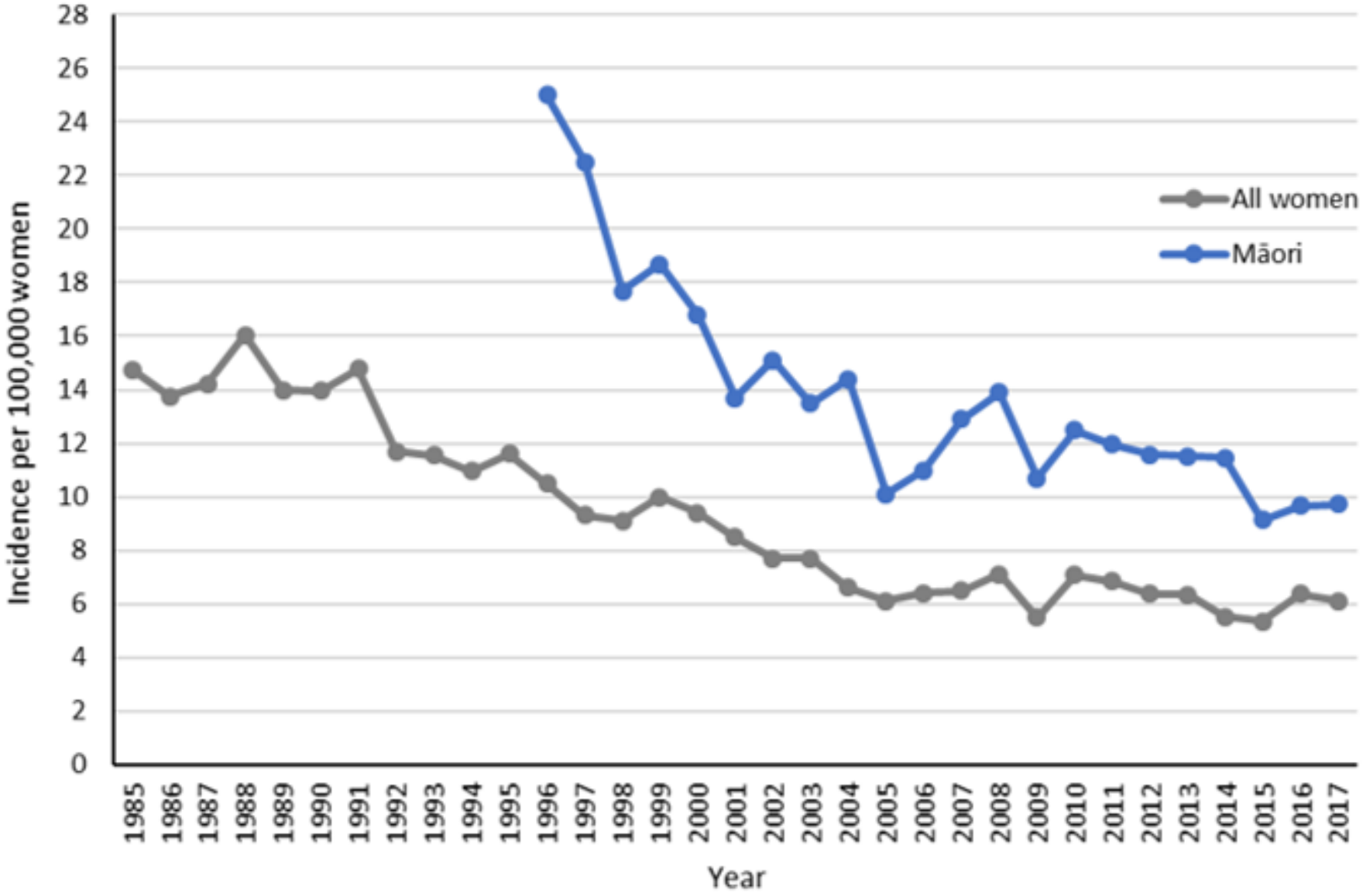
New Zealand Government

Goodfellow events webinar: Tuesday 20 September

Topics

1. The importance of continuing cervical screening, now and in the future
2. HPV primary screening testing options, from July 2023

Figure 2: Age-standardised cervical cancer incidence rates for Māori* and all women, 1985–2017†

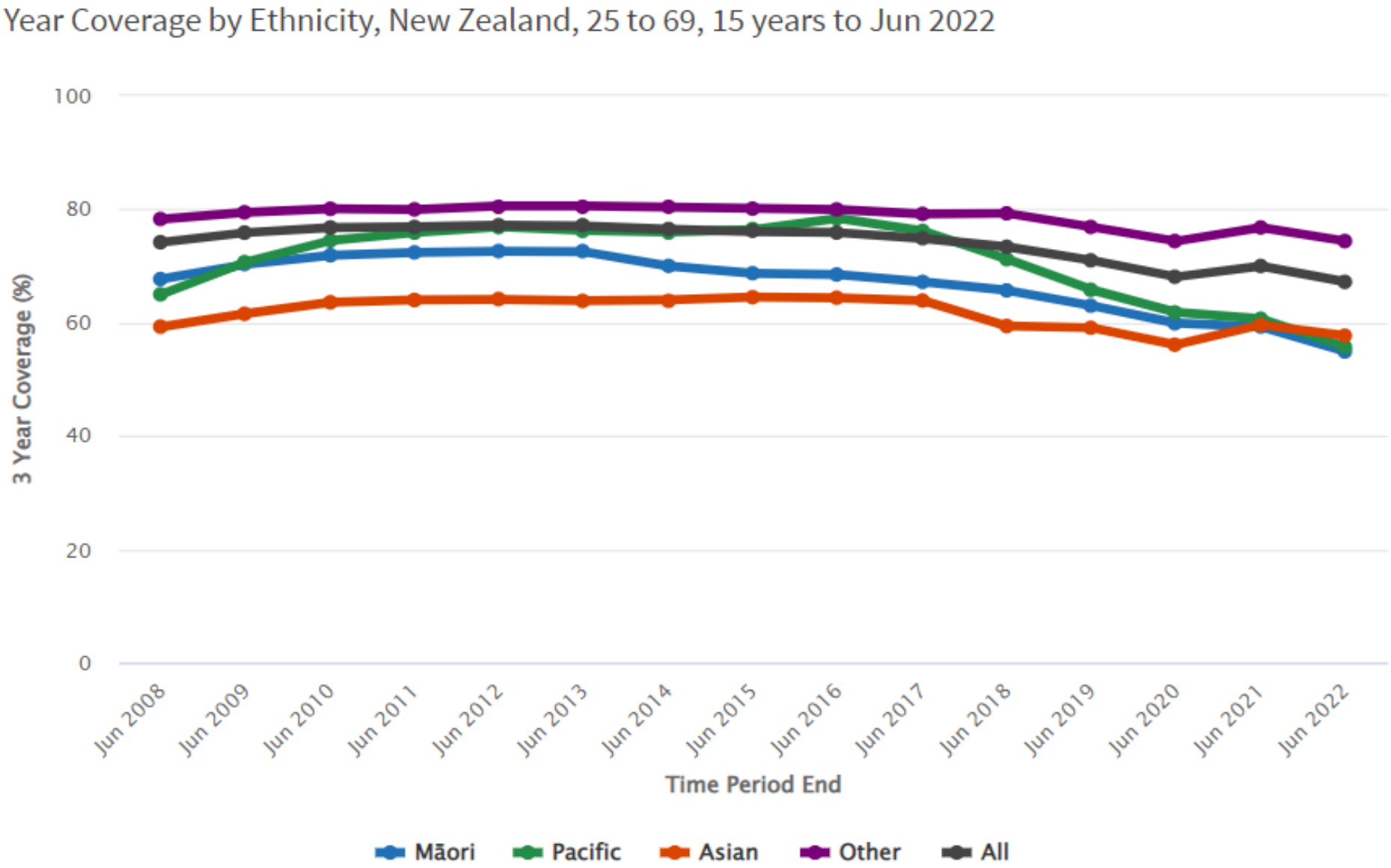


Rates are per 100,000 women, age-standardised to the WHO Standard Population (all ages).

Our understanding about HPV has exploded

- More than **95%** of cervical cancers are caused by **HPV**
- **80%** of the sexually active population is estimated to acquire an HPV infection at some point in their lives
- Most people **clear** these asymptomatic infections without knowing they have had an HPV infection

NCSP coverage data

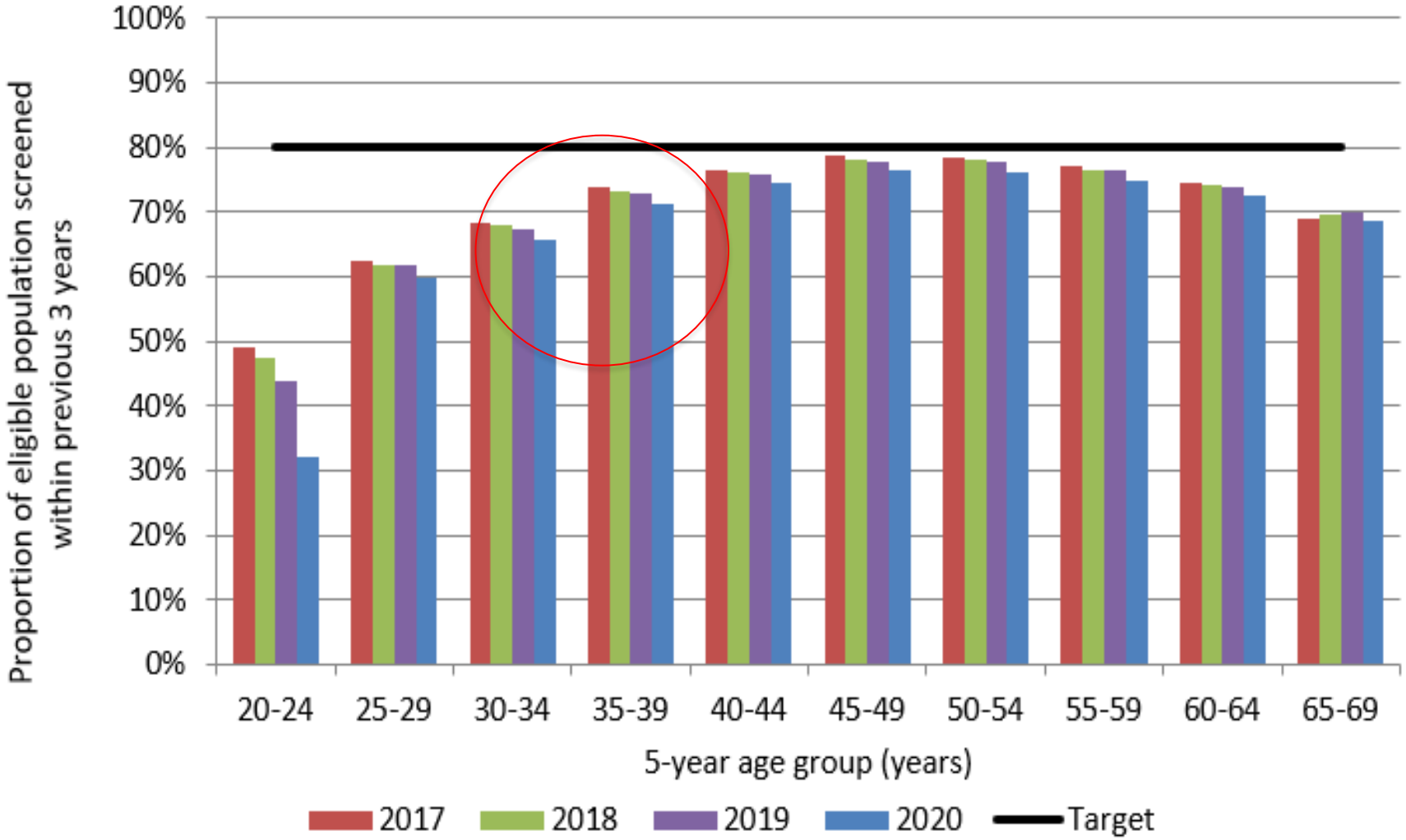


Coverage @June 2022

Other 74.4%
All 67.2%
Asian 57.7%
Pacific 55.7%
Māori 54.9%

Screening coverage by age

Figure 17 - Trends in three-year coverage by age (women screened in the previous three years, as a proportion of hysterectomy-adjusted female population)*



NCSP Monitoring report 1 Jan – 31 Dec 2020

Why continue with screening now?

An analysis* of all cases of invasive cervical cancer (n=747) reported in New Zealand in 2013 to 2017 showed that only 12% of 25-69 year old women with invasive cervical cancer were adequately screened i.e. had had at least 2 cervical screening samples not more than 3 years apart in the 6 months – 7 years prior to diagnosis.

Nearly 80% were unscreened or under-screened.

Review of Cervical Cancer Occurrences in relation to Screening History in New Zealand for the years 2013-2017
Report prepared for the NCSP. P Sykes et al. Department of Obstetrics & Gynaecology University of Otago – Christchurch

https://www.nsu.govt.nz/publications/review-cervical-cancer-occurrences-relation-screening-history-new-zealand-years-2013-2017

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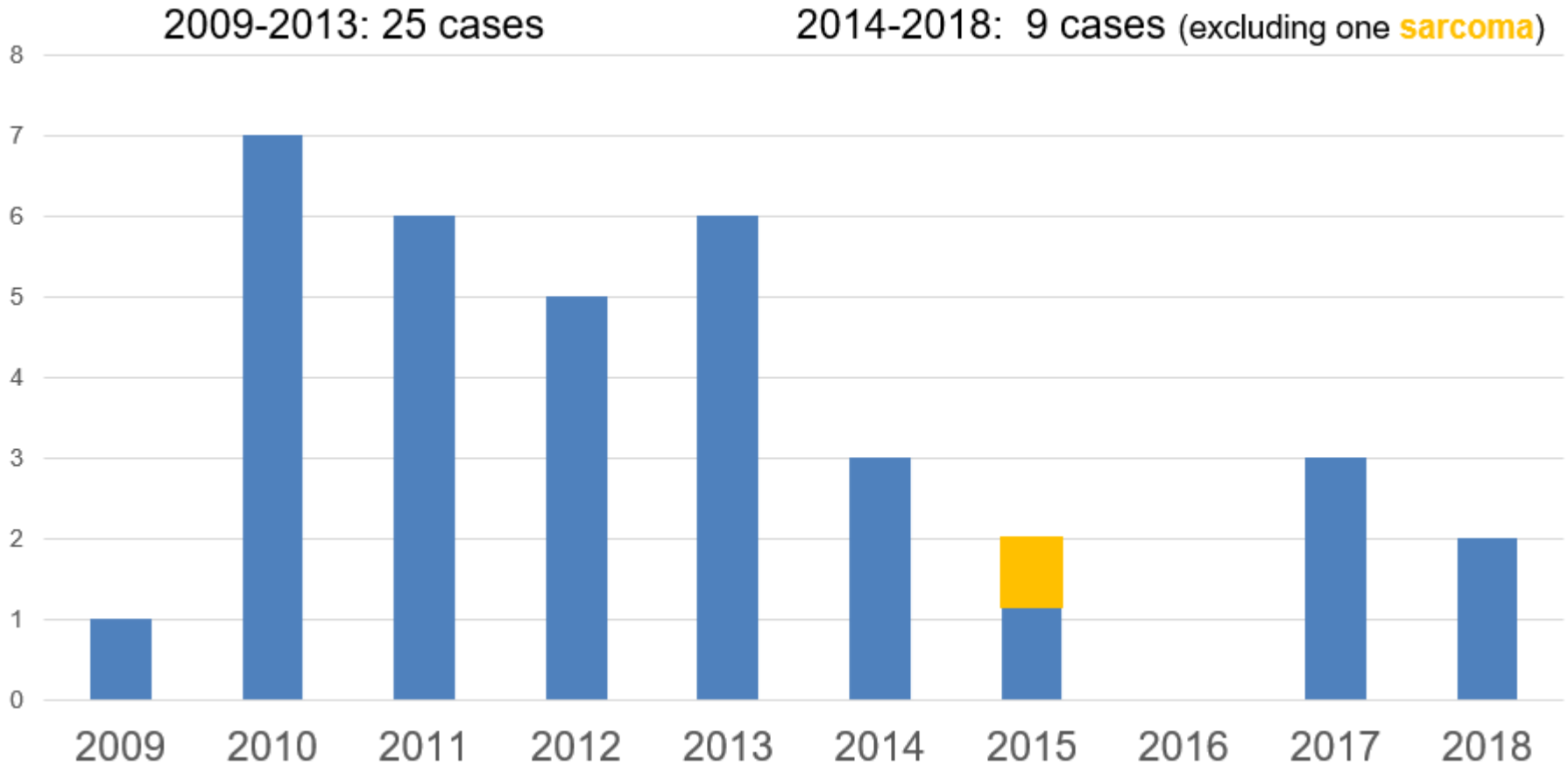
Invasive cervical cancers under 25 years of age:

Total number of cases per year 2009-18

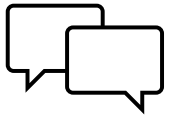


Why are we stopping screening under 25yr olds?

- The main reason is that screening this age group is **ineffective at preventing cervical cancer**
- **Pre-invasive cervical lesions** that develop in this age group often **resolve** without treatment
- There are **potential harms with treatment** (although colposcopists are well aware of this and modify treatments)
- 20-24yr olds are **increasingly vaccinated**

Why has cervical cytology screening been so successful?

- **Long preinvasive stage** of disease: often 10+ years
- The **cervix** is relatively accessible
- Cytology is a simple test that can **detect preinvasive disease** with **reasonable sensitivity** and good specificity
- The screening test is relatively inexpensive
- **Precursor lesions** can be treated effectively

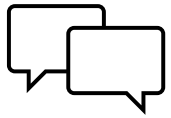


All this makes a significant impact on cervical cancer incidence and mortality

Screening with HPV

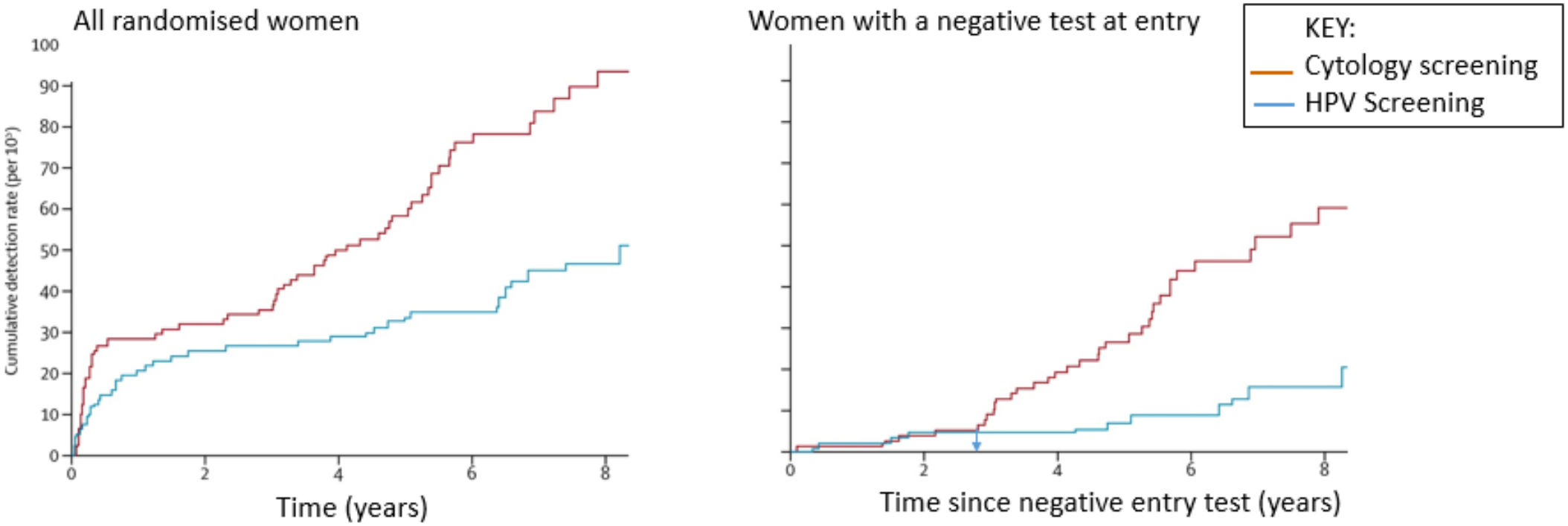
HPV testing is very sensitive: it is better at detecting HPV if present. This will identify the 10% of people in the population who are at risk of cervical lesions.

Cytology is more specific: it is better at identifying who actually has a cervical lesion because it looks for cell changes, not for the presence of the virus, so it works well as a second test for those who are HPV positive, to sort out who needs further investigation.



There are a very small number of cervical cancers that are not HPV related: most are adenocarcinomas.
Even if an HPV test is negative, symptoms of cervical cancer still need to be taken seriously.

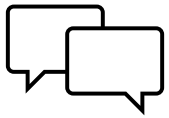
HPV test screening results in lower invasive cancer rates compared with cytology screening



Efficacy of HPV-based screening for prevention of invasive cervical cancer: follow-up of four randomised controlled trials
Ronco G et al Lancet 2014;383:524-32

HPV Primary Screening testing options - July 2023

- From July 2023, the **primary test** for cervical screening will **test for human papillomavirus (HPV)**, the cause of over 95% of cervical cancers
- **Self-testing** will be an option for everyone, it will increase access for Māori and Pacific
- Self-testing can be done in the **clinic**, at **home**, or other **community settings**
- **Clinical oversight is required** in order to explain the test, manage results and arrange follow up

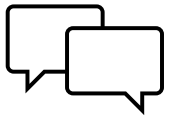


Universal mail-out will not occur in first phase of the programme

Empowering participants with choice

Participants can choose how to have their screening test: either take it themselves OR have a clinician take it for them.

- ✓ **Choose to** self-test using a swab, in a location of their choice
- ✓ **Opt for** a clinician to take the HPV test using a swab
- ✓ **Choose for the** clinician to take an LBC sample (using a speculum) which can be used for HPV testing, and cytology if required



Participants need to be reassured that a self test is just as effective as a clinician-taken sample at detecting the presence of HPV

Detecting cervical precancer and reaching under-screened women by using HPV testing on self samples: updated meta-analyses Marc Arbyn et al. BMJ 2018;363:k4823 | doi: 10.1136/bmj.k4823

HPV Screening options: Self-test

- **Self-taken** sample for HPV testing
- Vaginal swab used
- Requires **informed consent** process with **clinical oversight**
- If HPV is detected – a **clinician-taken LBC sample** is then required for cytology

A swab-collected sample can only be used for HPV testing, not cytology
If cytology is needed, a return visit for a clinician-taken LBC sample will usually be required

Explaining the HPV self-test

- The test is a vaginal **swab i.e.** don't need to find the cervix
- The **participant may self-test in a location of their choice**
- Self-testing requires **informed consent** with **clinical oversight**
- The participant can alternatively **choose to have a sample taker take the sample using a swab**

HPV screening options: Clinician taken

- A clinician can use a **swab to take a sample for HPV testing –** this will be treated by the labs as a self-test, **OR**
- A clinician can use a speculum to take an LBC sample from **cervix**
- **If HPV is detected on an LBC sample** - reflex cytology test can be performed on the same sample

An LBC sample can be used for HPV testing only, for cytology testing only, or for both HPV testing and cytology

Two changes to Primary Screening will be introduced in July 2023

1. Changing the primary screening test to an HPV test instead of cytology will reduce cancer rates because of the increased sensitivity of the HPV test. This will happen both for vaccinated and unvaccinated participants.

2. Offering the HPV test as a self-test will improve screening coverage. How the test is taken doesn't influence cancer rates, but if un/under-screened people choose the self-test option, and follow through to treatment if they have positive HPV result, then even greater disease reductions will be achieved.

New clinical management pathways

Swab collected sample (self-test or clinician-assisted)

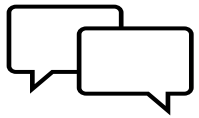
- **HPV not detected -** 5 year screening interval
- **HPV 16/18 detected**
  Option of returning to primary care for a cytology sample OR direct referral to colposcopy
- **HPV Other detected**
  Cytology sample required:
  Normal / Low-grade cytology - repeat HPV Test in 12 months
- High-grade cytology – referral to colposcopy

Clinician taken LBC sample

- **HPV not detected -** 5 year screening interval
- **HPV 16/18 detected**
- Direct referral to colposcopy. Cytology will be reported on the same sample as the HPV test.
- **HPV Other detected**
- Cytology on the same sample shows:
  Normal / Low-grade cytology - repeat HPV Test in 12 months
- High-grade cytology – referral to colposcopy

The new NCSP Register will…

- Be **population-based, sourced from NHI data**
- Include both those already **enrolled in the NCSP and those who are unenrolled**, with an opt-off option
- Provide **direct look-up access** for primary healthcare
- Support **improved reporting and monitoring** capabilities
- Provide **centralised notification** to let participants know its time to get screened



Clinicians will continue to provide communication with patients about screening, take responsibility for test delivery and results, and ensure appropriate clinical follow up of abnormal results.

Key messages

- **HPV testing** is a better primary screening test than cytology
- About **10%** will have high risk HPV detected, requiring follow-up (cytology or colposcopy)
- Participants can **choose** how to have their screening test
- The option of **self-testing** will **reduce barriers** and **increase participation**
- The **new register** will enable clinicians to track screening histories and recommended follow-up

"Please encourage participants to continue to have cytology screening on time prior to July 2023, rather than waiting for the new test."

Contact us

HPVscreen@health.govt.nz

You are important to us. Please get in touch if you have any **questions** or **feedback**.

Cervical screening | Time to Screen - National Screening Unit

National Cervical Screening Programme | National Screening Unit (nsu.govt.nz)

HPV primary screening | National Screening Unit (nsu.govt.nz)