

THE POWER OF PREVENTING WOMEN'S CANCER THROUGH SCREENING

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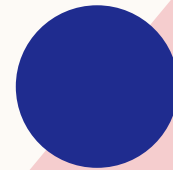
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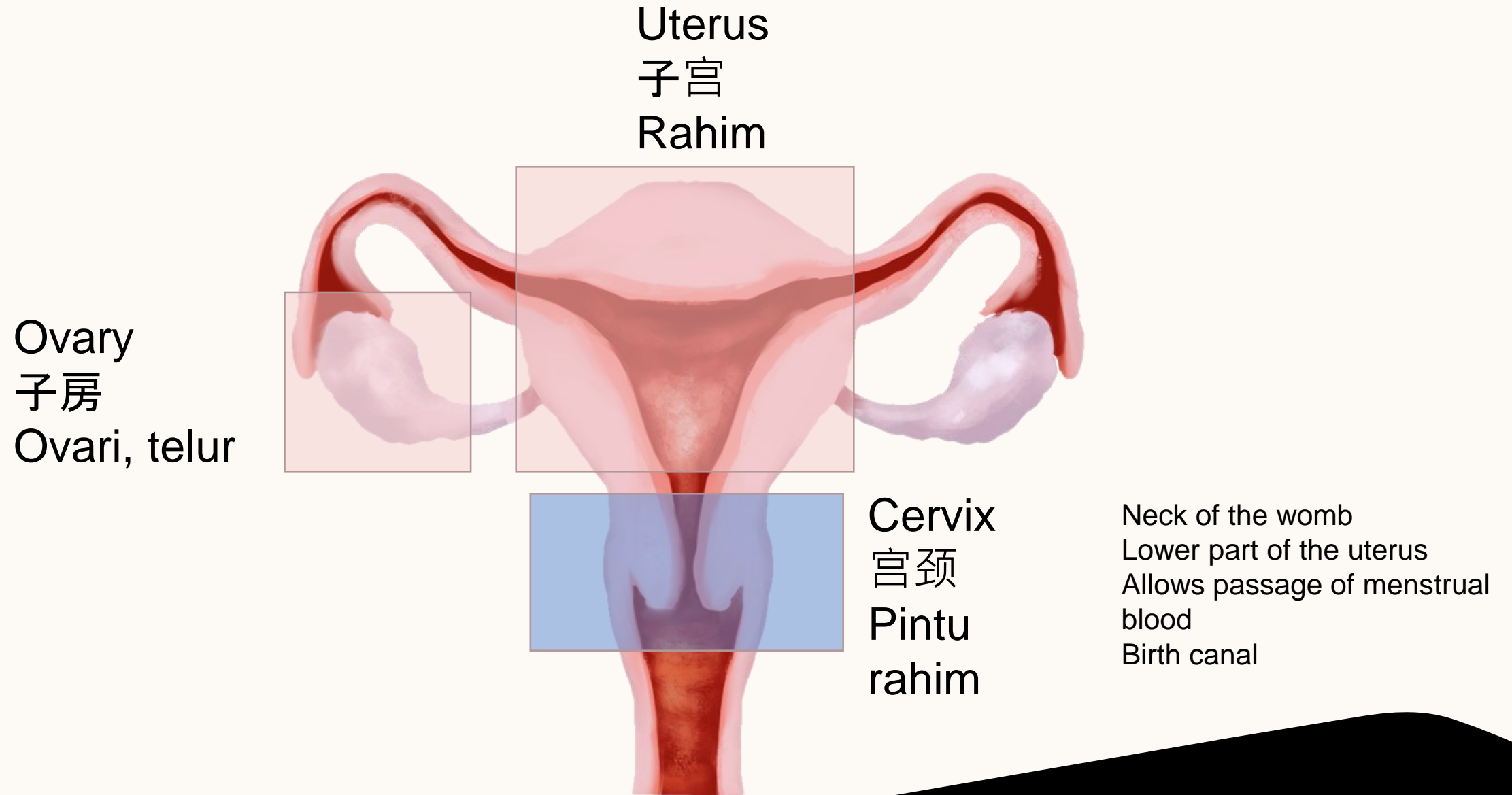
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CERVICAL CANCER: THE PREVENTABLE CANCER

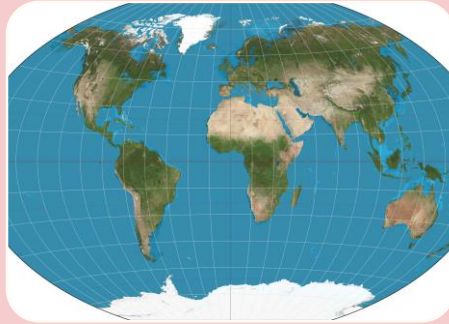
Doing the “Jab, Pap, Zap”



THE CERVIX



CERVICAL CANCER



Globally

- A leading cause of women's cancer death in 40+ countries
- 600,000 cases diagnosed a year & 300,000 deaths a year

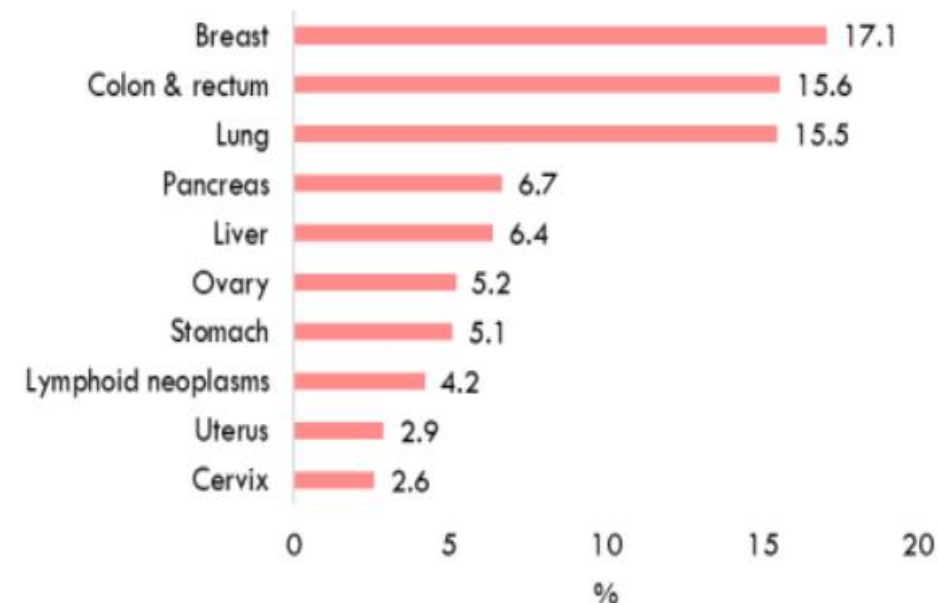
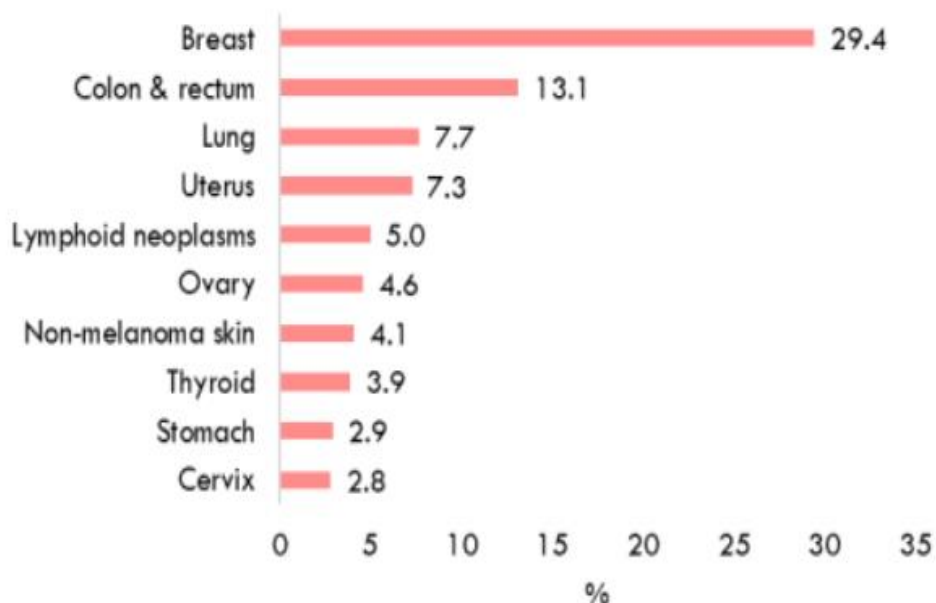


Singapore

- 10th cause of women's cancer death
- New cases dropping overall but....
- ...increase in proportion picked up at later stage

CERVICAL CANCER - #10

Female
Incidence (all sites) - 40127
Mortality (all sites) - 12940

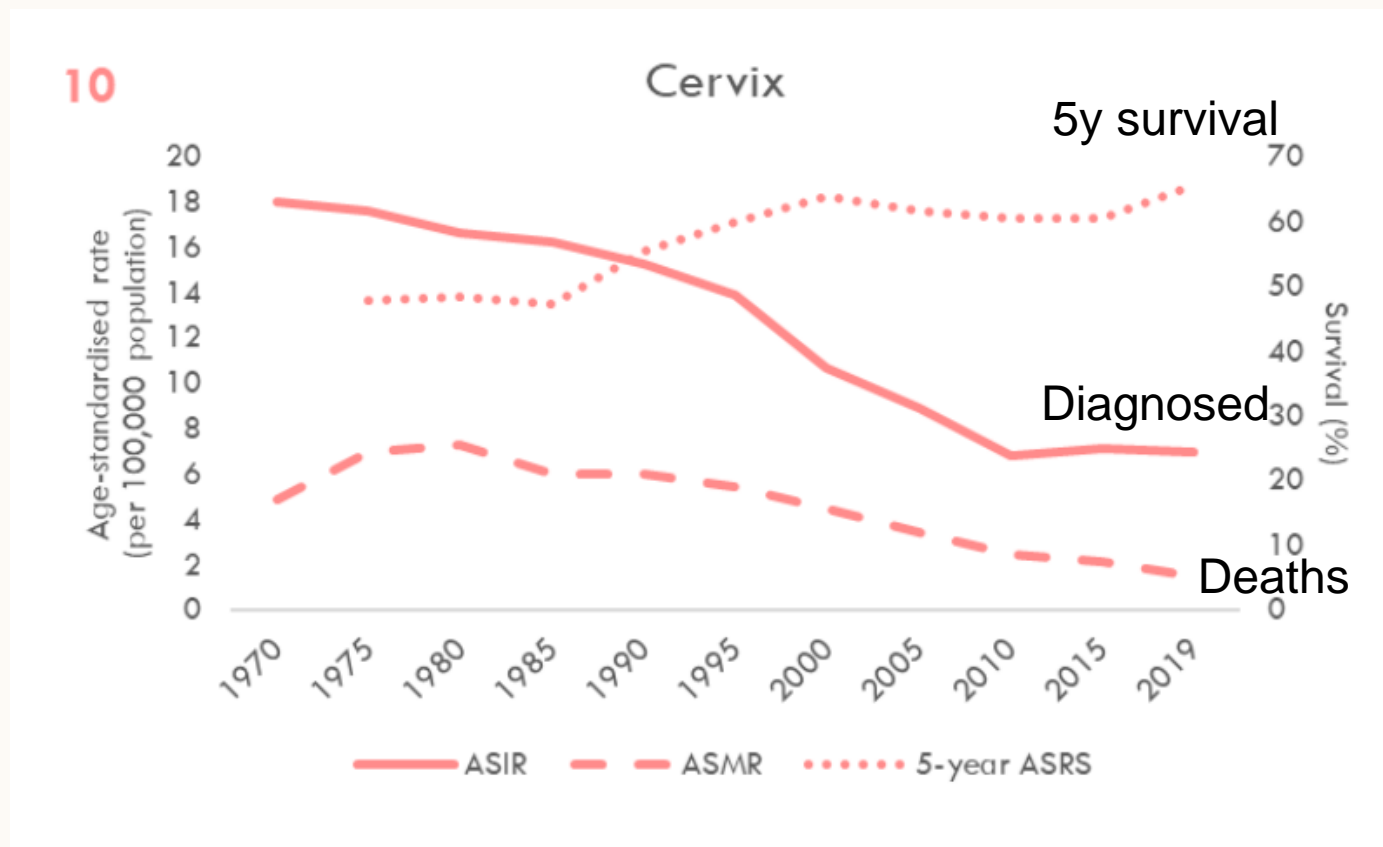


Ten most frequent cancers and cancer deaths in Singaporean females 2015 - 2019

Singapore Cancer Registry Annual Report 2019,
National Registry of Diseases Office 2022
Singapore Cancer Registry, Health Promotion Board

CERVICAL CANCER

Trends at Home



**Singapore Cancer Registry Annual Report 2019,
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CERVICAL CANCER

Trends at Home

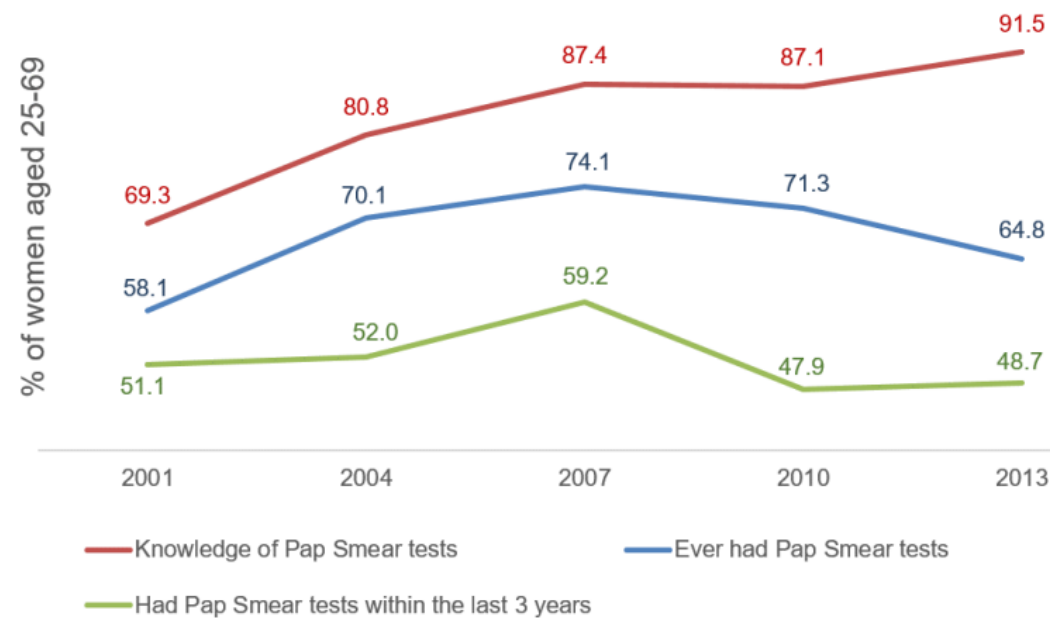
	2003 - 2007	2018 - 2019	
Stage 1	46.0	36.5	Limited to cervix Usually curable with surgery
Stage 2	26.0	29.8	Involving upper vagina Usually needs chemo- & radiation therapy
Stage 3	18.6	17.4	Regional spread to pelvis & lymph nodes
Stage 4	9.4	16.4	Distant spread

Decreased
detection of
early-stage
cancers

CERVICAL CANCER

Trends at Home

KNOWLEDGE OF THE PAP SMEAR TEST AND SCREENING BEHAVIOUR, 2001—2013



Statistics Singapore Newsletter March 2018

CERVICAL CANCER IS THE 10TH MOST COMMON CANCER AMONG WOMEN

Every year, more than **200 women** in Singapore are diagnosed with cervical cancer. HPV is responsible for up to 99% of all cervical cancers^{1,2}

Cervical cancer is one of the most preventable and treatable forms of cancer.

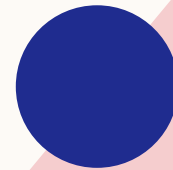
- 5th most frequent cancer among women between 15 and 44 years of age.



1. <https://www.who.int/health-topics/cervical-cancer>

2. https://hpvcentre.net/statistics/reports/SGP_FS.pdf

WHAT CAUSES CERVICAL CANCER?



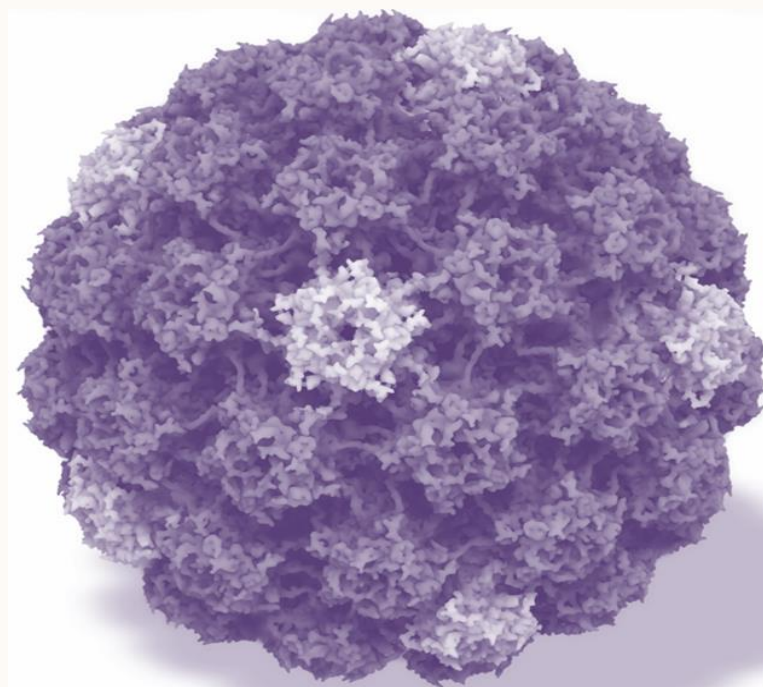
HPV IS RESPONSIBLE FOR UP TO 99% OF ALL CERVICAL CANCERS¹

Cervical cancer is caused by persistent¹ Human Papilloma Virus (HPV) infections.

- There are over 200 types of HPV²
- 14 types are known to cause most cases of cervical cancer
- HPV 16 & 18 are the highest risk types, accounting for more than 70% of cervical cancer³

HPV infections are **extremely common** and are usually cleared by the body.¹

•Cervical cancer is one of the most preventable and treatable forms of cancer



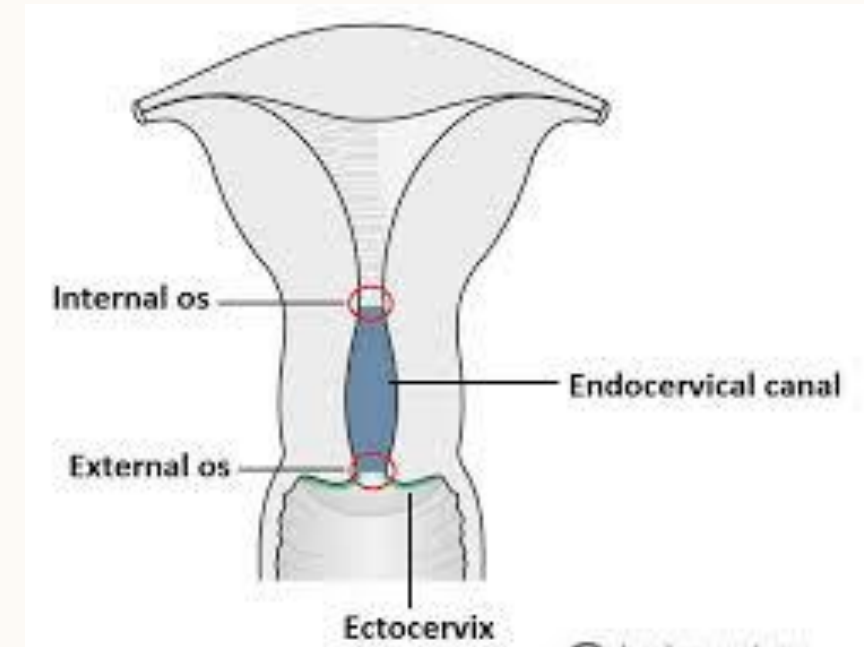
1. <https://www.who.int/health-topics/cervical-cancer> 2. <https://www.cancer.gov/about-cancer/causes-prevention/risk/infectious-agents/hpv-and-cancer>

3. <https://www.cancer.org.au/clinical-guidelines/cervical-cancer/cervical-cancer-screening/management-of-oncogenic-hpv-test-results/oncogenic-hpv-types-16-and-or-18>

CERVICAL CANCER

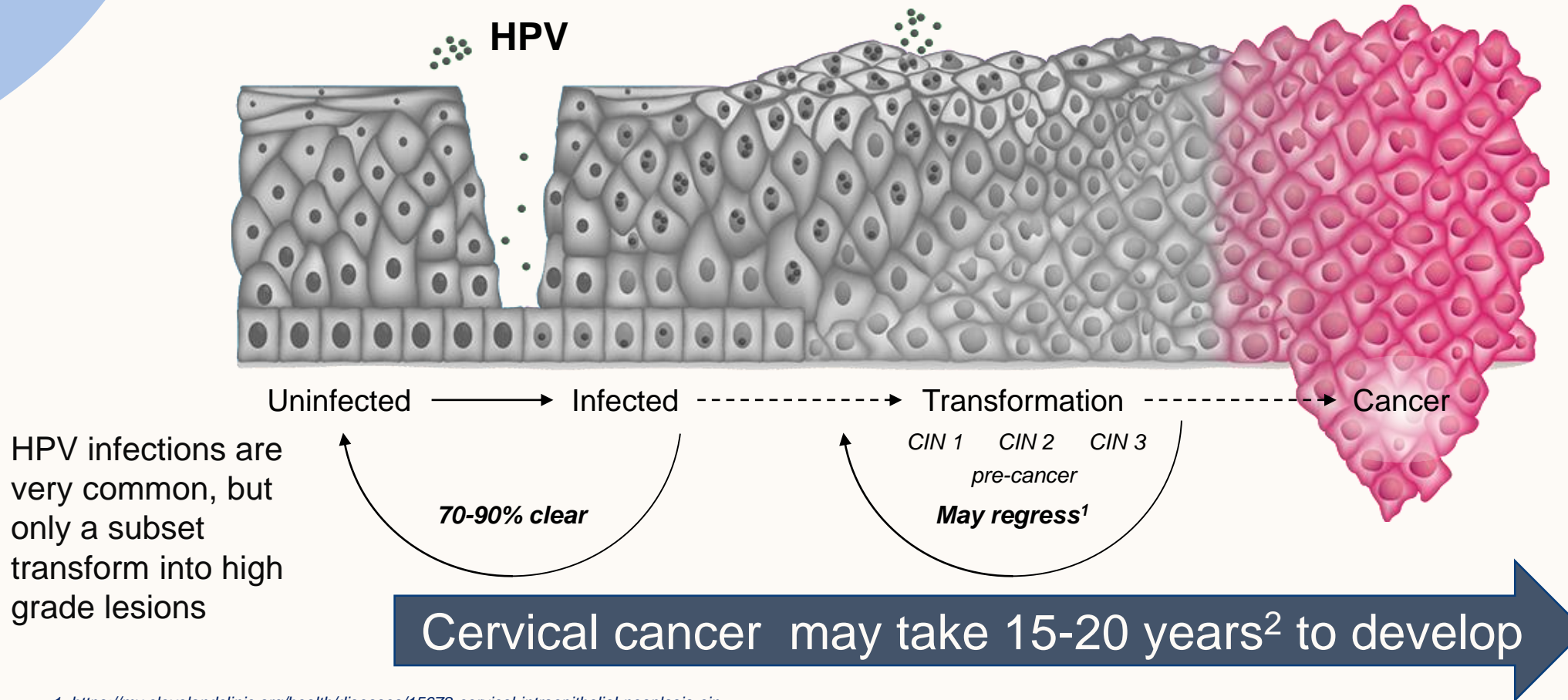
What causes it?

- HPV (**human papillomavirus**) – very common; ~80% of men & women will be exposed to it
- BUT: Only minority will develop pre-cancer/cancer as most HPV infection are **TRANSIENT**. HPV infection does not have symptoms
- HPV comprises of 2 groups
 - Cancer causing HPV (14 types): **HPV 16 and 18 most common (70%)**
 - Non-cancer causing HPV
- Cervical cancer happens when there is **PERSISTENT** infection from the cancer-causing HPV



CERVICAL CANCER MAY TAKE YEARS OR DECADES TO DEVELOP

Enable prevention with screening



HPV infections are very common, but only a subset transform into high grade lesions

1. <https://my.clevelandclinic.org/health/diseases/15678-cervical-intraepithelial-neoplasia-cin>

3. <https://www.who.int/news-room/fact-sheets/detail/cervical-cancer>

3 IMPORTANT STEPS



Jab

HPV Vaccine



Pap

HPV or Pap Smear



Zap

Colposcopy (if abnormal)



WHAT IS THE *JAB?*



HOW IS THE HPV VACCINE GIVEN?

- HPV vaccination ↓ *risks of precancer & cancer of cervix* (and also vagina, anus, penis)
- Currently *3 types of HPV vaccinations* available: Cervarix, Gardasil, Gardasil 9
- Prevents future infections of HPV BUT does not treat current or persistent infections
- Licensed to **girls and boys between 9 – 26 years old**

BUT Gardasil 9 can be given
up to Age 45 in males &
females

There are 14
cancer causing
HPV subtypes

	Cervarix	Gardasil	Gardasil 9
Protection from cancer causing infection	Yes HPV 16 and 18 70% of all cervical cancer	Yes HPV 16 and 18 70% of all cervical cancer	Yes HPV 16 and 18 + 5 more types 90% of all cervical cancer
Protection from genital Warts	No	Yes (HPV 6 and 11)	Yes
Medisave cover	Yes (Age <26) ~400 SGD for 3 doses	Yes (Age < 26) ~400 SGD for 3 doses	No ~680 SGD for 3 doses
Where to get it?	<ul style="list-style-type: none"> At all polyclinics School vaccination programme (girls only) 	Not being distributed	<ul style="list-style-type: none"> All hospitals Several GPs & private gynae clinics

Side effects mild: pain and redness over injection site, headache, fever, dizziness

WHO SHOULD GET THE *JAB*

The Best Effect

- Age <26 (younger better)
- Not yet sexually active

Still Very Important

- Age <45 (screening still important)
- Sexually active
- Treated cervical pre-cancer

Good to Have

- Males

3 doses, 2 months apart

2 doses adequate in Age 9-14

1 dose probably better than nothing

Routine screening is still mandatory!

SCHOOL VACCINATIONS

- Bivalent vaccine only *i.e. Cervarix*
- Opt-in scheme



Secondary 1 females

Up to Secondary 4 or 5

Opt in to receive free HPV vaccination

One-time catch-up programme will be progressively provided

3 IMPORTANT STEPS



Jab

HPV Vaccine



Pap

HPV or Pap Smear



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Colposcopy (if abnormal)



DOING THE *PAP*

WHO MUST GO FOR CERVICAL CANCER SCREENING?

- All women between the ages of 25 and 69 years old who have EVER had sex should go for **REGULAR** cervical cancer screening.
- 2019 Singapore National Cervical Cancer Screening Programme



ScreenforLife

25 to 29 years
old

PAP smear every 3 years

30 to 69 years
old

HPV test every 5 years

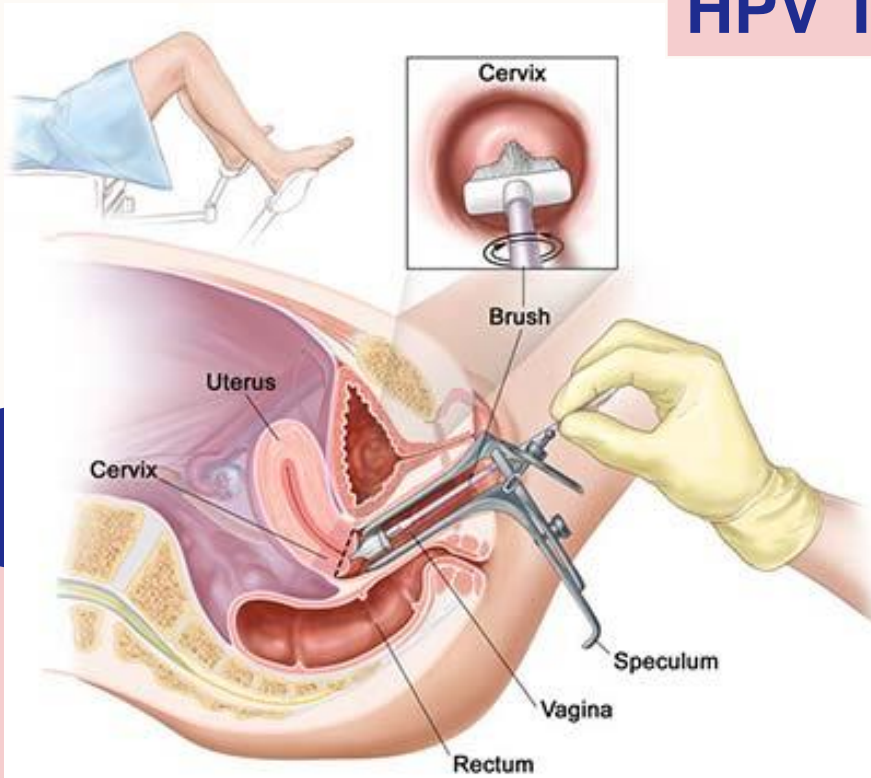
WHAT HAPPENS IN CERVICAL CANCER SCREENING?

Pap Smear

Detect abnormal cells on the cervix due to persistent infection by cancer-related HPV

HPV Test

Detect the virus HPV itself on your cervix



PAP/ PAP Smear / Cytology¹

Clinician collected only

25 - 29 years, 3 yearly

Looks for abnormal changes in
your cervical cells under a
microscope⁴



HPV Test

Clinician collected only¹

>=30 years, 5 yearly

HPV testing is done with a DNA-based molecular test

Checks for the presence of high-risk HPV, even before
changes to the cervical cells occurs³



1. https://www.sccps.org/wp-content/uploads/2019/03/CSS-Clinical-Mgt-Guidelines-2019_March-Release.pdf

2. Cervical Cancer Population Screening in the Netherlands <https://www.rivm.nl/sites/default/files/2022-03/013673%20Factsheet%20Cervical%20Cancer%20Screening.pdf>

3. <https://www.cancer.org/cancer/risk-prevention/hpv/hpv-and-hpv-testing.html> 4. <https://medlineplus.gov/lab-tests/pap-smear>

AFFORDABLE CERVICAL SCREENING IS AVAILABLE

Cervical Screening (PAP or HPV test)			
	Screen For Life Programme (SFL) at CHAS clinics	Polyclinics	Singapore Cancer Society Bishan Clinic
Cost	<p>\$0 - \$5 for PAP/ HPV test Free for the Pioneer Generation (PG)</p> <p>\$2 for the Merdeka Generation (MG) and Chas blue and orange card holders</p> <p>\$5 for other Singaporeans.</p>	<p>\$15 for PAP test</p> <p>\$22.50 for HPV test</p>	No cost for Singaporeans

<https://www.moh.gov.sg/news-highlights/details/affordable-health-screenings-available#:~:text=Under%20the%20Screen%20for%20Life,holders%2C%20and%20%245%20for%20other>

Most common group of women diagnosed with cervical cancer in Singapore

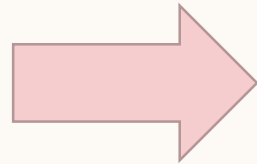
Never
been
screened

Did not go for
REGULAR
screening

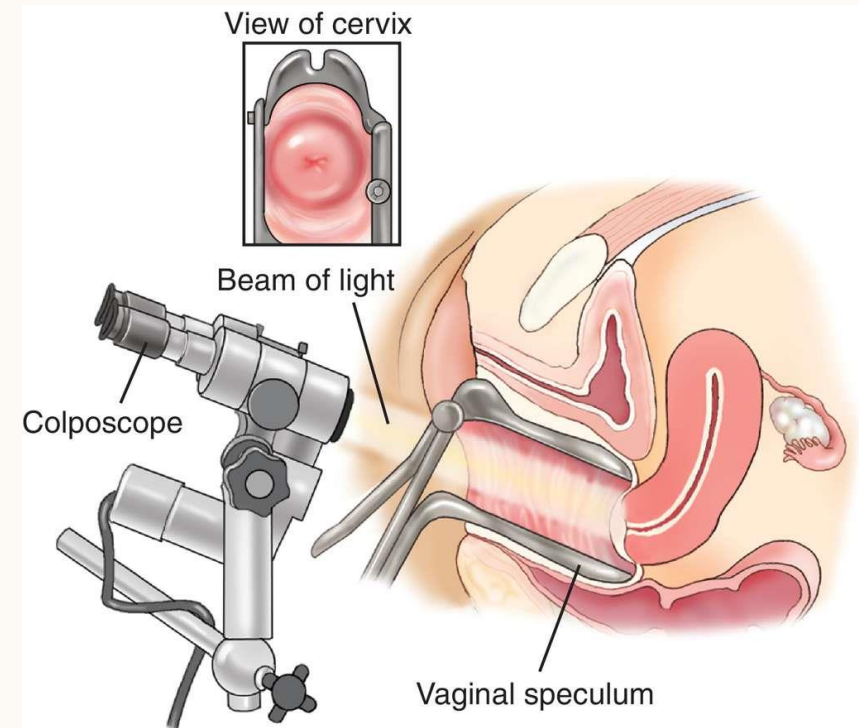
WHAT HAPPENS WITH AN ABNORMAL CERVICAL SCREEN?

High risk
HPV
positive

Abnormal
PAP smear

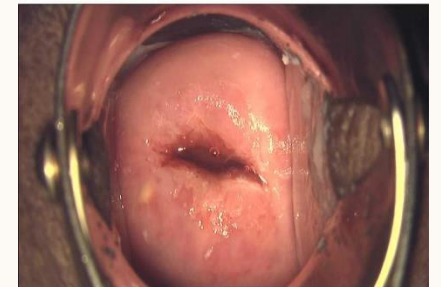
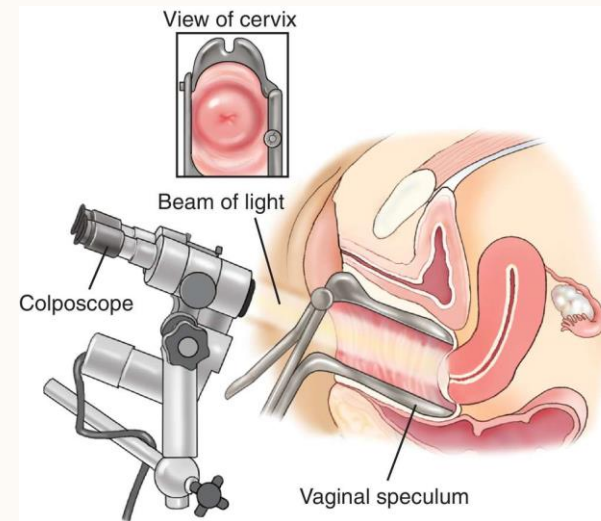


Colposcopy



COLPOSCOPY

- Outpatient procedure
- Diagnostic test looking for cervical pre-cancer. Biopsy may be taken
- Guides recommendation on the best treatment / monitoring for you



The goal is not to pick up cancer but to

1. Detect precancer early when it is easy to treat
2. Keep a closer eye on at-risk individuals

3 IMPORTANT STEPS



Jab

HPV Vaccine



Pap

HPV or Pap Smear



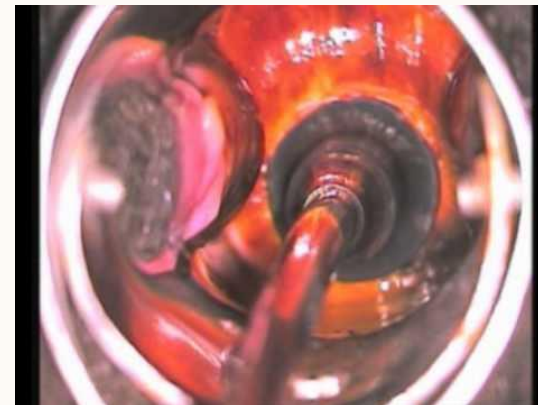
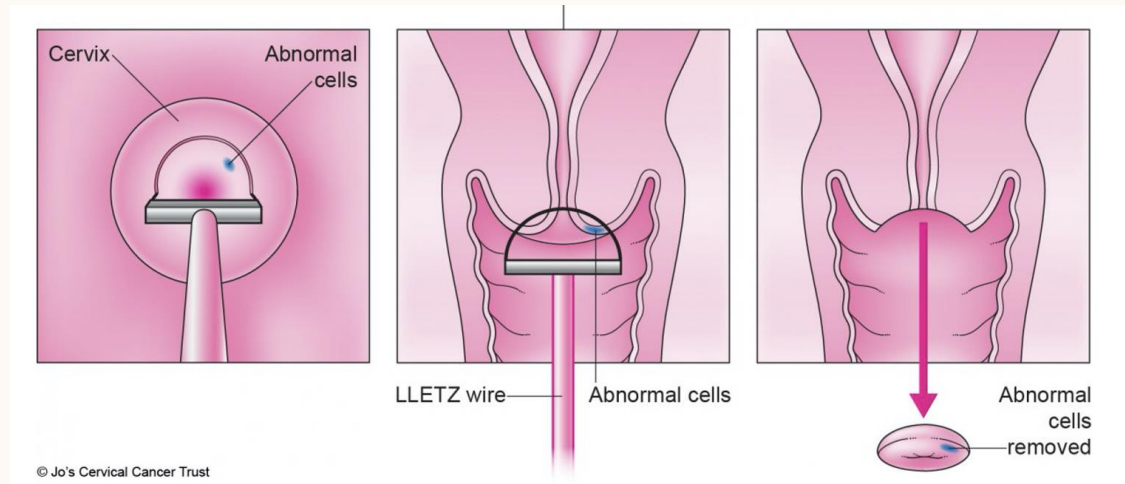
Zap

Colposcopy (if abnormal)

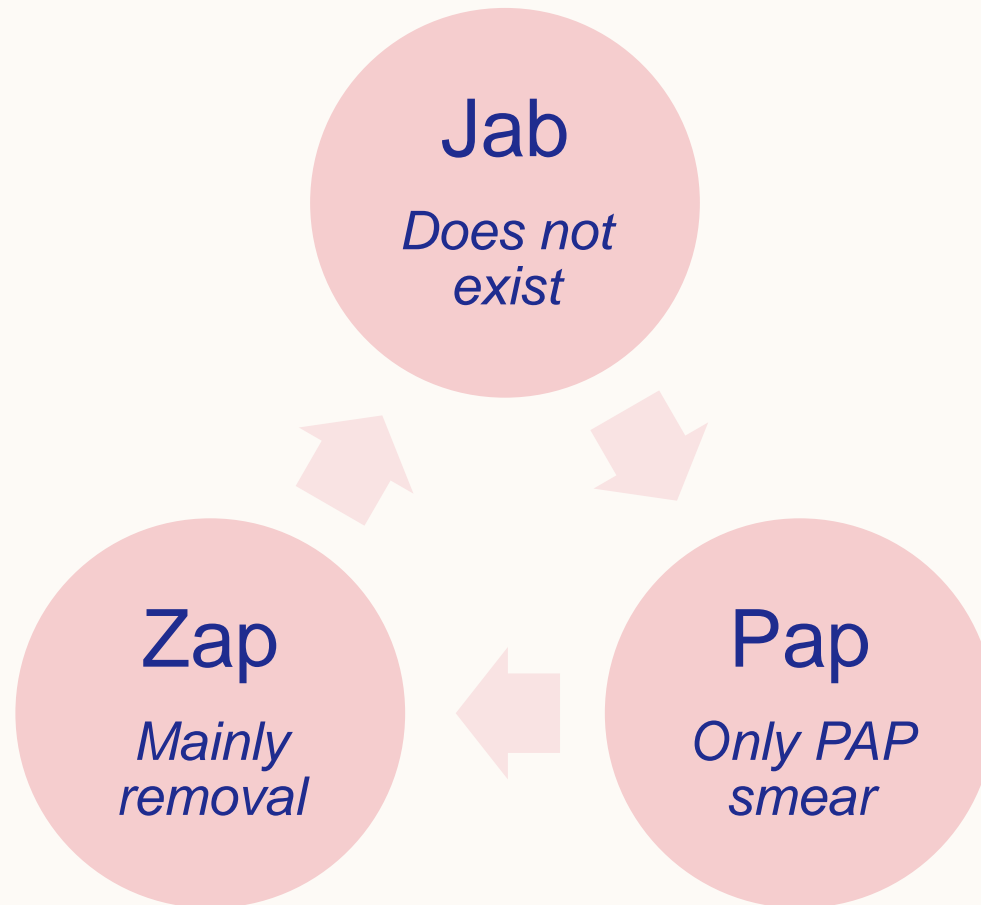
WHEN DO WE *ZAP?*

HOW DO WE *ZAP*?

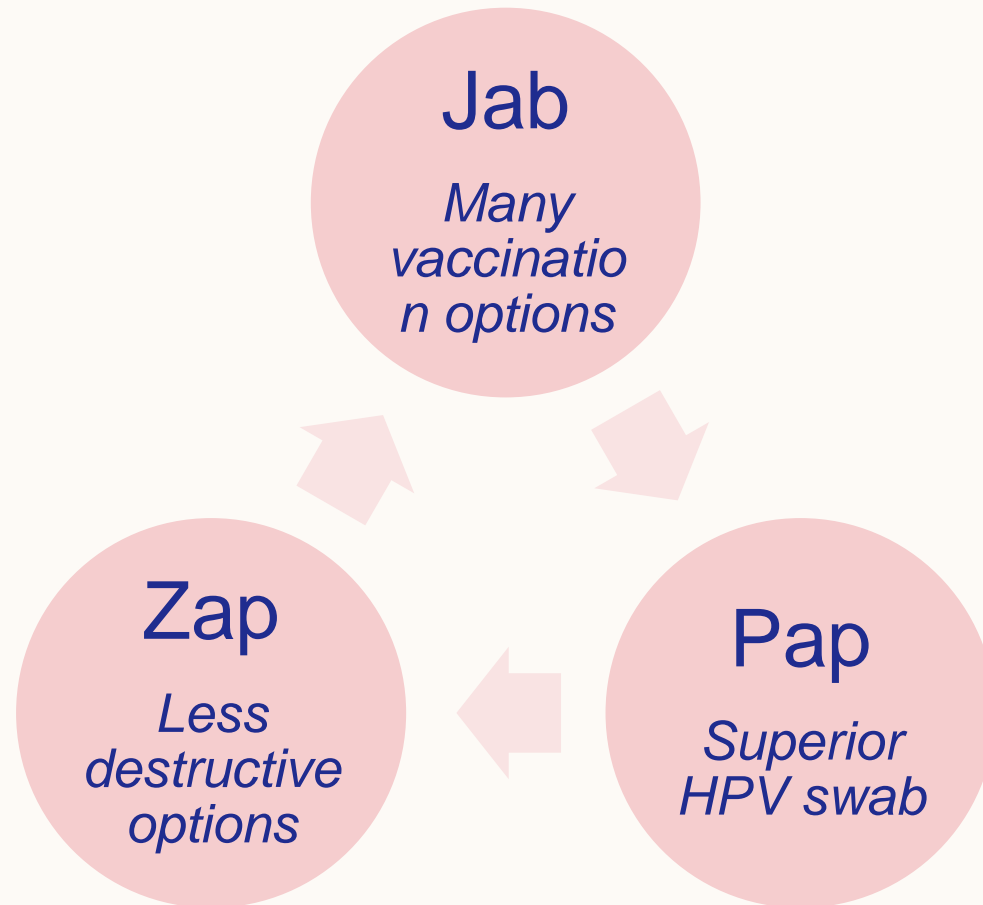
- Treatment for pre-cancer is very effective
 - Done either as outpatient or day surgery procedure
 - Pre-cancer cells are either
 - Removed (Excised)
 - Destroyed (Ablated)
- Up to 99% cure from pre-cancer



PREVIOUSLY



NOW





BARRIERS WHICH EXIST

I AM SCARED

- The nurses are very professional & experienced
- Do it as a group with friends or a social group!

Cervical cancer is a long, slow cancer & is due to persistent HPV

In older women, screening is much more important in prevention than vaccination

The vaccine's best benefit is before sexual activity & at young age

HPV can be obtained by means other than conventional sex

Good sex-ed is still important is still important for other aspects! (e.g. contraception, STIs)

You can use your Medisave for your daughter's vaccine until Age 26. Think of it as a gift of health

I am too old to get cervical cancer

My daughter is not sexually active

The HPV vaccine may encourage unwanted behaviours



WHAT ELSE CAN I DO?



REDUCE RISK FACTORS

- No smoking
- Avoid multiple sexual partners
- Avoid early age at onset of sexual intercourse
- Stay healthy, improve immunity

EARLY DETECTION OF SYMPTOMS

- **Bleeding after sexual intercourse** (post-coital bleeding)
- **Bleeding between normal periods** (inter-menstrual bleeding)
- **Bleeding after menopause** (post-menopausal bleeding)
- Vaginal discharge that smells unpleasant

See a doctor if any of the above symptoms develop
(May still be caused by other non-serious common condition)

LOOK OUT FOR YOUR LOVED ONES

- Go as a group!
- Don't be shy, ask your mum/sister/daughter if she has gone for a check (you want her to live long don't you?)
- Discuss with your friends about whether your daughters have been vaccinated

TAKE CHARGE OF YOUR HEALTH AND BOOK YOUR SCREENING TODAY



STEP 1:
Scan the QR Code to check your eligibility for subsidised screening

Book an appointment at the Polyclinic



Click on the menu to Select "Appointments"

APPOINTMENTS



Select 'Make New Appointment'

JANE DOE
SXXXX123A
Make New Appointment >

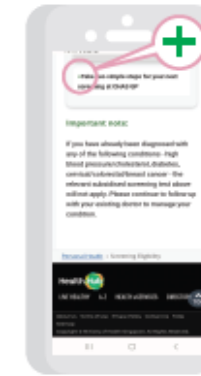


Select preferred polyclinic and pick 'Cervical Cancer Screening'

OR

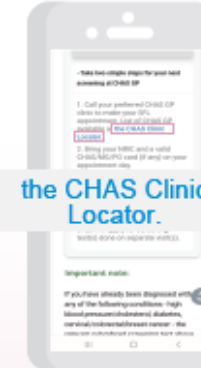
Call a CHAS clinic for an appointment

STEP 2



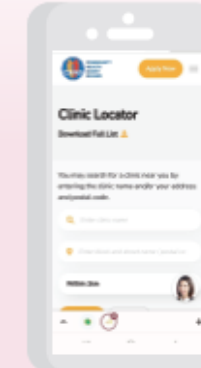
Scroll down. Click '+' to expand the menu.

STEP 3



Click on the CHAS Clinic Locator

STEP 4



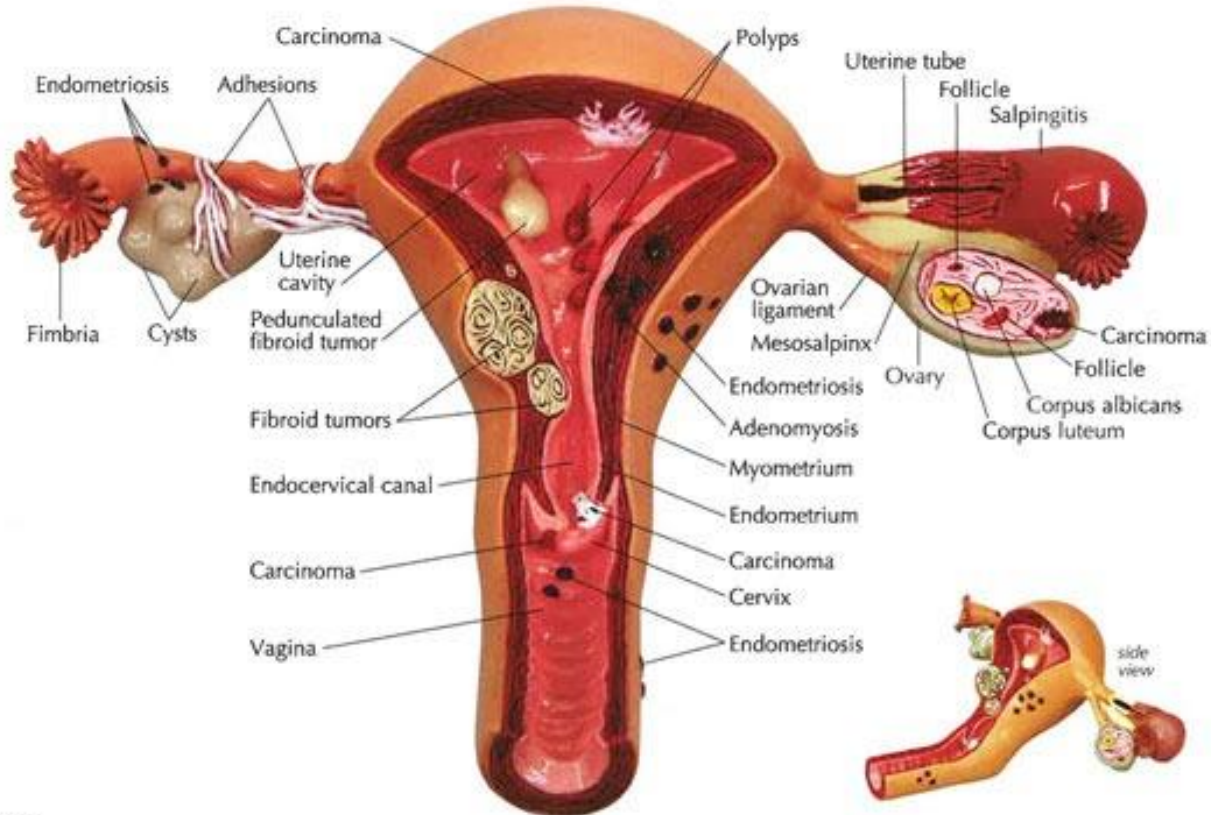
Search for a clinic near you. Call to make an appointment for cervical cancer screening.

CANCERS OF THE WOMB, OVARIES, VAGINA...

What to look out for?

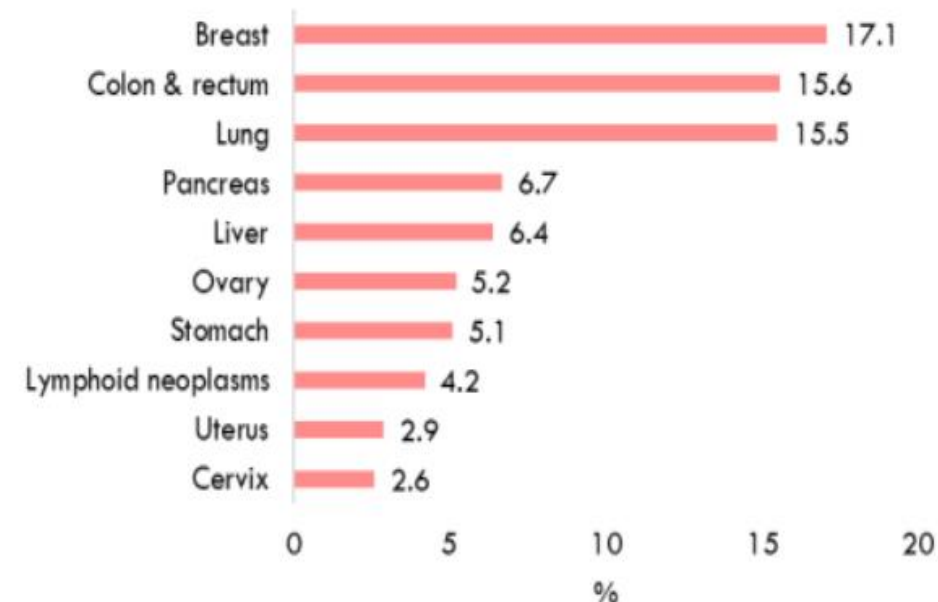
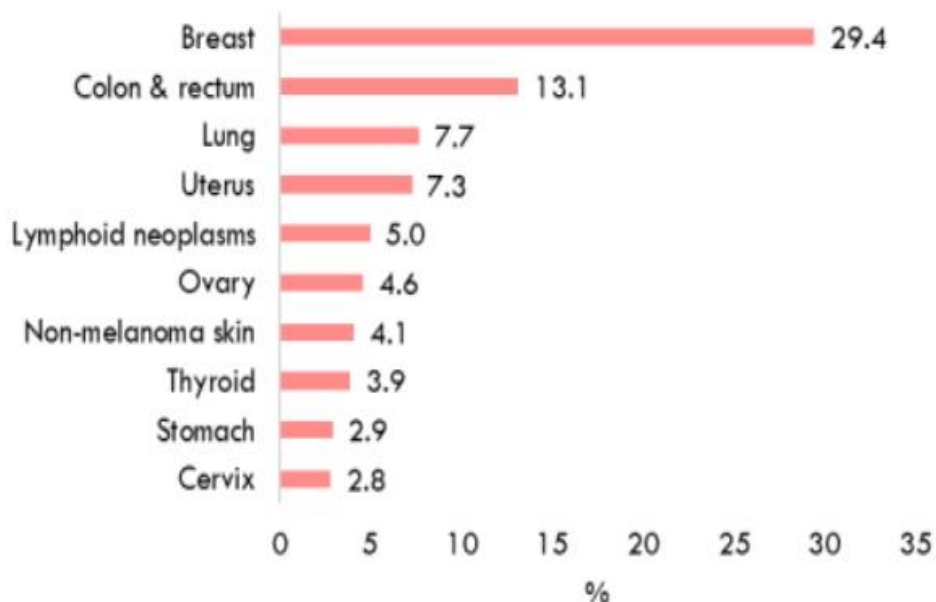
UTERUS - OVARY

Common Pathologies



WOMB AND OVARIAN CANCER - #4 & #6

Female
Incidence (all sites) - 40127
Mortality (all sites) - 12940



Ten most frequent cancers and cancer deaths in Singaporean females 2015 - 2019

**Singapore Cancer Registry Annual Report 2019,
National Registry of Diseases Office 2022
Singapore Cancer Registry, Health Promotion Board**

CURRENTLY...

- No screening programme available
- If healthy and well, no need for regular pelvic ultrasound scans

EARLY DETECTION OF SYMPTOMS

- **Bleeding after sexual intercourse** (post-coital bleeding)
- **Bleeding between normal periods** (inter-menstrual bleeding)
- **Abnormal periods**
- **Bleeding after menopause** (post-menopausal bleeding)
- **Vaginal discharge that smells unpleasant**

See a doctor if any of the above symptoms develop

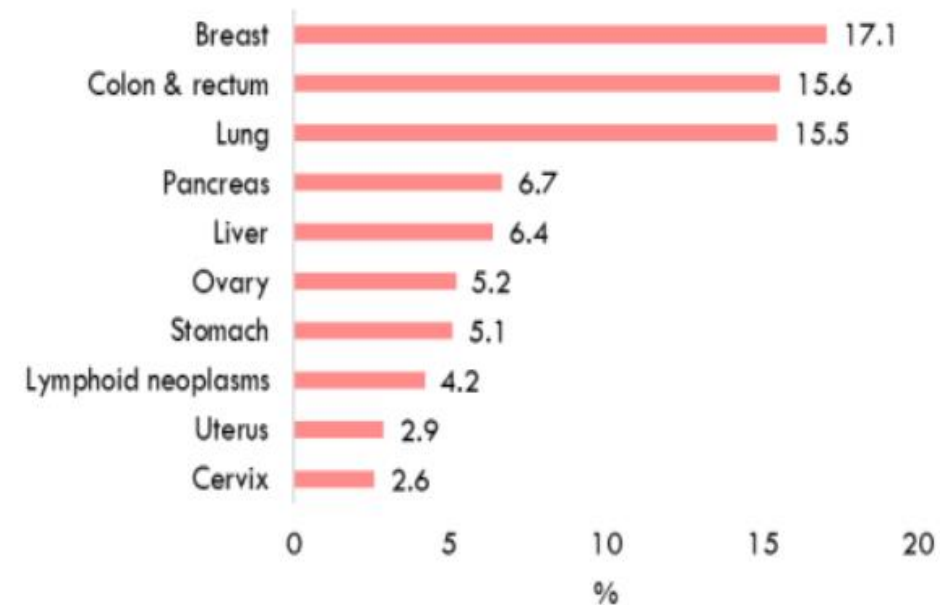
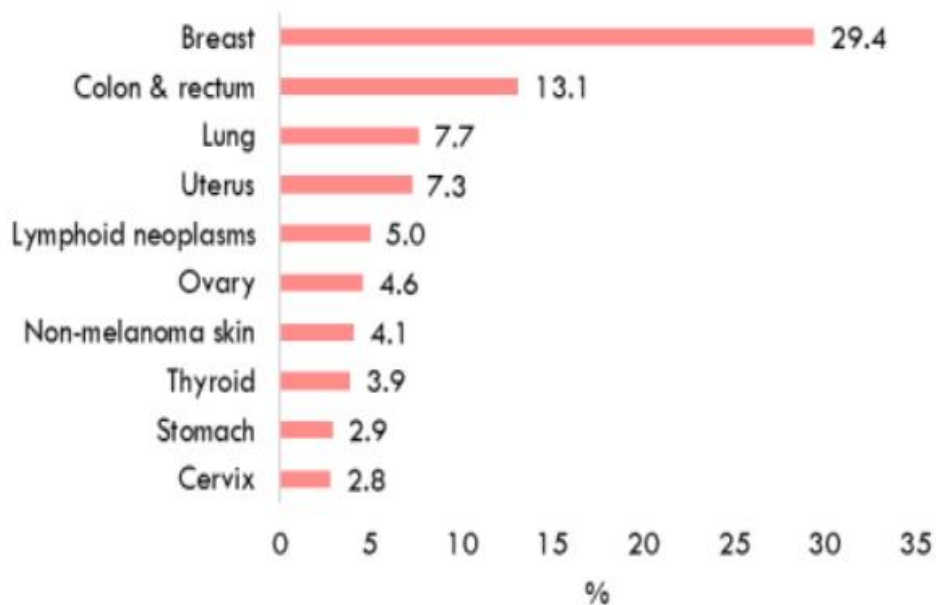
(May still be caused by other non-serious common conditions)

BREAST CANCER

What to look out for?

BREAST CANCER - #1

Female
Incidence (all sites) - 40127
Mortality (all sites) - 12940



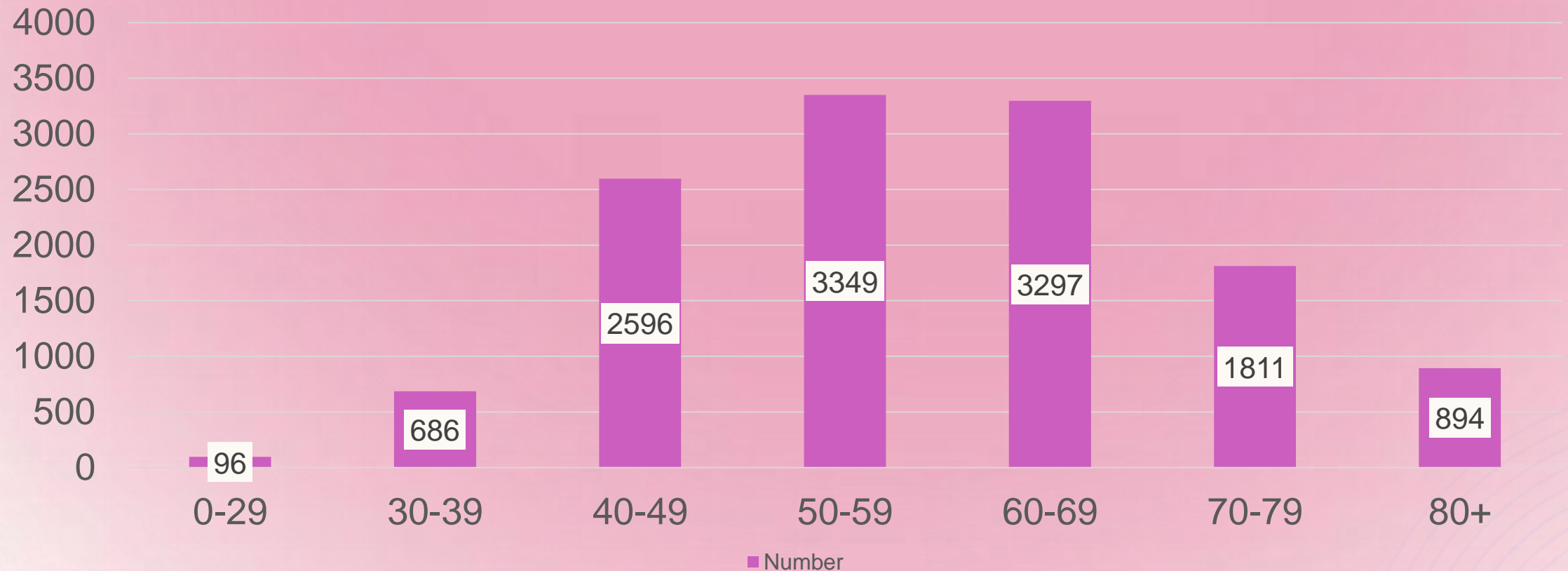
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BREAST CANCER

About 1,100 new cases are diagnosed annually and approximately 270 women die in Singapore each year from breast cancer.

Breast Cancer Incidence by Age Group, 2017-2021



BREAST CANCER

What should you Do?

- Be aware of your own breast health
 - Assess your risk
 - Regular Breast Self Exam (BSE) and screening



Breast Cancer Screening Guidelines (Average Risk):

20-39
Years Old

Breast Self-Examination once a month

40-49
Years Old

Breast Self-
Examination
once a month

Mammogram
once a year





50 & above
Years Old

Breast Self-
Examination
once a month

Mammogram
once in two years

Key Points on Screen for Life (SFL) Screening Mammograms

- Accessible
 - Screen For Life Mammograms performed at **Polyclinics**
- Affordable

			
Pioneer Generation cardholders	Merdeka Generation cardholders	Eligible Singapore Citizens	Permanent Residents
\$25	\$37.50	\$50	\$75

- \$25 subsidy for >50 from Singapore Cancer Society in April & October



Guide your friends & loved ones:

3 ways to book a
SingHealth Polyclinic

Screening Mammogram

1 Call
6536 6000



Scan to Book!



SUMMARY

- Prevention is better than cure!
- Regular cervical cancer screening from age 25
- HPV vaccination early
- Regular breast examination, and mammogram from age 40
- Reduce risk factors
- Early consult when symptoms arise

**THANK
YOU 😊**

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