

What is Cervical Cancer Disease

Dr Sithembile Dlamini- Nqeketo
WHO-South Africa



**World Health
Organization**



Key Issues

1

What is cervical cancer, its incidence, its morbidity & mortality?

2

What causes cervical cancer?

3

How does HPV infection lead to cervical cancer?



A major but preventable global burden

604 000

new cases worldwide in
2024

280 000

deaths worldwide in
2024

5th

most common cancer,
and 4th leading cause of
cancer death, in women

26

countries where it is the
most common cancer in
women, many in sub-
Saharan Africa

Almost completely preventable, and highly treatable when found early

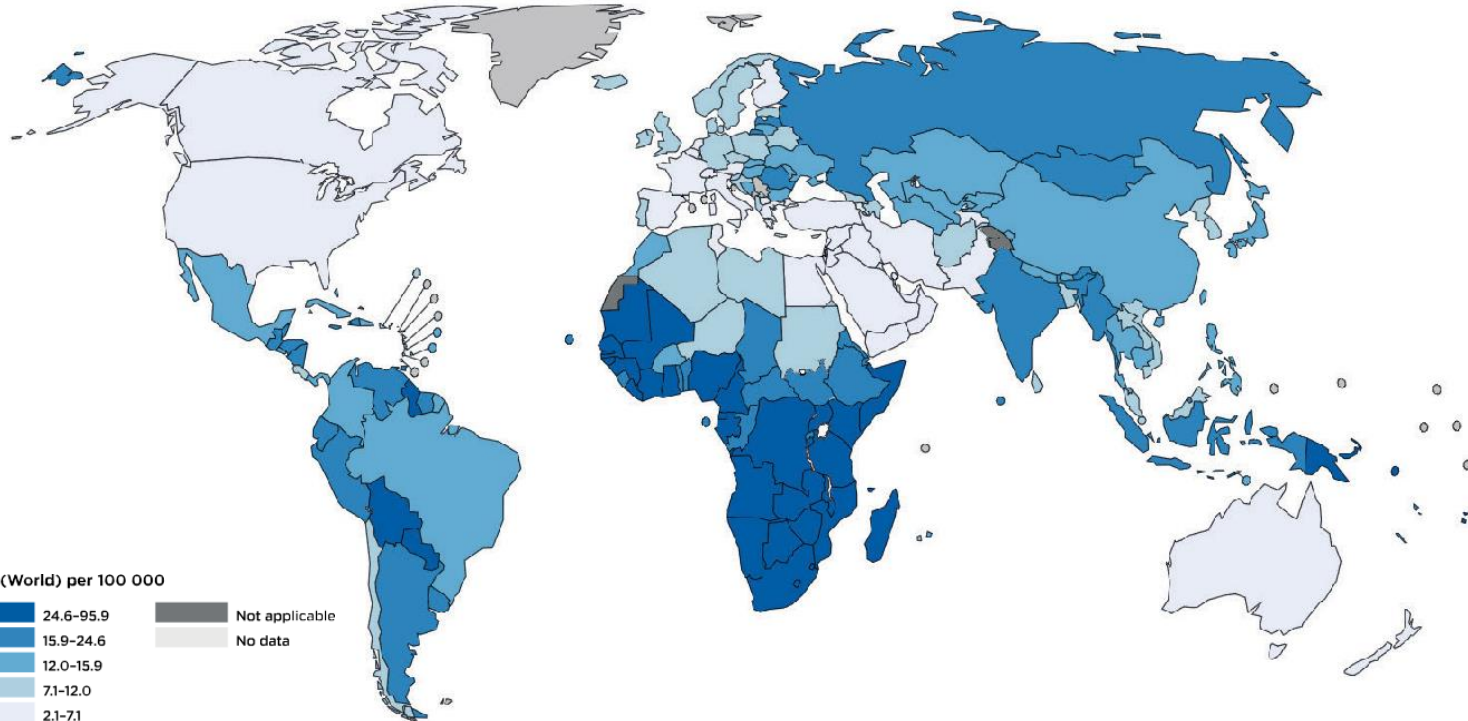
Source: WHO 2024; IARC GLOBOCAN

Inequity in the burden of cervical cancer



around
604,000 women diagnosed
with cervical cancer in 2024

Age-standardised Incidence Rates (ASIR/100,000)



Global
Incidence 2022
14.1

WHO Region:

AFR: **31.9**

AMR: **11.5**

EUR: **10.1**

EMR: **5.4**

SEAR: **17.7**

WPR: **3.1**

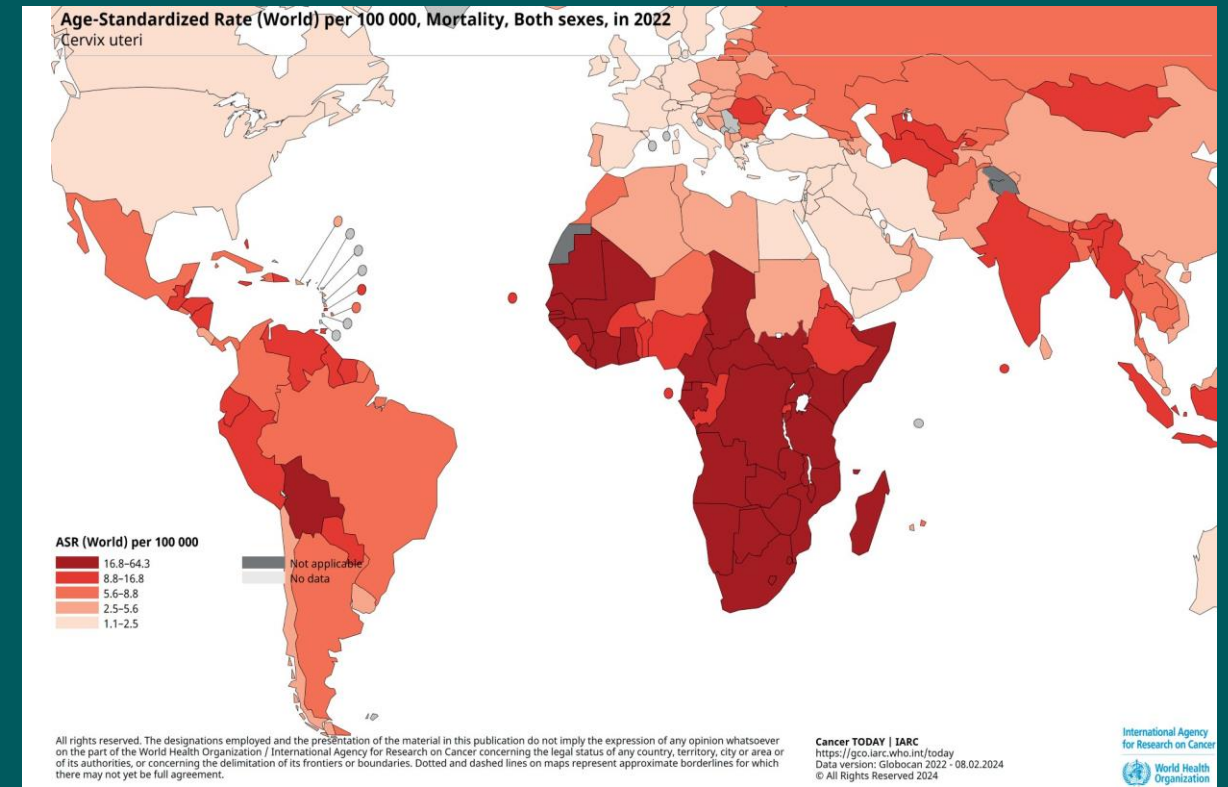
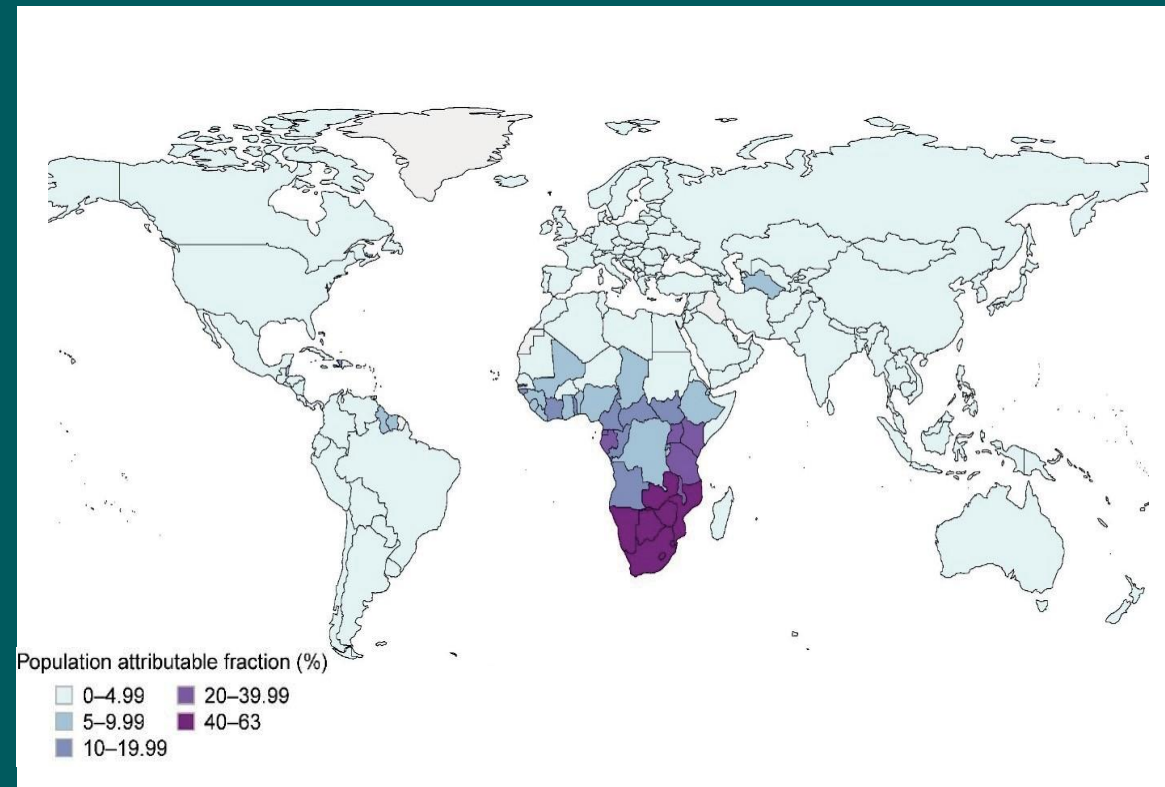
ASIR per 100,000

Target < 4

Population attributable fraction of women with cervical cancer, living with HIV



Risk for cervical cancer among women living with HIV is **6x** higher



Steinle D, Tanaka LF, Lee KK, et al. Estimates of the global burden of cervical cancer associated with HIV. Lancet Glob Health 2020

**Progress founded on lived experience,
rooted in communities**



- > 60%** of women with cervical cancer experience financial hardship
- > 40%** of women with cervical cancer abandoned by intimate partners
- > 200,000** maternal orphans each year from cervical cancer (children <18 years old)

KILLS OR DERAILS WOMEN IN THE PRIME OF THEIR LIVES

- Years of lost life
- Loss of income,
- Financial distress
- Work and employment challenges.
- Loss of workforce
- Reduction in family income
- Community structure severely diminished



South Africa: burden and HPV vaccination

11 000

new cervical cancer cases
in 2022

5 976

deaths in 2022

2014

National school-based programme for Grade 5 girls (9+ years); 87% first-year coverage, 80–85% since

2024

Single-dose schedule; free vaccine extended to private schools; goal of 90% by age 15

33

new cases per 100 000
women (age-
standardised); mortality
19

1st

most frequent cancer
among women aged 15–
44

2025

79% HPV Coverage (WUENIC)
16/18 prevalence of 1.5% in girls with
register-verified vaccination

Sources: IARC GLOBOCAN 2022; ICO/IARC HPV Centre; SA National Department of Health; Lancet Glob Health 2025

Every death preventable and avoidable



Number of
cervical cancer
from 2012-2022
> 3 million



Death averted
if targeted achieved
2070: >14 million
2120: >62 million

**Global strategy to accelerate the
elimination of cervical cancer as
a public health problem**



VISION: A world without cervical cancer

THRESHOLD: All countries to reach < 4 cases 100,000 women
years

90%

of girls fully
vaccinated with HPV
vaccine by age 15
years.

70%

of women are screened with
a high-performance test by
35 years of age and again
by 45 years of age.

90%

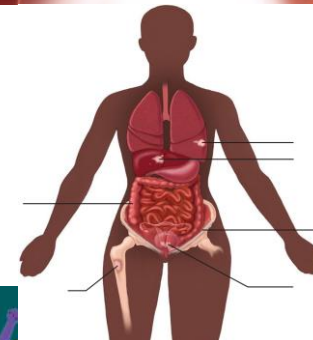
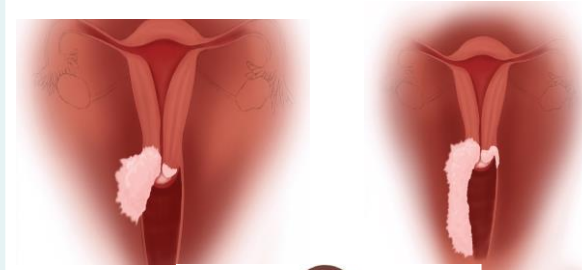
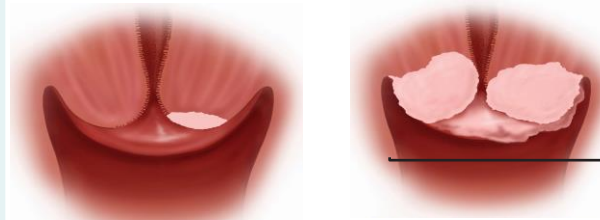
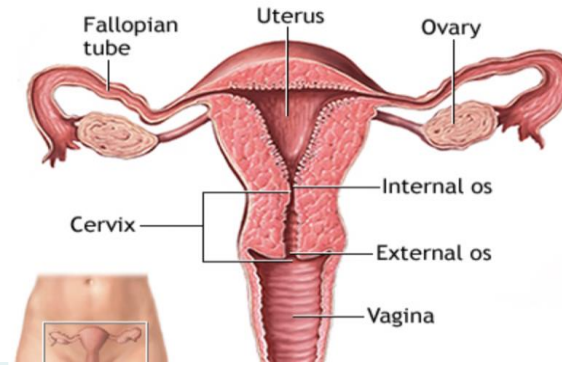
of women identified with cervical
disease receive treatment
(90% of women with precancer
treated, and 90% of women
with invasive cancer
managed).

2030 Control Targets provide a
comprehensive strategy for cervical
cancer control to ensure that lifetime
benefits are maintained, using life-course
approach.

What is cervical cancer?

A malignant disease in which abnormal cells of the cervix grow uncontrollably and invade surrounding tissue

- Caused by persistent infection with high-risk HPV
- HPV is a common virus, easily spread by skin-to-skin
- Starts on the surface as a long-lasting, treatable precancer
- Spreads locally, cervix, and invasive, can grow deep into (vagina, bladder, rectum and uterus)
- It can spread to distant organs and other parts of the body (metastasize) in some cases



Squamous cell carcinoma

SCC

Arises from the squamous cells covering the ectocervix; the large majority of cases

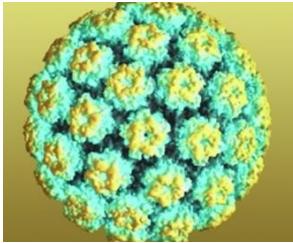
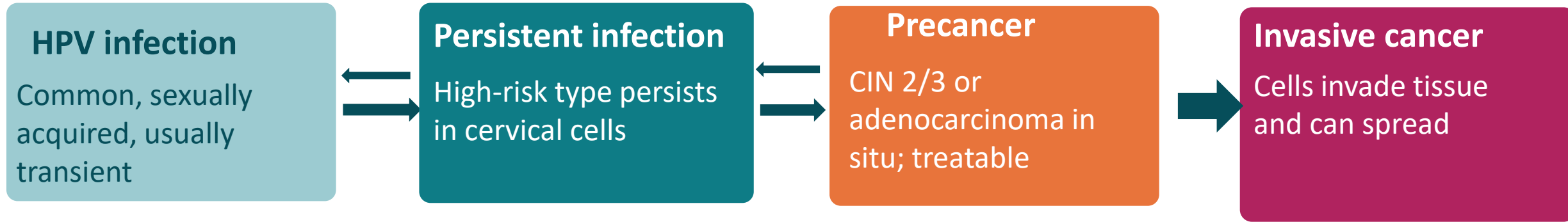
Adenocarcinoma

AC

Arises from glandular cells of the endocervical canal; second most common and harder to detect by cytology



How cervical cancer develops



Typically, 15–20 years | 5–10 years with weakened immunity, e.g. untreated HIV

Most HPV infections clear on their own within 1–2 years.

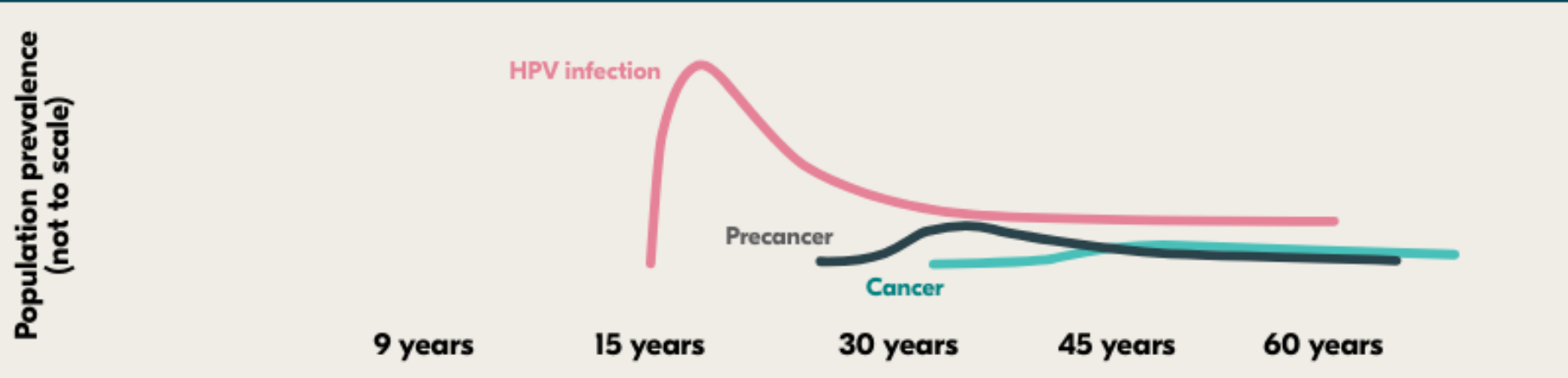
Screening and treatment of precancer interrupt the pathway before cancer forms.



Cervical Cancer – Life course

Timespan for
Cervical cancer
to develop

Fig. 9. Life-course approach to cervical cancer interventions



Primary Prevention

Girls 9–14 years

- HPV vaccination

Girls and boys, as appropriate

- Health information and warnings about tobacco use
- Sexuality education tailored to age and culture
- Condom promotion/provision for those engaged in sexual activity
- Male circumcision

Secondary Prevention

Women > 30 years of age

- Screening with a high-performance test equivalent to or better than HPV test
- Followed by immediate treatment or as quickly as possible, of precancerous lesions.

Tertiary Prevention

All women, as needed

Treatment of invasive cancer at any age

- Surgery
- Radiotherapy
- Chemotherapy
- Palliative care

Prevention
and Treatment

Key messages

1

HPV is the necessary cause: persistent high-risk infection drives virtually all cases

2

Development is slow (15–20 years; 5–10 with weakened immunity), leaving a window to act

3

Precancer is detectable and treatable; screening finds it before symptoms

4

Vaccinate, screen, treat: the WHO 90–70–90 targets make elimination achievable

World Cervical Cancer Elimination Day: 17 November

“Together We Can Eliminate Cervical Cancer”



Credits +





THANK YOU



References

- Global Strategy to accelerate the elimination of cervical cancer as a public health problem. WHO 2020: <https://www.who.int/publications/i/item/9789240014107>
- World Health Organization. Cervical cancer: fact sheet. [who.int/news-room/fact-sheets/detail/cervical-cancer](https://www.who.int/news-room/fact-sheets/detail/cervical-cancer)
- WHO. Global strategy to accelerate the elimination of cervical cancer as a public health problem. Geneva, 2020.
- WHO. Cervical Cancer Elimination Initiative: from call to action to global movement. 2023.
- IARC. Global Cancer Observatory, GLOBOCAN 2022. gco.iarc.fr
- IARC Monographs, Vol. 100B: Human papillomavirus (HPV).
- ICO/IARC Information Centre on HPV and Cancer. South Africa: HPV and related cancers, fact sheet 2023. [hpvcentre.net](https://www.hpvcentre.net)
- Population impact of South Africa's HPV vaccination programme. Lancet Glob Health, 2025; SA National Department of Health.