



TAMIL NADU CANCER REGISTRY PROGRAM (TNCRP)
A collaborative study by the Cancer Institute (W.I.A) and Department of Health and Family Welfare, Government of Tamil Nadu, Chennai
Sampath P, Swaminathan R on behalf of the TNCRP Study Group, Department of Epidemiology, Biostatistics and Cancer Registry.



CANCER INSTITUTE (WIA)

TNCRP

Vision and Mission

A systematic and continuous statewide cancer surveillance through **Population Based Cancer Registry (PBCR)** registering all new cancers occurring in the state of Tamil Nadu since 2012.

Single Largest Cancer Registry

Covers over 80 million resident population of Tamil Nadu.

Legal Framework

Cancer declared as a notifiable disease under:

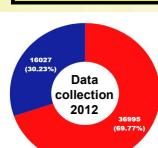
- G.O. (Ms.) No. 132 – April 17, 2012
- G.O. (Ms.) No. 66 – February 22, 2018 issued under Public Health Act 1939

Data Sources

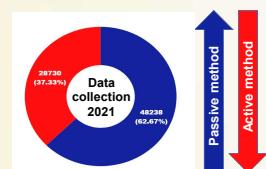
Cancer notifications (hard copy/e data) are reported from 2,000+ sources in and outside of Tamil Nadu by active and passive methods.

- Government & Private Hospitals – Cancer/other specialties.
- Pathology/Imaging Centers, screening programs.
- Supportive care services, cancer mortality data from Civil Registration System.

Comparison of Cancer Cases Registered by Active and Passive Methods (Year 2012 vs 2021)



Active method - Registry staff visit hospitals and other sources in person to identify cancer cases from medical record and fill the notification form.



Passive method relies entirely on individual hospitals sending notifications electronically in varying periods of time.

- Cancer patient line-list from **HBCRs** (Hospital Based Cancer Registry).
- Cancer line-list in different structure and formats.
- Discharge summary/pathology reports
- Extract of medical records.
- By post.

PDF, Word and Image files.

An Overview of New Cancer Incidence in Tamil Nadu (2012-2025)

Observed Number of Male and Female Cancer Cases (2012-2021)



- ❖ From 2012 to 2021, number of cancer cases showed a significant rise. Annual percentage increase is **higher for males (46.2%)** than for **females (44.4%)**.

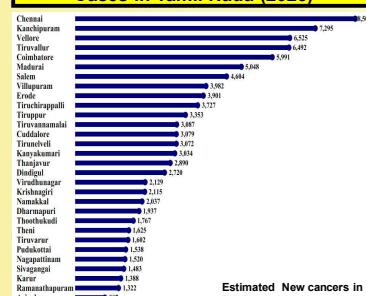
- ❖ There were more women with cancer than men (1.2:1).

Projected Number of Male and Female Cancer Cases (2022-2025)

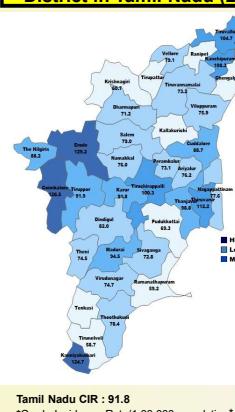


- ❖ Projected cancer cases are expected to rise steadily for both sexes from 2022 to 2025

District-wise Projection of New Cancer Cases in Tamil Nadu (2025)

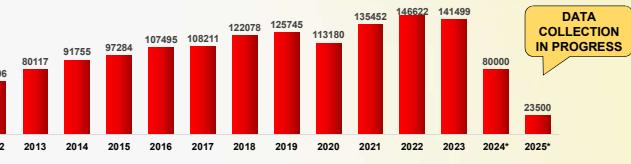


CIR* Comparison Across District in Tamil Nadu (2021)

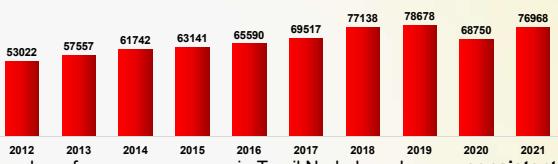


- Chennai represents 155 divisions within the old metropolitan limits.
- Kanchipuram includes Chengalpattu district.
- Nagapattinam includes Mayiladuthurai district.
- Tirunelveli includes Tenkasi district.
- Vellore includes Ranipet and Tirupattur districts.
- Villupuram includes Kallakurichi district.

Number of Cancer Notifications (2012-2025)

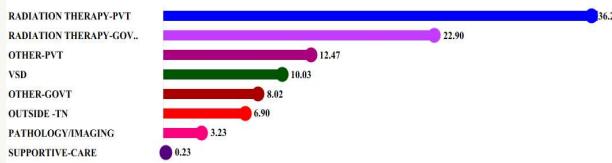


Number of New Cancer Cases (2012-2021)



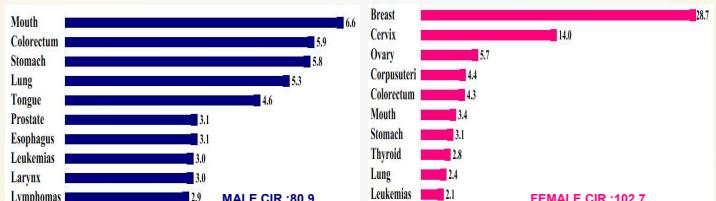
- The number of new cancer cases in Tamil Nadu has shown a **consistent upward trend** from 2012 to 2021 barring 2020: from **53,022** in 2012 to **76,968** in 2021.
- The average annual percent increase is **4%**
- The data processing for the period **2022-2023** is **ongoing** (data cleaning, eliminating multiple notifications and updating information, validity and consistency checking).

Distribution (%) of New Cancer Cases by Source Type



- ✓ A majority of cancer cases (**59%**) are registered from hospitals with RT-facility, both government (**22.9%**) and private (**36.2%**). Non-RT hospitals accounted for **20%**.
- ✓ Patients receiving cancer care outside Tamil Nadu has **reduced** to **7%** in **2021** from **10%** in **2016** indicating improved cancer care facilities in Tamil Nadu.
- ✓ **One-tenth** of total cancer cases in Tamil Nadu were first identified from death certificate only in Vital Statistics Division (VSD).

Crude Incidence Rate of Major Cancers Among Male and Female in Tamil Nadu (2021)



- In **2016**, stomach cancer (**6.6**) and mouth cancer (**6.2**) were the leading cancers among males, but by **2021**, there is a **clear change in pattern**.
- Mouth cancer (**6.6**) has taken the **first position**, becoming the most common cancer among males
- Stomach cancer (**5.8**) has shifted down to the **third position**.
- Colorectum cancer (**5.9**), an **emerging cancer** in **2021**, has now moved up significantly, becoming **one of the top two cancers** among males.
- Breast cancer remains the leading cancer among females, increasing from (**24.7**) in **2016** to (**28.7**) in **2021**, indicating a continued upward trend.
- Cervical cancer continues to decline, but still holds the **second position**.
- Cancers in males show changes in **top two ranking** unlike in females.
- In **2012**, corpus uteri cancer was **not ranked** among the top five cancers in females, but it has now **emerged as one among top five cancers**.

ACKNOWLEDGEMENT

Thanks are due to

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- Ms Bharani K for designing this poster.