# Population Level Screening Of Common NCDs & NCD Service Delivery Ayushman Bharat-CPHC

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**Under the guidance of**

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# About the organisation- Viewzen labs

The company provides end, to end data analytics services. Smaller entities can use company's data collection platforms to quickly create a data repository. Preconfigured templates are available industry wise which can be quickly customised to further accelerate data gathering. Entities already having data can simply plug into company's Analytics Platform to visualize the data and generate insights.

Company's aim is to

- Simplify data.
- Make data available and usable by all and
- Reduce the disparities and competitive disadvantages that data is creating.

# Introduction

- The Noncommunicable Diseases (NCDs) like CVDs, cancer, diabetes and chronic respiratory diseases are the leading causes of mortality in the world.
- NCDs kill 41 million people every year, corresponding to a total of 71% of all deaths world-wide. These four groups of diseases account for over 80% of all premature deaths from NCDs.
- Tobacco use, physical inactivity, use of alcohol and unhealthy diet are some of the major modifiable risk factors contributing to these NCDs.
- Every year between the ages of 30 and 69 years 15 million people die from NCDs, over 85% of these "premature" deaths occur in low- and middle-income countries.
- The National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS) was launched in 2010 to prevent and control major NCDs, with focus on strengthening infrastructure, human resource development, health promotion, early diagnosis, management, and referral

# About NPCDCS

The overall objective of the programme is to prevent and control Non-Communicable diseases, especially Cancer, Diabetes, CVDs and Stroke.

The specific objectives of NPCDCS programme are:

- Health promotion through behavior change with involvement of community, civil society, community-based organizations, media etc.
- Screening at all levels in the health care delivery system from sub-centre and above for early detection of diabetes, hypertension and common cancers. Outreach camps are also envisaged.
- To build capacity at various levels of health care for prevention, early diagnosis, treatment, IEC/BCC, operational research and rehabilitation.
- To support diagnosis and cost-effective treatment at primary, secondary and tertiary levels of health care.
- To support development of database of NCDs through Surveillance System and to monitor NCD morbidity and mortality and risk factors.

http://nhm.gov.in/index1.php?lang=1&level=2&sublinkid=1048&lid=604

# Objective

| | |
|---|---|
| Primary objective | To generate national level estimates of key NCD risk factors identified in the national NCD monitoring framework from the year 2017-18. |
| | To review CPHC NCD software |
| Secondary objectives | To set a baseline to track changes and monitor future trends in the prevalence of risk factors associated with NCDs at the national level. |
| | To recommend interventions that can be implemented strategically to overcome the gaps for screening process in NNHM and NCD software. |

# Methodology for National NCD Monitoring Survey (NNMS)

- **TARGET STUDY POPULATION**: Geographically, the country was divided into six zones mainly north, south, east, west, central and northeast zone. The target study was the entire adult population between age 18-69 years and adolescent population aged 15-17 years which includes both gender, and those living in the urban and rural areas of the country.
- **STUDY DESIGN**: The National NCD Monitoring Survey (NNMS) was a cross-sectional survey,
- **SAMPLE SIZE**: The national representative sample size of 12000 households was equally allocated to both the urban and rural areas, i.e. 6000 households for each. The PSUs for rural area was a village or group of villages and it was Census Enumeration Block (CEB) or ward for the urban areas. By selecting a total of 600 PSUs (300 from urban and 300 from rural) and 20 households from each PSU, the desired number of samples of 12000 households was made available for national survey

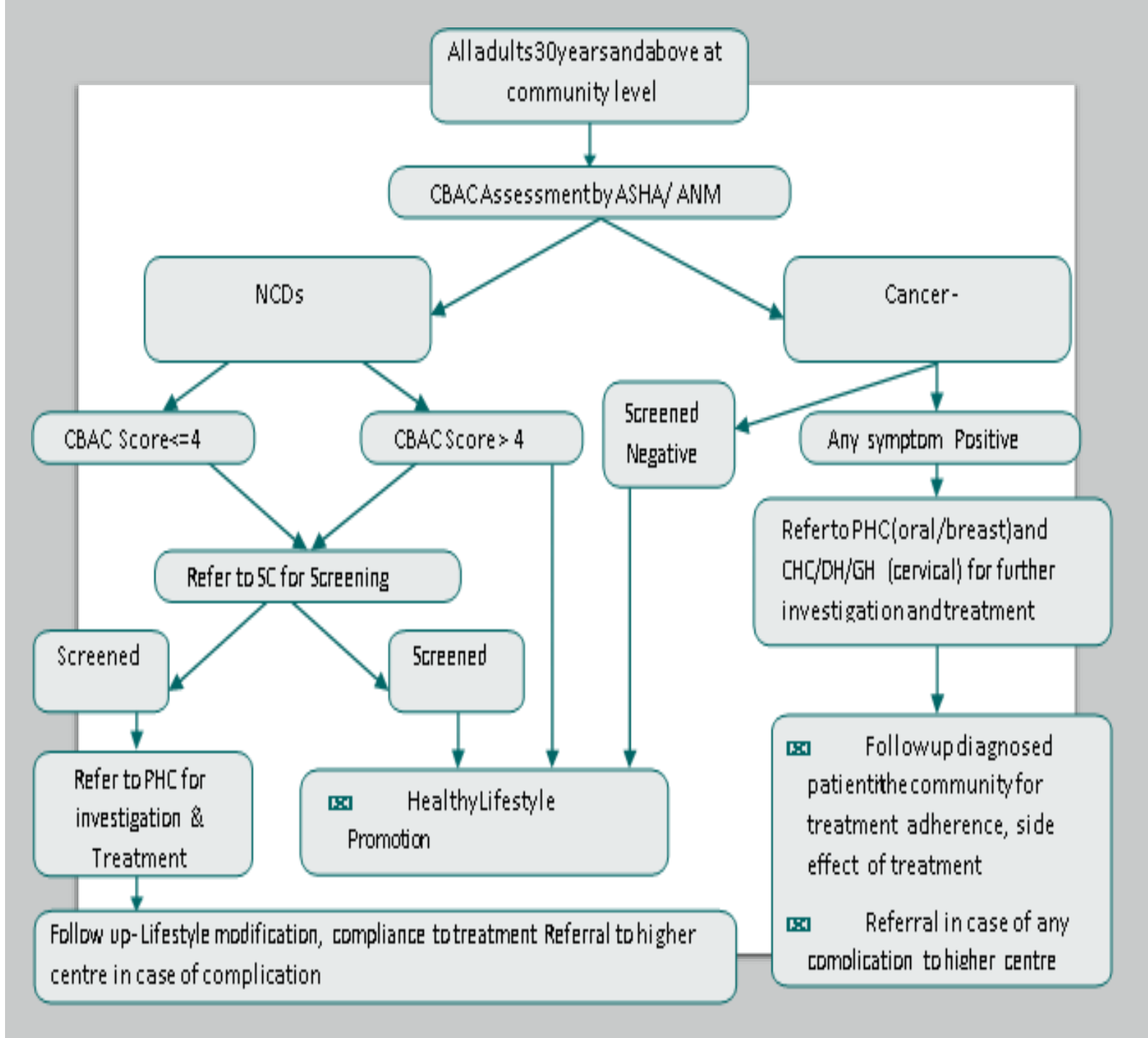
Ref: https://www.ncdirindia.org/nnms/

# Methodology for NHM software- CPHC portal for ASHA and ANMs

1) **Population enumeration**

2) **Total Individuals Enumerated**:

3) **CBAC forms-**




Ref:
https://main.mohfw.gov.in/sites/default/files/Module%20for%20Multi-Purpose%20Workers%20-%20Prevention%2C%20Screening%20and%20Control%20of%20Common%20NCDS_2.pdf

# Methodology for NHM software- CPHC portal for ASHA and ANMs (cont.)

**4) Screening**

**5) General considerations:**

- Approx.37%of the population is over 30years.
- Ina normative village of 1000: Total case load:370
- No. of men over 30years=51%of the total case load:188
- No. of women over 30years=49%of the total case load:182
- For Hypertension and Diabetes:370-(annual screening)

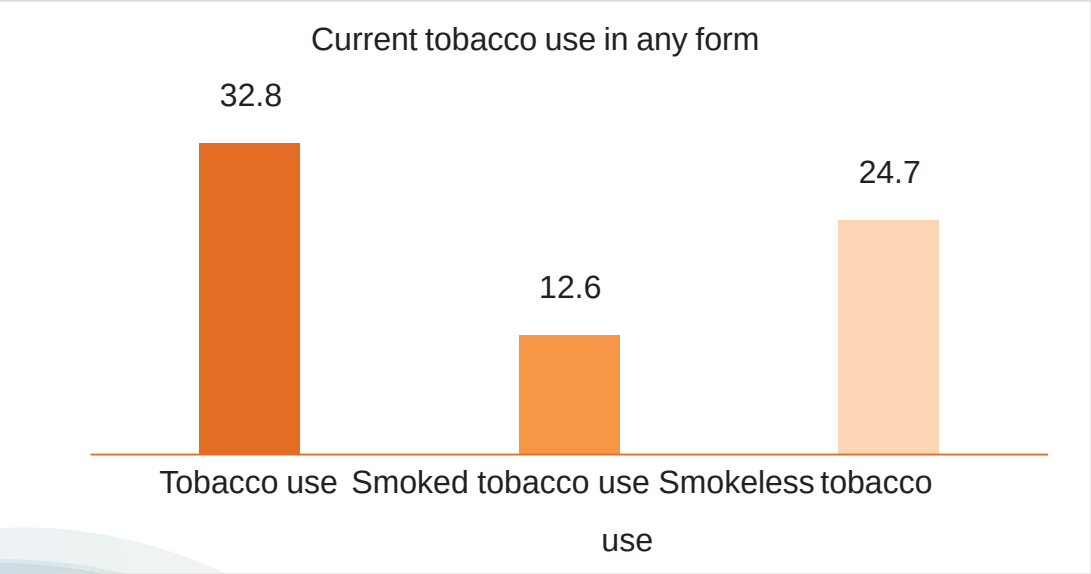
| Type of ncds | Age of beneficiary | Method of screening | Frequency of screening |
|---|---|---|---|
| Hypertension | 30 years and above (Normative Population: 370 people/1000 population; 182 women and 188 men) | Blood pressure apparatus-Dig- ital or Aneroid Sphygmoma-nometer | Once a year |
| Diabetes | 30 years and above ((370 people/1000 population) | Glucometer | Once a year |
| Breast Cancer | 30-65 years (182 women/1000 population) | Clinical Breast Examination (CBE) | Once in 5 years |
| Oral Cancer | 30-65 years (370 people/1000 population) | Oral Visual Examination (OVE) | Once in 5 years |
| Cervical Cancer | 30-65 years (182 women/1000 population) | Visual inspection with acetic acid (VIA) | Once in 5 years (at the level of PHC to start with) |

Ref: https://main.mohfw.gov.in/sites/default/files/Module%20for%20Multi-Purpose%20Workers%20-%20Prevention%2C%20Screening%20and%20Control%20of%20Common%20NCDS_2.pdf

# SURVEY RESULTS

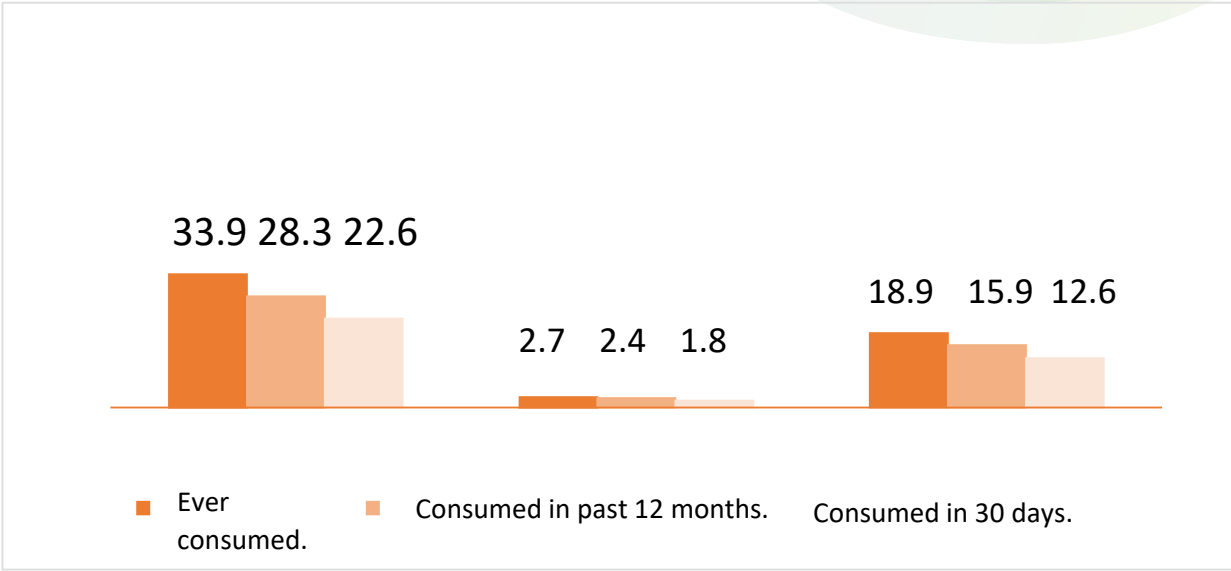
- NCD risk factors - adults (18-69 years)

## Tobacco




- Prevalence of current tobacco use was 32.8% (smoked tobacco use was 12.6% and smokeless tobacco use was 24.7%).
- 48.5% adults were exposed to second hand smoke either at home or at workplace or during travel.

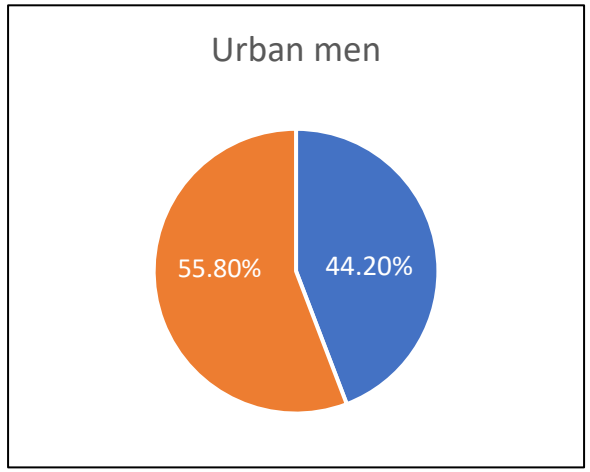
## Alcohol use

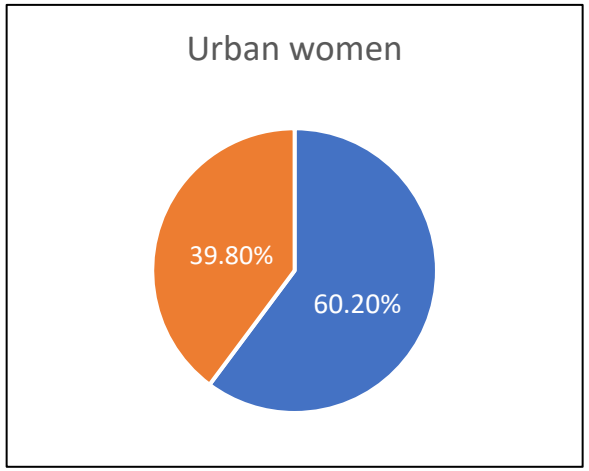


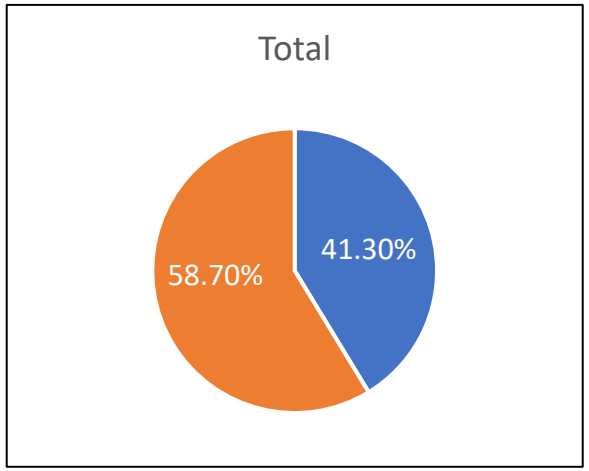

- 15.9% adults had used alcohol in the past 12 months.
- Mean age of initiation of alcohol use was 22.2 years.
- 5.9% were engaged in heavy episodic drinking.

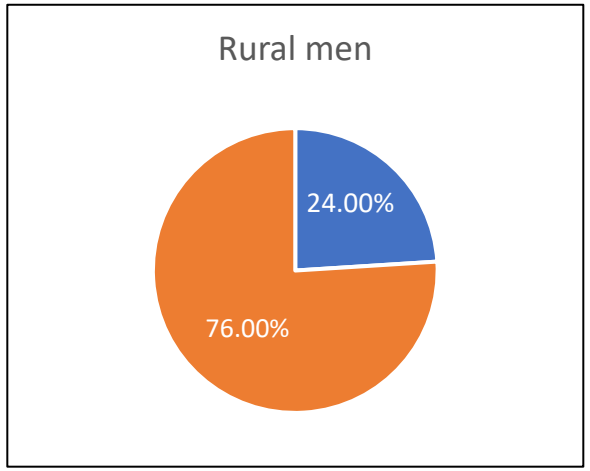
Ref: https://www.ncdirindia.org/nnms/resources/Factsheet.pdf

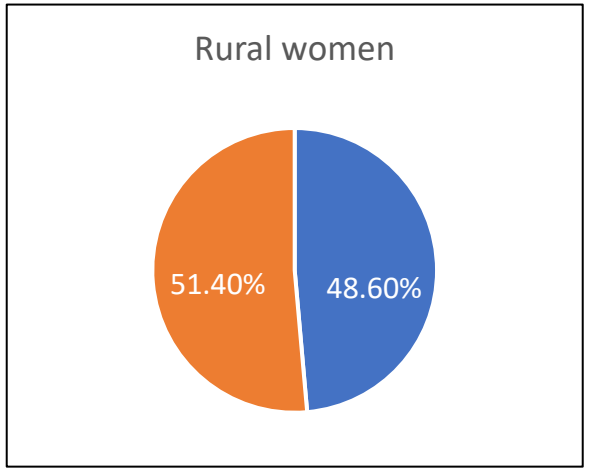
# PHYSICAL ACTIVITY




Insufficient physical activity

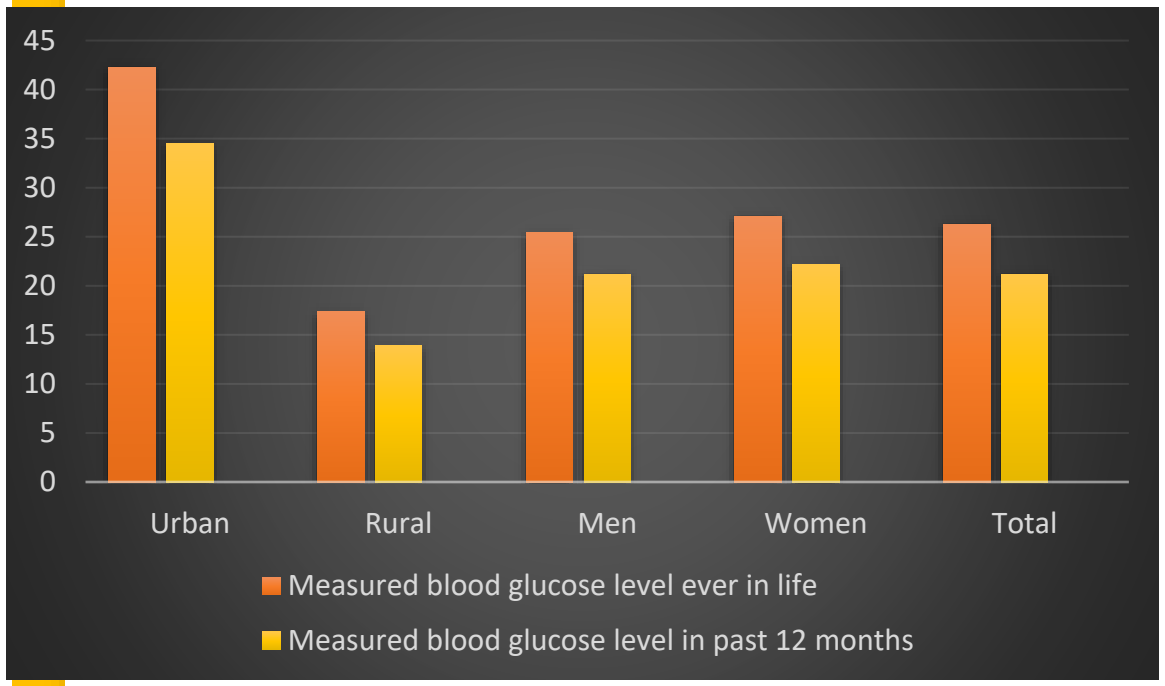
Sufficient physical activity

41.3% of adults did not meet the WHO recommended physical activity levels.

https://www.ncdirindia.org/nnms/resources/Factsheet.pdf

# Health seeking behaviors and management indicators (30-69 years)

## RAISED BLOOD GLUCOSE




47.6% reported being aware of their raised blood glucose status, 38.5% were currently on treatment (any one day in last 2 weeks) and 16.3% had their raised blood glucose in control (fasting blood glucose

## CARDIOVASCULAR CONDITIONS

| 30-69 Years | Urban | | | Rural | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|
| | Men | Women | Combined | Men | Women | Combined | Men | Women | Combined |
| Known CVD condition | 4.3 | 2.4 | 3.4 | 3.2 | 4.0 | 3.6 | 3.6 | 3.5 | 3.5 |
| Govt health facility as source of diagnosis | 1.2 | 0.6 | 0.9 | 0.8 | 1.1 | 1.0 | 1.0 | 0.9 | 1.0 |

Nearly equal proportion of men and women (3.6% men and 3.5% women) reported a history of heart attack or chest pain from heart disease and 1.0% of them reported to be diagnosed at a government health facility

https://www.ncdirindia.org/nnms/resources/Factsheet.pdf

# CANCER SCREENING

## Oral cancer

| Oral cancer screening | Urban | | | Rural | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|
| | Men | Women | Combined | Men | Women | Combined | Men | Women | Combined |
| **30-49** | 1.1 | 1.7 | 1.4 | 2.4 | 0.4 | 1.4 | 1.9 | 0.9 | 1.4 |
| **50-69** | 4.4 | 2.5 | 3.5 | 2.1 | 1.1 | 1.6 | 2.9 | 1.6 | 2.2 |
| **30-69** | 2.1 | 2.0 | 2.0 | 2.3 | 0.6 | 1.5 | 2.2 | 1.1 | 1.7 |

1.7% (men and women) had ever undergone a screening test for oral cancer.

## Breast cancer

| Breast cancer screening | Urban | Rural | Total |
|---|---|---|---|
| **30-49** | 2.5 | 0.9 | 1.5 |
| **50-69** | 3.0 | 1.4 | 2.0 |
| **30-69** | 2.7 | 1.1 | 1.6 |

1.6% of women (30–69 years) had ever undergone clinical breast examination and screening for breast cancer

https://www.ncdirindia.org/nnms/resources/Factsheet.pdf

# Recommendations

1. Regularization of such surveys
2. Setting up of a national NCD surveillance department/unit
3. Linkages with multi-sectoral actions:
4. Developing a prioritized national NCD research agenda:
5. Strengthen advocacy and dissemination:

For CPHC Software

1. Discrepancy in data input
2. Difficulty in interpretation due to unawareness and multiple proficiency level among data entry operators.
3. Homogenised portals should be designed keeping it systemised and separate sub headers should be there for medical officers.

# Thank You