



**icmr**  
INDIAN COUNCIL OF  
MEDICAL RESEARCH

**NCDIR**  
NATIONAL CENTRE FOR DISEASE  
INFORMATICS AND RESEARCH

Impacting NCD Public Health Actions and Policies  
Collaborate Innovate Inspire



# National Stroke Registry Programme

## Factsheet

### Stroke Incidence and Mortality :

### A Report of the Population Based Stroke Registries, India

2021

## Stroke Incidence and Mortality

Stroke is the third leading cause of death and sixth leading cause of disability in India. The Indian Council of Medical Research – National Centre for Disease Informatics and Research (ICMR-NCDIR), Bengaluru initiated a network of Population Based Stroke Registries in five regions [Varanasi, Kota, Tirunelveli, Cuttack and Cachar] under the National Stroke Registry Programme (NSRP). The purpose of NSRP is to establish a continuous and systematic stroke surveillance system to generate incidence rates of stroke in specific populations across India.

The Stroke Fact Sheet presents the epidemiological profile of stroke described in the ‘Stroke Incidence and Mortality: A Report of the Population Based Stroke Registries, India’.

Epidemiological profile of stroke (2018-19)					
	Cuttack	Cachar	Tirunelveli	Kota	Varanasi
<b>Stroke Incidence</b>					
Number of registered first ever stroke cases in age group 18 and above (N)	3226	2493	3730	2347	2024
Crude Incidence Rate (per 100,000 population)	187.6	96.6	169.6	125.8	123.0
Age Standardized Incidence Rate (per 100,000 population)	127.7	81.9	107.7	105.8	94.3
<b>Type of Stroke</b>					
Ischemic Stroke (%)	75.5	46.5	84.8	83.6	60.4
Haemorrhagic Stroke (%)	20.6	26.8	11.5	16.1	35.1
Undetermined Stroke (%)	3.9	26.7	3.7	0.3	4.5
<b>Ischaemic Stroke (includes venous stroke)</b>					
Crude Incidence Rate (per 100,000 population)	141.6	45.0	143.9	105.1	74.3
Age Standardized Incidence Rate (per 100,000 population)	96.6	39.6	91.4	88.5	56.8

	Cuttack	Cachar	Tirunelveli	Kota	Varanasi
<b>Haemorrhagic Stroke</b>					
Crude Incidence Rate (per 100,000 population)	39.0	25.9	19.6	20.2	43.1
Age Standardized Incidence Rate (per 100,000 population)	26.4	21.7	12.4	16.9	33.6
<b>Undetermined Stroke</b>					
Crude Incidence Rate (per 100,000 population)	7.3	25.8	6.2	6.8	5.6
Age Standardized Incidence Rate (per 100,000 population)	4.9	20.6	3.9	5.9	4.3

<b>Risk Factors of Stroke</b>					
Hypertension (%)	75.0	67.9	40.3	58.7	64.1
Diabetes (%)	26.2	15.9	26.4	23.8	35.1
Current Tobacco Use (%)	62.4	53.8	23.1	32.2	19.3
<b>Basis of Diagnosis</b>					
Clinical Only (%)	17.7	2.6	10.5	0.8	6.0
Clinical and Imaging (%)	79.6	71.5	84.1	99.2	91.3
Death Certificate Only cases (%)	2.7	25.9	5.3	0.0	2.7
<b>Vital status at 28 days after onset of stroke</b>					
Alive (%)	77.8	46.5	79.8	87.1	60.2
Dead (%)	20.4	42.6	20.2	12.9	39.7
Unknown (%)	1.8	10.9	0.0	0.0	0.1
<b>Stroke Mortality at 28 days after onset of stroke</b>					
Crude case fatality rate (per 100,000 population)	31.4	39.9	30.3	15.3	46.6

## **ICMR - National Centre for Disease Informatics and Research**

II Floor of Nirmal Bhawan, ICMR Complex  
Poojanahalli Road, Off NH-7,  
Adjacent to Trumpet Flyover of KIAL  
Kannamangala Post Bengaluru - 562 110. India.



[www.ncdirindia.org](http://www.ncdirindia.org)



[@ncdirindia](https://twitter.com/ncdirindia)



[ncdirindia](https://www.facebook.com/ncdirindia)