

**GOVERNMENT OF INDIA
MINISTRY OF HEALTH AND FAMILY WELFARE
DEPARTMENT OF HEALTH RESEARCH**

**LOK SABHA
STARRED QUESTION NO. 83
TO BE ANSWERED ON 25TH JULY, 2025**

RISE IN SUDDEN CARDIAC DEATHS DUE TO COVID-19

83*. DR. KIRSAN NAMDEO:

Will the **Minister of HEALTH AND FAMILY WELFARE** be pleased to state:

- (a) whether the Government has conducted any study to ascertain the reasons behind the unusual increase in the rate of Sudden Cardiac Death (SCD) amongst apparently healthy individuals with a history of COVID-19 illness in the country;
- (b) if so, the details thereof and if not, the reasons therefor; and
- (c) the number of people in the country who have died due to cardiac arrest with history of COVID-19 disease, State/UT-wise?

**ANSWER
THE MINISTER OF HEALTH AND FAMILY WELFARE
(SHRI JAGAT PRAKASH NADDA)**

(a) to (c): A Statement is laid on the Table of the House.

**STATEMENT REFERRED TO IN REPLY TO LOK SABHA
STARRED QUESTION NO. 83* FOR 25TH JULY, 2025**

(a) to (c): Indian Council of Medical Research (ICMR) has informed that ICMR and National Centre for Disease Control (NCDC) explored two approaches to investigate the causes of sudden death. The first approach was a retrospective case-control study to determine the risk factors associated with sudden death and the second approach of the study was to prospectively investigate sudden deaths in young adults using a virtual autopsy approach. The details of both these studies are as follows:

Study 1: ICMR-National Institute of Epidemiology (NIE) conducted a study titled “Factors associated with unexplained sudden deaths among adults aged 18-45 years in India – A multicentric matched case-control study” at 47 tertiary care hospitals located across 19 States/Union Territories of India during May- August 2023. Cases were apparently healthy individuals without any known co-morbidity, who suddenly (<24 hours of hospitalization or seen apparently healthy 24 hours before death) died of unexplained causes during 1st October 2021-31st March 2023. Four controls were included per case matched for age, gender and neighbourhood. Information was collected regarding data on COVID-19 vaccination/infection, post-COVID-19 conditions, family history of sudden death, smoking, recreational drug use, alcohol frequency, binge drinking and vigorous-intensity physical activity two days before death among the cases / interviewed controls.

A total of 729 sudden death cases and 2916 controls were included in the analysis. It was observed that receiving two doses of COVID-19 vaccine significantly reduced the odds of unexplained sudden death. Past COVID-19 hospitalization, family history of sudden death, binge drinking 48 hours before death/interview, use of recreational drug/substance and performing vigorous-intensity physical activity 48 hours before death/interview increased the odds of sudden death.

Hence, the study observed that COVID-19 vaccination did not increase the risk of unexplained sudden death among young adults in India. Past COVID-19 hospitalization, family history of sudden death and certain lifestyle behaviours increased the likelihood of unexplained sudden death.

Study 2: The second study, titled “Establishing the cause in sudden unexplained deaths in young” conducted by the All India Institute of Medical Sciences (AIIMS), New Delhi with funding and in collaboration with ICMR, is a prospective study aimed at determining the common causes of sudden deaths in young adults. Early analysis of data from the study indicates that heart attacks, or myocardial infarction (MI), continue to be the leading cause of sudden death in this age group. Importantly, no major changes in the pattern of causes have been observed when compared with previous years before the Covid-19 pandemic.

Together, these two studies offer a more comprehensive understanding of sudden unexplained deaths in young adults in India. It has also been revealed that COVID-19 vaccination does not appear to increase the risk, whereas, the role of underlying health issues, genetic predisposition and risky lifestyle choices does play a role in unexplained sudden deaths.
