

**GOVERNMENT OF INDIA
ATOMIC ENERGY
LOK SABHA**

UNSTARRED QUESTION NO:647

ANSWERED ON:26.11.2014

HEALTH HAZARD IN ATOMIC HUBS

Chautala Shri Dushyant;Chowdhury Shri Adhir Ranjan;Mahadik Shri Dhananjay Bhimrao;Patil Shri Vijaysinh Mohite;Satav Shri Rajeev Shankarrao;Sule Smt. Supriya Sadanand

Will the Minister of ATOMIC ENERGY be pleased to state:

- (a) whether cancer is reported to be the cause of almost 70% of the health related deaths of inhabitants residing in the atomic energy hubs across the country as reported in the media;
- (b) if so, the details thereof and the reaction of the Government thereto;
- (c) whether the Government proposes to conduct periodic health check up of inhabitants living around atomic energy hubs and employees working in such units and also publish more detailed information regarding the health status of such persons;
- (d) if so, the details thereof; and
- (e) the other steps taken by the Government for ensuring the safety and welfare of its personnel working in atomic plants and inhabitants residing in the atomic energy hubs?

Answer

THE MINISTER OF STATE FOR PERSONNEL, PUBLIC GRIEVANCES & PENSIONS AND PRIME MINISTER'S OFFICE (Dr. JITENDRA SINGH) :

(a)&(b) No, Sir. However, there was a news item in the Times of India, Mumbai edition on 7th September, 2014 titled 'Cancer behind 70% deaths in India's atomic energy hubs', which is not true. The Department of Atomic Energy has published a press release countering the wrong information, and has also lodged a complaint with the Press Council of India in this regard.

(c) &(d) Yes, Sir. An ongoing exercise among 22,224 workers and their families in three major Indian nuclear installations (Tarapur, Kaiga and Kakrapara), with detailed information on prevalence of cancer and cancer related deaths from 1981 to 2012 revealed no evidence of increased cancer risk among radiation workers.

A number of international groups, which have studied the possible causal effect of radiation among nuclear power plant employees to cause cancer and cancer related deaths, have consistently failed to reveal any possible association at all. A recent update of a well conducted cohort study from Canada estimating cancer incidence from 1956-1994, published in the Journal of Cancer reported no evidence of increased cancer risk among Canadian nuclear workers.

In another cancer surveillance study set up by Tata Memorial Centre (TMC) looking at population based cancer registries, to understand the cancer burden among population residing around 8 different nuclear installations around the country, including Rawatbhatta, Karwar, Kalpakkam and Kudankulam revealed crude incidence rate of cancer in the range of 28.7 to 87.4 per 100,000 persons. This compares favourably with national average rates of 78.8 per 100,000 reported by ICMR led National Cancer Registry programme (25 registries) and crude cancer incidence estimate of 80.7 per 100,000 as reported by Globocan project of the International Agency for cancer in Lyon, France.

Safety of radiation workers and of general public is one of the top priority items of Department of Atomic Energy (DAE). The design of an installation handling radioactive material takes into account the safety of radiation workers. Sufficient infrastructural provisions are existing in DAE establishments, handling radioactive materials, to protect the radiation workers from exposure to radiation during the work. Each and every radiation

worker has to qualify a training course before carrying out any work related to handling of radioactive materials.

A team under the leadership of Radiological Safety Officer carries out occupational radiological monitoring of workers, as per the stipulations of Atomic Energy Regulatory Board (AERB). Regular radiation monitoring involves the measurement of ambient radiation field, air activity and contamination in work area. Non-routine work is carried out only under the special work permits, approved by the Radiological Safety Officer, wherein stipulations regarding protective equipment, time of exposure etc. is clearly specified. After completion of the work, workers carry out contamination monitoring of the body including personal cloths. External/internal exposures are routinely monitored for the workers. In case of any contamination, standard procedures are followed to decontaminate the persons. The records of total dose received by each and every worker is maintained and submitted to AERB regularly for further scrutiny.

