

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

**LOK SABHA  
UNSTARRED QUESTION NO.3358  
TO BE ANSWERED ON 12<sup>TH</sup> JULY, 2019**

**ACUTE ENCEPHALITIS SYNDROME**

**3358. PROF. SAUGATA RAY:  
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SHRI BHOLA SINGH:  
SHRI ANTO ANTONY:  
DR. SWAMI SAKSHIJI MAHARAJ:  
SHRI KAUSHALENDRA KUMAR:  
SHRI BIDYUT BARAN MAHATO:  
SHRI AJAY MISRA TENI:  
SHRIMATI POONAM MAHAJAN:  
SHRI GNANATHIRAVIAM S.:  
SHRI PRASUN BANERJEE:**

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

- (a) whether cases of Acute Encephalitis Syndrome (AES) and Japanese Encephalitis (JE) have been reported in the country, particularly in Bihar and if so, the details thereof indicating the number of AES and JE related cases along with deaths reported in the country during the current season, State/UT-wise;
- (b) whether any study/research has been carried out by the Government on various aspects of AES/JE including the reasons for their manifestation and if so, the details and the findings thereof;
- (c) whether the Government has constituted a seven member team to monitor the outbreak of AES in Bihar and if so, the details thereof;
- (d) whether there is any proposal to provide financial and technical assistance to Bihar to combat the said diseases and if so, the details thereof; and

(e) the further measures being taken by the Government to prevent the said diseases and the amount of financial as well as other assistance given to the families of affected persons?

**ANSWER**  
**THE MINISTER OF STATE IN THE MINISTRY OF HEALTH AND**  
**FAMILY WELFARE**  
**(SHRI ASHWINI KUMAR CHOUBEY)**

(a) Yes. The number of cases and deaths due to Acute Encephalitis Syndrome (AES) and Japanese Encephalitis (JE) in Bihar in the year 2019 are as under:

	AES (till 08.07.2019)	JE (till 07.07.2019)
Cases	872	16
Deaths	176	1

The State/UT-wise details of cases and deaths due to AES and JE for other States of the country in the year 2019 is given in Annexure .

(b) Officials from Indian Council of Medical Research (ICMR) visited Muzaffarpur, Bihar for investigating the AES outbreak, in June 2019. Following are the salient features of ICMR teams:

- It was observed that majority of the children presented with hyperacute and early morning illness in a previously healthy child. Children presented with seizures and altered sensorium. Hypoglycemia was also present in a sizeable number of children. These findings are consistent with earlier reports of 2013-14.
- Limited number of serum samples and litchi fruit samples were tested for MCPG toxin. Atleast half of the serum and litchi fruit samples were found to be positive for MCPG toxin.
- Around 90 samples were tested for infectious agents at ICMR and non-ICMR Institutes. Though, few samples were found to be positive for dengue, chikungunya and JE, majority of the samples tested negative. This indicates a predominantly non-infectious etiology.
- Next Generation Sequencing (NGS) was conducted on a limited number of samples. All were found to be negative for infectious etiology.
- Culex mosquito samples collected from Muzaffarpur, Bihar tested negative for JE.

(c) to (e) As per Constitutional provisions, 'Health' is a state subject.

Union Ministry of Health and Family Welfare(MoHFW) have taken measures to support State in containment of AES cases as follows:

- ò **Union Health & Family Welfare Minister (HFM)** had reviewed the situation with Health Minister of Bihar and also with officials from Ministry.
- ò MoHFW had deputed a Central team of experts consisting of Public Health Specialist from various Central Government Institutes to assist the State Government in containment and management measures.
- ò HFM visited Bihar along with Minister of State (HFW) and team of officers. HFM reviewed the situation and also visited Shri Krishna Medical College & Hospital, (SKMCH), Muzaffarpur.
- ò MoHFW deployed another high level multi-disciplinary team to Muzaffarpur drawing senior Paediatricians from various central government Institutes to advise state in their efforts to manage the cases. Epidemiologists from National Center for Disease Control (NCDC), senior paediatricians, Laboratory technicians from central level are present in Muzaffarpur since 12<sup>th</sup> June 2019.
- ò Strategic Health Operations Centre (SHOC) facility of NCDC was activated to monitor the AES situation in Muzaffarpur and co-ordinate tasks at the field level.
- ò MoHFW had further deputed 5 teams of Doctors along with technicians from Central Government Hospitals to SKMCH to support clinical management.
- ò Central team consisting experts from Indian Council of Medical Research (ICMR) was also deployed at SKMCH. The team is also scrutinising and reviewing the case records of discharge and deceased patients using a standardised tool to know the reasons for mortality.
- ò Orientation training of all Paediatricians of SKMCH on clinical case management and treatment protocol of AES was conducted on regular basis by the Central Team of paediatricians.

Further, National Vector Borne Disease Control Programme (NVBDCP) is working for Prevention and Control of Japanese Encephalitis (JE) which is one of the important cause of AES. Under NVBDCP, Sentinel sites report number of AES cases and also confirm Japanese Encephalitis (JE) by testing of samples (Serum/CSF) by IgM Mc ELISA kits provided by Government of India. Numbers of Sentinel sites have gradually been increased from 51 in 2005 to 142 at present. Apex Laboratories increased from 12 to 15 for testing of non JE pathogens in AES cases and quality control. 355 JE Kits have been supplied in 2019 as on 30.06.2019.

**Annexure**

**State-wise Cases and Deaths due to Acute Encephalitis Syndrome and Japanese Encephalitis in 2019 (till 07.07.2019)**

S. No.	States	AES		JE	
		Cases	Deaths	Cases	Deaths
1	Andhra Pradesh	1	0	0	0
2	Arunachal Pradesh	0	0	0	0
3	Assam	947	128	215	56
4	Delhi	0	0	0	0
5	Goa	37	0	0	0
6	Haryana	0	0	0	0
7	Jharkhand	305	2	11	2
8	Karnataka	182	0	11	0
9	Kerala	0	0	0	0
10	Maharashtra	71	1	7	1
11	Manipur	42	1	8	1
12	Meghalaya	101	0	9	0
13	Nagaland	8	0	0	0
14	Odisha	611	1	55	1
15	Punjab	0	0	0	0
16	Tamil Nadu	348	0	72	0
17	Telangana	44	0	21	0
18	Tripura	87	0	14	0
19	Uttar Pradesh	502	21	27	2
20	Uttarakhand	0	0	0	0
21	West Bengal	464	30	15	3
<b>Total</b>		<b>3750</b>	<b>184</b>	<b>465</b>	<b>66</b>