

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

**LOK SABHA  
UNSTARRED QUESTION NO. 1024  
TO BE ANSWERED ON 7<sup>th</sup> FEBRUARY, 2020**

**BIO-MEDICAL WASTE**

**1024. DR. A. CHALLAKUMAR:**

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

- (a) the quantum of bio-medical waste generated annually by various Government and private hospitals in the country during the last three years, State/ UT-wise;
- (b) the system put in place for the disposal of such waste;
- (c) whether many of the Government/private hospitals are not adhering to the provisions of the Bio220 medical Waste (Management & Handling) Rules, 2016 and if so, the details thereof along with the action taken against the violators, State/UT-wise; and
- (d) the effective measures taken/being taken by the Government to ensure proper disposal of bio-medical waste by the hospitals across the country?

**ANSWER**

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

(a): As per information submitted by State Pollution Control Boards (SPCBs) / Pollution Control Committees (PCCs), the details of State/Union Territories-wise quantum of bio-medical waste generation (during 2016, 2017 & 2018) in the country are given in **Annexure**.

(b): As informed by Central Pollution Control Board and as per Bio-medical Waste Management Rules, 2016, Bio-medical waste is required to be segregated in 4 color coded waste categories, and the same is treated and disposed as per the specified methods of disposal prescribed under Schedule I of the Rules.

Bio-medical waste generated from the hospitals shall be treated and disposed by Common Bio-medical Waste Treatment and Disposal Facility. In case there is no common facility in the reach of a healthcare facility, then such healthcare facility should install captive treatment and disposal facility. There are 200 authorized Common Bio-medical Waste Treatment and Disposal Facilities (CBWTFs) in 28 States for environmentally safe disposal of biomedical waste. Remaining 7 States namely Goa, Andaman Nicobar, Arunachal Pradesh, Lakshadweep, Mizoram, Nagaland and Sikkim do not have CBWTFs. Apart from common facilities, there are 12,296 number of captive treatment and disposal facilities installed by Healthcare Facilities. Every healthcare facility, both bedded and non-bedded is required to take authorization from concerned State Pollution Control Board / Pollution Control Committee (SPCB/PCC) for management of Biomedical waste. As per annual report for the year 2018, there are 2,60,889 number of healthcare facilities generating about 608 MT per day of Bio-medical Waste, out of which 528 MT of Bio-medical Waste is treated and disposed through either CBWTF or Captive disposal facility.

Common methods of treatment and disposal of bio-medical waste are by incineration/plasma pyrolysis/deep-burial for **Yellow Category** waste; autoclaving/microwaving/chemical disinfection for **Red Category** waste; sterilization and shredding, disinfection followed by burial in concrete pit/recycling through foundry/encapsulation for **White Category** sharps waste; and washing, disinfection followed by recycling for **Blue Category** glass waste.

(c): As per Annual report information received from State Pollution Control Boards / Pollution Control Committees (SPCBs/PCCs) for the year 2018, about 27427 instances of violations under Bio-medical Waste Management Rules, 2016 were reported against Healthcare Facilities (HCFs) or Common Biomedical Waste Treatment and Disposal Facilities (CBWTFs); out of which 16,960 number of HCFs/CBWTFs were given Show Cause Notices/Directions by concerned SPCB/PCCs for such violations. During the last 3 years, SPCBs/PCCs have issued about 46,442 nos of notices/directions to HCFs/CBWTFs.

Central Pollution Control Board conducted random inspection of HCFs/CBWTFs to verify compliance and taken action under section 5 of Environment (Protection) Act, 1986 against 33 nos. of HCFs/CBWTFs during the year 2019.

(d): Central Pollution Control Board has been following up with all SPCBs/PCCs to ensure effective management of biomedical waste in States/UTs. CPCB has also prepared following guidelines to facilitate the stakeholders to ensuring proper treatment and disposal of Bio-medical Waste in line with provisions of Bio-medical Waste Management Rules, 2016;

- i. Revised Guidelines for Common Bio-medical Waste Treatment and Disposal Facilities.
- ii. Guidelines for Management of Healthcare Waste in Health Care Facilities as per Bio Medical Waste Management Rules, 2016
- iii. Guidelines for Bar Code System for Effective Management of Bio-Medical Waste
- iv. Guidelines for Handling of Biomedical Waste for Utilization
- v. Environmentally Sound Management of Mercury Waste Generated from Health Care Facilities.
- vi. Guidelines for "Imposition of Environmental Compensation against HCFs and CBWTFs"
- vii. Guidelines for Verification of Two Seconds Residence Time in Secondary Combustion Chamber of the Biomedical Waste Incinerator

<b>Annexure</b>				
<b>S.No</b>	<b>Name of State</b>	<b>Year 2016 Biomedical Waste Generation kg/day</b>	<b>Year 2017 Biomedical Waste Generation kg/day</b>	<b>Year 2018 Biomedical Waste Generation kg/day</b>
1	Andaman Nicobar	380	187	199.3
2	Andhra Pradesh	9898	10662.27	15144
3	Arunachal Pradesh	577.4	645.4	888.67
4	Assam	7925.8	8564.95	7820.67
5	Bihar	8827.69	33799.97	34812.9
6	Chandigarh	1994	2503	3188
7	Chhattisgarh	1988.85	1104.493	16096
8	Daman &Diu and Dadra & Nagar Haveli	253.9	322	331
9	Delhi	24996.44	24667.05	26757.5
10	Goa	2660.34	874	1837.1
11	Gujarat	30296	29070	33706
12	Haryana	11171.02	11662.91	14217.88
13	Himachal Pradesh	1717.70	3018.3	2570.12
14	Jharkhand	12829.98	12498.04	12788.2
15	J & K	885.94	4618.58	4482.9
16	Karnataka	66468	67339	65621.2
17	Kerala	37773.45	40990	71976.14
18	Lakshadweep	80	423	527
19	Madhya Pradesh	12810	14824	15846.74
20	Maharashtra	71511.5	61918	62418
21	Manipur	367.49	529.14	1140.16
22	Meghalaya	972.97	1061.5	1432.87
23	Mizoram	440.09	747.63	830.74
24	Nagaland	751.48	626.5	631.75
25	Orissa	13795.34	14197.49	14564
26	Puducherry	5849.8	5400	4319.8
27	Punjab	14668	15203	15980.7
28	Rajasthan	21722.84	22502.57	22261.756
29	Sikkim	388.44	235.21	396.7
30	Tamil Nadu	43789.08	46818.8	47196.9
31	Telangana	13220	15719	16243
32	Tripura	1607	1607	1401.5
33	Uttarakhand	2557.32	2946	4111.39
34	Uttar Pradesh	37655	43554	46401
35	West Bengal	26858.76	29773.84	34123.62
36	DGAFMS	27995.26	28470.21	6350.64
	<b>Total</b>	<b>517685</b>	<b>559084</b>	<b>608616</b>