

1	2	3
26.	Odisha	1
27.	Puducherry	1
28.	Punjab	20
29.	Rajasthan	29
30.	Sikkim	1
31.	Tamil Nadu	27
32.	Telangana	24
33.	Tripura	1
34.	Uttar Pradesh	35
35.	Uttarakhand	1
36.	West Bengal	1
	TOTAL	256

Contamination of heavy metals in drinking water

1537. SHRI NEERAJ SHEKHAR: Will the Minister of JAL SHAKTI be pleased to state:

- (a) the details of permissible limits of arsenic, fluoride, mercury and other heavy metals in drinking water as per the international norms;
- (b) the details of the level of contamination of heavy metals in drinking water in the country, State-wise and metal-wise;
- (c) whether there is any decrease or increase in contamination level of heavy metals in drinking water since last five years; and
- (d) if so, the details thereof, year-wise?

THE MINISTER OF STATE IN THE MINISTRY OF JAL SHAKTI (SHRI RATTAN LAL KATARIA): (a) As per existing guidelines, IS 10500 is to be adopted for ensuring safe drinking water supply, as per the standard, the details of permissible limits of Arsenic, Fluoride, Mercury and other heavy metals is given in the Statement-I (*See* below).

(b) As reported by States, as on 27.11.2019, the details of habitations having drinking water sources with heavy metal contamination is given in the Statement-II (*See* below).

(c) and (d) As reported by States, the year-wise details of habitations having drinking water sources with heavy metal contamination, are given below.

Sl. No.	State	As on 01.04.2016	As on 01.04.2017	As on 01.04.2018	As on 01.04.2019	As on 01.04.2020
1.	Assam	6	7	7	7	7
2.	Karnataka	3	1	1	1	1
3.	Punjab	2080	2222	1947	1899	1853
4.	West Bengal	0	276	265	255	254
TOTAL		2089	2506	2220	2162	2115

Source: IMIS, DDWs

Statement-I

Details of Permissible Limits of Arsenic, Fluoride and Heavy Metals in drinking water as per BIS standard IS 10500:2012

Sl. No.	Characteristic	Unit	Requirement (Acceptable Limit)	Permissible Limit in the absence of alternate source
1.	Arsenic	Milligram/litre	0.01	No relaxation
2.	Fluoride	Milligram/litre	1.0	1.5
3.	Iron	Milligram/litre	1.0	No relaxation
4.	Selenium	Milligram/litre	0.01	No relaxation
5.	Zinc	Milligram/litre	5.0	15.0
6.	Mercury	Milligram/litre	0.001	No relaxation
7.	Lead	Milligram/litre	0.01	No relaxation
8.	Copper	Milligram/litre	0.05	1.5
9.	Chromium	Milligram/litre	0.05	No relaxation
10.	Cadmium	Milligram/litre	0.003	No relaxation
11.	Manganese	Milligram/litre	0.1	0.3
12.	Aluminum	Milligram/litre	0.03	0.2

Statement-II

Details of Number of habitations having drinking water sources with heavy metal contamination as on 27.11.2019

Sl. No.	State	Manganese	Aluminum	Mercury	Uranium	Lead	Cad- mium	Chr- omium	Selenium	Zinc	Total
1	2	3	4	5	6	7	8	9	10	11	12
1.	Assam	7	0	0	0	0	0	0	0	0	7
2.	Karnataka	1	0	0	0	0	0	0	0	0	1
3.	Punjab	1	419	19	455	525	107	4	322	1	1853
4.	West Begngal	254	0	0	0	0	0	0	0	0	254
TOTAL		263	419	19	455	525	107	4	322	1	2115

Source: IMIS, DDWS