

National Programme for Prevention and Control of Fluorosis (NPPCF)

NATIONAL PROGRAMME FOR PREVENTION AND CONTROL OF FLUOROSIS

Fluorosis, a public health problem is caused by excess intake of fluoride through drinking water/food products/industrial pollutants over a long period. It results in major health disorders like dental fluorosis, skeletal fluorosis and non-skeletal fluorosis.

Problem : *Dental Fluorosis* affects children and discolours and disfigures the teeth. The teeth could be chalky white and may have white, yellow, brown or black spots or streaks on the enamel surface. Discoloration is away from the gums and bilaterally symmetrical. *Skeletal Fluorosis* affects the bones and major joints of the body like neck, back bone, shoulder, hip and knee joints with severe pain, rigidity or stiffness in joints. In severe forms results in marked disability. *Non-Skeletal fluorosis* is an earlier manifestation of fluorosis seen as gastro-intestinal complaints etc and may overlap with other diseases leading to misdiagnosis.

Prevalence : Fluoride prevalence was reported in 230 districts of 19 States earlier. As per recent data from Ministry of Drinking Water and Sanitation, there are 14,132 habitations (as on 1.4.2014) from 19 States which are yet to be provided with safe drinking water. The population at risk based on population in habitations with high fluoride in drinking water is 11.7 million.

Programme coverage: The National Programme for Prevention and Control of Fluorosis (NPPCF) was a new health initiative during 11th Five Year Plan, initiated in 2008-09 and is being expanded in a phased manner. 100 districts of 17 States were covered during 11th Plan, further 11 districts were taken up during 2013-15 (over 19 States) and additional 84 new districts are to be taken up during the remaining period of 12th Plan.

The list of 111 districts covered so far is Annexed.

Goal and Objectives:- The NPPCF aims to prevent and control Fluorosis cases in the country. The Objectives of the National Programme for Prevention & Control of Fluorosis are as follows:

- To collect, assess and use the baseline survey data of fluorosis of Ministry. of Drinking Water and Sanitation for starting the project;
- Comprehensive management of fluorosis in the selected areas;
- Capacity building for prevention , diagnosis and management of fluorosis cases.

Strategy : The following is the strategy for NPPCF:

- surveillance of fluorosis in the community;
- capacity building (Human Resource) in the form of training and manpower support;
- establishment of diagnostic facilities in the medical hospitals;
- management of fluorosis cases including treatment surgery, rehabilitation
- health education for prevention and control of fluorosis cases.

Activities :

- Community Diagnosis of Fluorosis village/block/cluster wise.
- Facility mapping from prevention, health promotion, diagnostic facilities, reconstructive surgery and medical rehabilitation point of view – village/block/district wise.
- Gap analysis in facilities and organization of physical and financial support for bridging the gaps, as per strategies listed above.
 - (a) Diagnosis of individual cases and providing its management.
 - (b) Public health intervention on the basis of community diagnosis.
- Behaviour change by IEC.
- Training

Assistance provided to States

- Strengthening manpower in endemic district by providing for :
 - Consultant
 - Laboratory Technician
 - Field Investigators (3) for six months
- Purchase of equipment for lab including an Ion meter
- Training at various levels
- Health Education and Publicity
- Treatment including reconstructive surgery and rehabilitation

