Achievements under National Iodine Deficiency Disorders Control Program

- As per a letter dated 17 January 2012, Govt. of India appreciated the efforts & progress made under NIDDCP program in Punjab during last couple of years & also stated that State specific “Standard Operating Procedures (SOPs)” and databases at district level are unique.
- For awareness, 20 question booklet in Punjabi about common FAQs on Iodized Salt and Deficiency manifestations of IDD has been prepared and printed.

- State IDD Cell & IDD Lab
  - For effective implementation of NIDDCP programme in Punjab, State IDD Cell & State IDD Lab has been established and is fully functional.

- Collection of Urine and Salt samples (as per Govt. of India guidelines)
  - 3231 urine samples (age group 6-12 yrs) & 9194 salt samples have been tested by State IDD Lab, Punjab.
  - Result shared with districts.

- On Spot Testing of Salt samples
  - On the spot testing of 15670 salt samples has been done by the districts, out of which 14189 salt samples contained Iodine content more than 15 ppm, 1317 samples contained Iodine content less than 15 ppm and 146 salt samples contained nil Iodine.
  - Resampling done under FSSA act & samples sent to Public Analyst, Punjab for testing. Results from O/o Public Analyst sent directly to concerned Civil Surgeon.

- State Level Trainings
  - State Orientation training of District Nodal Officers & Assisting MO/ Epidemiologists has been successfully completed on 24 August 2011.
• One day training of 20 Data Entry operators & 40 identified District Lab Technicians has been successfully completed in month of September, 2011.

• **State specific Standard Operating Procedures (SOPs)**
  • SOPs for salt & urine sample collection, transportation & testing in State IDD Lab, Chandigarh has been developed with Govt. of India inputs
  • **First of its kind in India.**
  • Includes SOP for salt & urine sample collection, transportation & testing in State IDD Lab.

• **Fund Distribution for District & Block Level Trainings & Set up of District IDD Labs**
  • A total support of Rs 9.31 lakh has been provided to districts.
  • **District & Block Level training on Standard Operating Procedures (SOPs)** conducted by all 20 districts.
  • **District IDD Labs**: District IDD Labs established in all districts for testing of salt samples for iodine content.
  • Salt Sample testing started in all districts.
  • A total of 4794 Salt Samples have been tested by district labs.

• **Sensitization of ASHA Workers** done by 17 districts.

• **IDD Survey in 5 Districts**
  • IDD Survey completed successfully in 5 districts namely Kapurthala, Jalandhar, Gurdaspur, Tarn-Taran & Amritsar.
  • 540 Salt samples & 270 Urine Samples collected from each district.
  • Testing of Samples from all 5 districts has been successfully completed by State IDD Lab.
  • A total of 2700 salt samples (from 5 districts) analyzed in the State IDD Lab for Iodine Estimations. 2503 salt samples contained iodine content more than 15 ppm and 197 samples contained iodine content less than 15 ppm.
  • A total of 1350 urine samples (from 5 districts) analyzed in the State IDD Lab for Iodine Estimations. 1347 urine samples contained iodine content more than 100 µg/l and 3 samples contained iodine content less than 100 µg/l.

• **"Global Iodine Deficiency Disorders Prevention Day"**
• Every year 21st October is celebrated as “Global Iodine Deficiency Disorders Prevention Day”.

National Iodine Deficiency Disorders Control Program

• Introduction

Iodine Deficiency Disorders (IDDs) are a worldwide major public health problem. According to Govt. of India, more than 1.5 billion people all over the world are at risk of IDD. Therefore, in 1962, Government of India launched National Goiter Control Program and in 1992, it is renamed as National Iodine Deficiency Disorders Control Program.

Iodine Deficiency may lead to Goiter, still births, abortions, congenital anomalies increased infant mortality, mental deficiency, deaf mutism, squint & dwarfism.

Iodine Deficiency Disorders with the exception of few are permanent and incurable. However, all these disorders can be easily prevented before they occur. The simplest, most effective and inexpensive method to prevent the broad spectrum of IDDs is to consume iodated salt daily

As per GOI guidelines, NIDDCP is being effectively implemented in Punjab.

• Punjab

District wise prevalence of Iodine Deficiency Disorders as per surveys carried out from time to time is given in the table below:

Prevalence of Iodine Deficiency Disorders in Punjab

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>1</td>
<td>Gurdaspur</td>
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<td>40.3%</td>
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<tr>
<td>2</td>
<td>Hoshiarpur</td>
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<td>52.3%</td>
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<td>6.07%</td>
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<td>3</td>
<td>Ropar</td>
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<td>45.8</td>
<td>3.93%</td>
<td>5.33%</td>
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<tr>
<td>4</td>
<td>Bathinda</td>
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<td>3.8</td>
<td>3.88%</td>
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<td></td>
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<td>5</td>
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<td>0.03%</td>
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<tr>
<td>6</td>
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<td>7</td>
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<td>6.99%</td>
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<tr>
<td>8</td>
<td>SAS Nagar</td>
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<td></td>
<td></td>
<td>6.74%</td>
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</table>

*Adequately iodized salt (more than 15 ppm) is 92-95% and No sample was found Non-iodized. All districts are mildly endemic (Prevalence of goiter lies between 5 to 19.9%.

• Spectrum of IDDs

Iodine deficiency results in physical and mental retardation. It affects people of all ages, both sexes and different socioeconomic status.

• Prevention is Better than Cure

Iodine Deficiency Disorders with the exception of few are permanent and incurable. However, all these disorders can be easily prevented before they occur. The simplest, most effective and inexpensive method to prevent the broad spectrum of IDDs is to consume iodated salt daily. The average consumption of iodated salt per person per day is about 10 gms.
• **Requirement of Iodine**
  - 100-150 micrograms Iodine is needed every day. Even less than a small teaspoon of Iodine is required for whole life. The daily requirement of iodine can be met by consuming approximately 10 gms of iodized salt.

• **Sources of Iodine:**
  - Sea foods: sea fish, sea salt, sea weed, Cod liver oil, Milk, meat, eggs, vegetables, fruits, cereals.

• **Packing of Iodated Salt:**
  - The iodated salt has to be packed only in HDPE or polythene-lined jute bags of 50 kg for bulk quantity and in polythene pouches of 500 gms/1000 gms for retail packing with the following legend on it:
    • Name of manufacturer
    • Month and year of packing
    • Iodine content (when packed)
    • Net weight
    • Batch number

• **Safety of Iodated Salt Consumption:**
  - As per the WHO report, a safe daily intake of iodine should be in between a minimum of 50 microgram and a maximum of at least 1000 microgram. Since iodine, when taken in a large quantity, is easily excreted through the kidney into urine, the consumption of iodated salt is absolutely safe for each and everyone.

• **Indicators for assessing IDD and Criteria for Classifying IDD as a Public Health Problem (WHO)**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>No Deficiency</th>
<th>Mild</th>
<th>Moderate</th>
<th>Severe</th>
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<tbody>
<tr>
<td>Prevalence of Goiter</td>
<td>-</td>
<td>5-19.9%</td>
<td>20-29%</td>
<td>30% or &gt;30%</td>
</tr>
<tr>
<td>Median UIE (microgram per liter)</td>
<td>100 or &gt;100</td>
<td>50-99</td>
<td>20-49</td>
<td>&lt;20</td>
</tr>
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