## Sambhavna Trust

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## **Press Statement**

At a press conference organized by the Sambhavna Trust today, a group of top medical specialists from Bhopal expressed serious concerns on the continuing health problems of the people affected by the December '84 Union Carbide disaster and contamination of ground water. In his opening remarks, Padmabhusan Dr. P M Bhargava, an internationally famed molecular biologist and Chairman of the trust called for immediate steps for carrying out research on the health status of the affected population so that appropriate preventive and curative measures could be undertaken.

Dr. H H Trivedi, former Professor of Internal Medicine and one of the senior doctors on duty at the Hamidia Hospital at the time of the disaster expressed concern at the fact that a high proportion of the gas affected people continue to suffer from persistent cough and breathlessness. Dr. Trivedi who has been treating gas affected people ever since, emphasized the need for continuing research so that people could get appropriate medical care. He said that features of Bronchiolitis Obliterans, a condition in which the small airways in the lungs get obstructed due to inflammation or fibrosis, were observed till six years after the disaster when the project was terminated. "There has been no research on the condition of the lung or other organs for several years now," said Dr. Trivedi, "how do you expect local doctors to provide appropriate treatment?"

Dr. J K Raizad a former Professor of Ophthalmology and Principal Investigator in the ICMR research on exposure related eye damages, has a clinic in the gas affected area and continues to treat gas affected people for eye problems. According to Dr. Raizada, there is still " an unusually high prevalence of early age cataract in the gas affected population and the gas affected have posterior cortical cataract which is markedly different from commonly found senile cataract". Dr. Raizada said that "This population also continues to be more prone to eye infections such as Conjunctivitis, Keratitis and Scleratitis. Post operative complications [in cases of eye surgery] are more frequent among gas affected people. Corneal opacity in the pupilary area of the eye leading to impaired acuity of vision is still commonly found among gas victims." "It is not possible to correct this condition optically" added Dr. Raizada.

Dr. Sushil Jindal one of the top Endocrinologist in the city expressed concern that there was no scientific study on the observed higher incidence of Diabetes and Thyroid disorders in Bhopal. Explaining the scientific basis for possible injury to the endocrine system by the Union Carbide disaster, Dr. Jindal said that the poisons or their metabolites could disrupt the function of the thyroid gland and could be toxic to insulin producing beta cells of the pancreas. Dr. Jindal stressed the need for studies to compare the prevalence of endocrine system disorders in the population of Bhopal with that in other cities.

Dr. Shyam Agrawal, top Cancer specialist in the city and Director of the Navodaya Oncology Centre said " There is a definite rise in the incidence of different kinds of Cancers in the gasaffected population in the last few years. Cancer of the lungs is much higher among the exposed population in Bhopal in comparison to other cities in the country. He said that compared to 18 years back today there is much more data on the mutagenic and carcinogenic effects of Methyl isocyante. Dr. Agrawal underlined the "urgent need for Cancer screening, community health education and proper system of registration of gas-exposed cancer patients." Dr.N.Ganesh, a Cytogenetic Technologist and Senior Research Officer at the Jawaharlal Nehru Cancer Hospital and Research Centre, Bhopal, spoke on his ongoing study on chromosomal changes among the gas-affected people and birth defects in the exposed population. "So far I have collected information on pregnancy outcome of 75 severely exposed mothers. My data shows that 54 of their progeny have Congenital Malformation. These mothers had the history of spontaneous abortion after exposure to Union Carbide's gases. The chromosomal aberration observed in

exposed population were mainly Premature Centromeric Division, Endoreduplication, Polyploidy, Hyoploidy, Double minutes, Translocation and Deletion. Malformations among children recorded were cleft palate, bone deformities, Syndactyly, Polydactyly, undecended testis, Hydrocephalous and Down's syndrome". Dr. Ganesh emphasized that the study "was only indicative of the situation in Bhopal and there is need for long-term genetic studies, because some of the abnormalities may be due to consanguineous marriages".

Dr. Mohammad Ali Qaiser physician at the Sambhavna Trust Clinic which has offered free medical care to over 11800 survivors in the last six years presented information on the population affected by contamination of ground water and soil in the vicinity of the abandoned Union Carbide factory. Based on a survey carried out by the community health workers of the clinic in Annu Nagar with a population of 1528, Dr. Qaiser said that 91 % of the residents were using water from the contaminated hand pumps. According to the survey, every second person in the community was suffering from a multitude of symptoms. The commonest symptom in the population in all age groups was found to be abdominal pain followed by giddiness, pain in chest, headache and fever. These symptoms were most frequent among gas affected people who were additionally exposed to contaminated water. One of the significant findings of the survey was that among the teenage females in the age group of 13 to 15, 43% had not begun their periods. Dr. Qaiser said that while nine studies by government and independent agencies have established the contamination of water and soil around the factory, there is not a single study on the health impact of the poisons people are routinely drinking. He expressed serious concern at the fact that there were 108 babies of age less than two years in the community who were nursing on breast milk that has been found to contain mercury and toxic chemicals.

In her concluding remarks, Dr. Ingrid Eckerman, from Sweden who is one of the medical advisors of Sambhavna, commented that given the unprecedented nature of the disaster and the unknown effects of the chemicals, there was need to continue medical care, research and health surveillance for at least two generations of survivors.

Dr. P M Bhargava Chairman Dr H H Trivedi Trustee