

CleanMed 2008

Pittsburgh, PA • 21 - 22 May 2008

The First “Courage in Science” Award Herbert L. Needleman, M.D.

Dr. Herbert Needleman is receiving Health Care Without Harm’s inaugural Courage in Science Award for his instrumental work in advancing the science regarding the health impacts of lead and the imperative to eliminate exposures, leading to one of the greatest public health victories of the 20th century. Dr. Needleman’s tenacity in pursuing preventive actions on the basis of science -- in the face of fierce industry and governmental opposition to his findings -- was pivotal in removing lead from gasoline, reducing high lead exposures in children and leading to a five-fold reduction in the prevalence of lead poisoning in children in this country.

Dr. Needleman is distinguished as a researcher who, having determined the developmental implications of excessive exposure to lead, worked tirelessly to bring his findings into the public eye, and responded to the harsh criticism his findings generated with perseverance and dignity. His work made him a frequent target of criticism by the lead industry. He was once forced to defend himself against charges of scientific fraud and misconduct, from which he was exonerated, and fought for and won the right for those accused of such charges to an open hearing with legal counsel – a right that has benefited the entire scientific community.

In the 1970s, Dr. Herbert Needleman conducted a study while at the Harvard Medical School that provided the first clear evidence that lead, even at very low levels, could affect a child’s IQ. In a series of follow-up studies, he determined that lead poisoning had long-term implications for a child’s attentiveness, behavior, and school success. Having identified a preventable affliction harming millions of children, Dr. Needleman set about the process of educating everyone – from parents to government advisory committees – on the dangers of childhood lead poisoning. After extensive scientific review, his findings spurred the Centers for Disease Control to issue guidelines for the diagnosis and management of lead poisoning in children.

Dr. Needleman’s work was pivotal for the decisions made by the Environmental Protection Agency to mandate the removal of lead from gasoline and by the Consumer Product Safety Commission to ban lead from interior paints. His studies also prompted the Department of Housing and Urban Development to remove lead from thousands of housing units across the country. As a result of his work, average blood lead levels in this country dropped an estimated 78% from 1976 to 1991.

A pediatrician and child psychiatrist at the University of Pittsburgh Medical Center (UPMC), Dr. Needleman continues his work today. The founder of the Alliance to End Childhood Lead Poisoning, he has continued to work on reducing the hazards of lead-based paint in the homes of those living in the inner city by working in conjunction with UPMC Health Systems and the Homewood Healthy Homes Collaborative. His recent research has shown that boys with high levels of

CleanMed 2008

Pittsburgh, PA • 21 - 22 May 2008

lead in their bones are more likely to develop aggressive or delinquent behavior, and that an estimated 11 to 38 percent of the nation's delinquency is attributable to high lead exposure.

Dr. Needleman is an inspired medical educator and writer who remains committed to the cause of preventing and eradicating pediatric lead poisoning. Born in Philadelphia, Pennsylvania, he earned his medical degree from the University of Pennsylvania School of Medicine and his B.S. from Muhlenberg College in Allentown, Pennsylvania. He interned at Philadelphia General Hospital, and trained in pediatrics at The Children's Hospital of Philadelphia, where he was chief resident in pediatrics. He also was a research fellow in cardiology at the National Institutes of Health (NIH). He entered private practice in pediatrics and later trained in Psychiatry at the Temple University Health Sciences Center, where he was assistant professor of psychiatry. Since 1981, he has been a professor of child psychiatry and pediatrics at the University of Pittsburgh School of Medicine.

Dr. Needleman has received numerous awards for his work, among them the Heinz Award in the Environment, the 2006 Distinguished Investigator Award from the Neurotoxicology Specialty Section of the Society of Toxicology, the Rachel Carson Award for Integrity in Science from the Center for Science in the Public Interest, and the Vernon Houk Award from the Society for Occupational and Environmental Health.