Chemical Exposure May Increase Risk of ALS

CHICAGO – Preliminary results show that a common environmental chemical may increase the risk of developing amyotrophic lateral sclerosis (ALS), also known as Lou Gehrig’s disease, according to research that will be presented at the American Academy of Neurology 60th Anniversary Annual Meeting in Chicago, April 12–19, 2008.

The study was based on the Cancer Prevention Study II of the American Cancer Society. Over one million people were asked to report their exposure to 12 types of chemicals. The participants were followed for 15 years, and the number of people who died during that time of ALS was tracked. A total of 617 men and 539 women died from ALS during the study.

Researchers found no significant link between ALS and exposure to most chemicals, including pesticides and herbicides. People who reported that they had regular exposure to formaldehyde, however, were 34 percent more likely to develop ALS than those with no exposure to formaldehyde.

“Although this finding could well be a chance observation, it merits further investigation, particularly because people with longer exposure to formaldehyde had a greater risk of developing ALS than those with shorter exposures,” said study author Marc Weisskopf, PhD, of Harvard University in Boston. “People who reported 10 or more years of exposure were almost four times as likely to develop ALS as those with no exposure.”

Weisskopf said the results are preliminary and more research needs to be done to test the results. “This finding was somewhat surprising, because formaldehyde has not been raised as an issue in ALS before,” he said.

Formaldehyde is used in particle board and other wood products, permanent press fabrics, glues, and other household products, such as cosmetics and shampoo. It is also used as a preservative in medical laboratories and mortuaries, and as an industrial disinfectant.

Weisskopf noted that the participants were asked about their exposure to formaldehyde and other chemicals in 1982. In 1987, formaldehyde was classified as a probable human carcinogen at high exposure levels by the U.S. Environmental Protection Agency in 1987.

“Exposure since then has generally decreased, but it certainly isn’t gone,” he said.

The study was supported by a grant from the U.S. Department of Defense.

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The American Academy of Neurology, an association of more than 21,000 neurologists and neuroscience professionals, is dedicated to improving patient care through education and research. A neurologist is a doctor with specialized training in diagnosing, treating and managing disorders of the brain and nervous system such as Alzheimer’s disease, epilepsy, multiple sclerosis, Parkinson’s disease, and stroke.

For more information about the American Academy of Neurology, visit www.aan.com.

**Editor’s Note:** Dr. Weisskopf will present this research during a scientific platform session at 2:00 p.m. CT/3:00 p.m. ET, on Wednesday, April 16, 2008, in Room 190B of the McCormick Place West Convention Center.

He will be available for media questions during a briefing at 9:00 a.m. CT/10:00 a.m. ET, on Monday, April 14, 2008, in the on-site Press Interview Room, Room 182.

If you are a member of the media interested in listening to the press briefing via conference call, please call the AAN Press Room (April 12 – 18) at (312) 791-7053.