



Pesticides again tied to Parkinson's disease

By Andrew M. Seaman

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(Reuters Health) - Exposure to pesticides and other chemicals is linked to an increased risk of developing Parkinson's disease, according to a fresh look at some past research.

Dr. James Bower, a neurologist from the Mayo Clinic in Rochester, Minnesota, said the finding is consistent with previous research but the study still can't prove that pesticides cause people to develop the neurological condition.

"We're definitely learning that Parkinson's disease is not caused by one thing. We're finding a lot of risks for Parkinson's and pesticides are just one of many," said Bower, who wasn't involved with the new study.

In 2011, a study of U.S. farm workers from National Institutes of Health found some pesticides that are known to interfere with cell function were linked to the development of Parkinson's disease.

Another study that was published in 2012 also reported that people with Parkinson's disease were more likely to report exposure to pesticides, compared to people without the condition (see Reuters Health story of Nov 13, 2012 here: reut.rs/17ndoUU.)

The disease affects about 500,000 Americans.

For the new study, Dr. Emanuele Cereda, of the IRCCS University Hospital San Matteo Foundation in Pavia, [Italy](#), and his coauthor pulled data from 104 studies that were published between 1975 and 2011 and examined the link between pesticides and Parkinson's disease.

Overall, they found exposure to pesticides was tied to a 58 percent increased risk of developing the disease.

That increase, according to Bower, would be equivalent to 10 more Parkinson's cases among every 1,000 40-year-old residents living in Olmstead County, Minnesota.

Currently, Bower said about 17 of every 1,000 40-year-old Olmstead County residents will go on to develop Parkinson's disease.

The new study's researchers also found that certain pesticides - such as the plant killer paraquat and fungus killers maneb and mancozeb - were tied to a doubling of Parkinson's disease risk.

Bower said these findings are more applicable to farm workers who regularly use pesticides - not necessarily people who use weed killers around their homes.

Cereda told Reuters Health in an email that the study's results suggest that people should avoid contact with pesticides or - at least - wear proper protection when handling the chemicals.

"The use of protective equipment and compliance with suggested, or even recommended, preventive practices should be emphasized in high-risk working categories (such as farming)," he wrote.

Bower echoed that statement and said people who work with pesticides should wear protective equipment that is recommended by the U.S. Occupational Safety and Health Administration - also known as OSHA.