

# SYNDICATED NEWS SERVICES

## Pesticide Exposure Tied To Parkinson's Risk

Added by [Al Stefanelli](#) on May 28, 2013



[Pesticide](#) exposure tied to Parkinson's [risk](#). Two researchers in [Italy](#) suggest exposure to pesticides, herbicides and solvents is linked to a higher risk of developing [Parkinson's disease](#). They came to this conclusion after analyzing over 100 studies from around the world.

Parkinson's is a progressive [degenerative disease](#) that affects a person's ability to control and coordinate their muscle movement.

What can begin as a tremor in a little finger eventually leads to problems with speech and writing, and one day, inability to walk without help.

This deterioration is caused by the gradual reduction in brain levels of dopamine, a chemical messenger that carries signals to brain regions that control movement and coordination.

Exactly why Parkinson's develops and how this affects dopamine production and maintenance is not known. But there is increasing evidence of an inherited component in a small proportion of cases.

One view that is gaining ground is that [inflammation likely has a role in the development of Parkinson's disease](#).

Dopamine is produced by a special type of brain cell, the [dopaminergic neuron](#).

There is also a suggestion that certain toxins in the environment cause Parkinson's by selectively destroying dopaminergic neurons. This latest analysis from Italy appears to add some weight to that view.

Emanuele Cereda from the IRCCS University Hospital San Matteo Foundation in [Pavia](#), and Gianni Pezzoli of the Parkinson Institute – ICP in [Milan](#), write about their findings in the 28 May print issue of the journal *Neurology*.

For their meta-analysis, a type of study that pools data from several studies of similar design, Cereda and Pezzoli reviewed results of 104 cohort and [case-control studies](#) that examined links between exposure to bug, weed, fungus and rodent killers, and solvents, and risk for developing [Parkinson's disease](#).

They found that exposure to these chemicals is linked to a higher risk of developing Parkinson's by between 33% and 80%.

And results from high quality case-controlled studies shows that exposure to paraquat (a herbicide) and maneb and mancozeb (fungicides), is tied to around a two-fold increase in risk of developing Parkinson's.

The analysis also included studies that took into account how close people lived to the site of exposure (for instance urban or rural settings), their jobs, and whether their drinking water came from wells.

In a statement, Cereda says they also found "a link between farming or country living and developing Parkinson's in some of the studies".