

## Infections Tied to Cognitive Decline

By Nicholas Bakalar.

A new study adds to the evidence that chronic infection, known to be associated with vascular disease, is also associated with poorer performance on tests of mental ability.



Researchers studied 1,625 people in northern Manhattan with an average age of 69, testing them with two well-validated tests of mental acuity. They also tested their blood for “infectious burden” — their degree of exposure to five common viruses and bacteria:

cytomegalovirus, herpes 1 and 2, *Helicobacter pylori*, and *Chlamydia pneumoniae*. The study appeared online in *Neurology*.

Lower scores on the cognitive tests were associated with higher infectious burden as measured by blood tests, and the connections were most prominent among those without a high school diploma, people who were physically inactive and women.

The reasons for the link are not known, but chronic infection contributes to inflammation, and inflammation leads to atherosclerosis, a known risk factor for stroke and dementia.

“Another mechanism might be that these pathogens are neurotoxic, directly affecting the nerves,” said the lead author, Dr. Mira Katan, a clinical research fellow at Columbia.

“We’ve found a common pattern,” Dr. Katan added, “but we cannot prove causality. If we could show causality, we could intervene and address two very important public health burdens, dementia and stroke.”