



# Who Knew?

## MENTAL ILLNESS

### Cat Carrier

*Your cat could make you crazy*

Cats can act a little crazy. One minute they're completely relaxed, purring while you scratch between their ears—then they whip around and carve the mark of Zorro in your hand. They get that spooky look and do high-speed laps around the house. If you have a cat, you've seen all sorts of nutty stuff. But here's something you may not know: Some scientists suspect cats can cause mental illness in people.

A protozoan named *Toxoplasma gondii*, commonly found in cat feces, contaminated water, and undercooked meat, has been implicated in some cases of schizophrenia. Alan S. Brown, a Columbia University professor of psychiatry and epidemiology, has found a 2.6 times greater prevalence of schizophrenia in people exposed to "toxoplasma" in utero. Brown has also reported a threefold increase in the risk of developing schizophrenia in children of mothers who had flu during pregnancy.

This is but one example of a broader suspicion that has recently gotten a lot of attention: Mental illnesses of many types are rooted not in the classic psychological causes but in infections. It's conceivable (though hardly yet proved) that you could catch a brain disorder in much the same way you catch a cold.

E. Fuller Torrey, a psychiatrist with the Stanley Medical Research Institute in Bethesda,

Maryland, has spent more than 30 years searching for what he half jokingly calls the "schizovirus." Yet anyone asking American psychiatrists 40 years ago if an infectious agent could cause schizophrenia "would've been called nuts," Torrey says.

Then in the early 1980s two Australian doctors figured out that peptic ulcers were caused not by stress but most often by bacterial infection. That was a stunning development. Everyone knew that stress caused ulcers! People would say: "This job is giving me an ulcer." No, the microbe did it.

It's long been known that syphilis can trigger psychosis. So can Lyme disease. Both diseases are caused by bacteria called spirochetes that can take up residence in brain tissue, and both are treated with antibiotics. The National Institute of Mental Health has found that some children with obsessive-compulsive disorder and nervous tics have elevated levels of antibodies to the streptococcus bacterium. There's research showing an association between a herpes virus and bipolar disorder. Some researchers think Alzheimer's disease may also have an infectious origin.

That said, studies in this area remain preliminary. Much of the research is built around statistical correlations rather than any clear step-by-step pathway from

infection to disease. Torrey says he and his colleagues don't know why early exposure to toxo would lead to a disease, schizophrenia, that doesn't show up until late adolescence at the earliest. All told, it's still a rather speculative line of argument. But we'll still keep an eye on those crazy cats.

—Joel Achenbach

WASHINGTON POST STAFF WRITER

### Give Me Fever

Neurosyphilis, a form of syphilis that causes mental illness and paralysis, once meant sure death. Mercury, the common treatment for syphilis for centuries, could not cure it. By the 19th century, however, psychiatrists noticed that in rare cases of remission, neurosyphilis patients had often contracted a disease such as typhoid that caused high fever. Some doctors started injecting a curable form of malaria, which triggered fevers exceeding 104°F, into neurosyphilis victims. A dangerous option—but with death the only other one, fever therapy remained widespread until the 1940s, when penicillin became the drug of choice for syphilis.

—Heidi Schultz

**WEBSITE EXCLUSIVE** For more on the role of infections in mental illness, and for links to Joel Achenbach's work, go to Departments at [nationalgeographic.com/magazine/0508](http://nationalgeographic.com/magazine/0508).