## North Koreans Rumored To Be Trying To Make "Zombie-Bomb" with Cat Poop!

Walking Dead fans might finally get their day. Imagine a weapon that spreads a dust that turns people into raging maniacs like the most crazed zombies on the AMC hit TV series.

It turns out that cat poop residue can start you on the way to zombie-land. It has now been proven that a disease is now known to exist that can enter your brain and turn you into an enraged butcher.

## **Could germ from cat poop trigger rage disorder in people?**

By Dennis Thompson, HealthDay News Follow @upi

WEDNESDAY, -- Your cat's litter box could be a source of explosive anger -- and not for the obvious reasons.

A new study suggests that people prone to explosive bouts of rage might be under the influence of toxoplasmosis, an illness caused by a parasite found in cat feces and undercooked meat.

Folks diagnosed with intermittent explosive disorder (IED) are more than twice as likely to carry *Toxoplasma gondii*, the parasite that causes toxoplasmosis, said lead researcher Dr. Emil Coccaro.

"If you've got someone with aggression problems, you might check them for toxoplasmosis," said Coccaro, chair of psychiatry and behavioral neuroscience at the University of Chicago. "People who blow up have a real problem. It's not just a character problem or bad behavior. There's something underneath that's driving it."

Coccaro noted that because this study was not a clinical trial, the results don't establish a direct causeand-effect link. He also added that not everyone who tests positive for toxoplasmosis will have aggression issues.

Intermittent explosive disorder involves recurrent and impulsive outbursts of verbal or physical aggression that are disproportionate to the situations that caused the anger.

"They've got a short trigger, and when they're threatened by something, they blow up," Coccaro said.

IED is thought to affect as many as 16 million Americans, more than bipolar disorder and schizophrenia combined, the study authors said.

Coccaro and his colleagues suspected that toxoplasmosis might be linked to some cases of intermittent explosive disorder.

Toxoplasmosis is typically a relatively harmless parasitic infection. About a third of all humans have been infected, the researchers said. Newborns and people with compromised immune systems are most at risk for a severe toxoplasmosis infection, which can cause damage to the brain, eyes or other organs, according to the U.S. Centers for Disease Control and Prevention.

However, toxoplasmosis might also affect the brains of otherwise healthy carriers. Previous research has tied the parasite to an increased risk of suicide and suicidal behavior, which involve the same sort of impulsive and aggressive traits as intermittent explosive disorder, Coccaro said.

Researchers recruited 358 adults for this new study. The participants were split into three groups -- people with intermittent explosive disorder, people with a psychiatric disorder other than IED, and healthy controls with no mental illness.

Twenty-two percent of people with IED tested positive for toxoplasmosis exposure. That compared to just 9 percent of the healthy control group, the study said.

Around 16 percent of the group with other psychiatric disorders tested positive for toxoplasmosis. But they had similar aggression and impulsivity scores to the healthy control group. IED-diagnosed subjects scored much higher on both measures than the other two groups, the researchers reported.

Toxoplasmosis-positive individuals scored significantly higher on measures of anger and aggression, the findings showed.

Toxoplasmosis could affect people's mood and aggression by infecting areas of the brain that control emotional regulation, Coccaro said, or by altering brain chemistry. "We're not really certain yet, but those are the two leading candidates," he said.

These potential explanations make sense to Dr. Alan Manevitz. He's a clinical psychiatrist with Lenox Hill Hospital in New York City.

"We do know that things like Lyme disease have an impact on mood as well as on physical aspects of the body, so there's no reason to think that other infectious agents would not have a similar impact," Manevitz said.

These findings are provocative enough that they could spur new research into toxoplasmosis prevention, said Dr. Amesh Adalja, senior associate at the University of Pittsburgh's UPMC Center for Health Security, in Baltimore.

"There has been prior work on both veterinary and human toxoplasmosis vaccines, and I expect the results of this study will renew interest in developing such a vaccine," Adalja said. "*Toxoplasma* is a ubiquitous microorganism, and in some parts of the world over three-quarters of the population are infected."

People can avoid toxoplasmosis by cleaning their vegetables and cooking their meat thoroughly to prevent foodborne infection, said Dr. Greg Nelson, veterinarian and director of surgery and diagnostic imaging at Central Veterinary Associates in Valley Stream, N.Y.

Pet owners can avoid infection by keeping their cats indoors, which prevents them from eating the raw

flesh of wild animals that might carry the parasite, Nelson said. Care also should be taken to avoid contact with cat feces when cleaning a litter box.

"People can acquire the disease from cleaning litter boxes, particularly if infected fecal matter has remained in the box for several days," he added. "So, clean the box daily. Do not let immunecompromised people or women who are pregnant or who may become pregnant clean the litter box."

Toxoplasmosis infections can usually be treated with a combination of an antimalaria drug and antibiotics, the CDC notes.

The study appears March 23 in the latest Journal of Clinical Psychiatry.

## More information

For more on toxoplasmosis, visit the <u>U.S. Centers for Disease Control and Prevention</u>.

Topics: Zombies, walking dead, cats, Toxoplasmosis, korean weapons,