# Monkeys in Florida have deadly herpes, so please don’t touch them

If you see a monkey in Florida, don’t touch it. It seems like pretty basic advice, especially now that scientists have found that more than a quarter of these adorable, feral invaders carry the deadly herpes B virus.

Though at least 25 percent of the population *carries* the virus – which causes mild disease in macaques, but can be deadly to humans – fewer were actually infectious. The virus lies dormant in nerves in between flare-ups, similar to cold sores in humans. Between 4 and 14 percent of the monkeys released the virus in their spit during their fall breeding season, researchers report in the journal *Emerging Infectious Diseases.* And the wild monkeys’ poop turned out to be pristine – at least, as far as herpes B was concerned.

“The headlines have already taken off about this, but there’s really a lot we still don’t know about herpes B in wild monkeys,” says study author Samantha Wisely, a wildlife biologist at the University of Florida. The virus is what she calls low-risk, but high-consequence – like rabies, she says. “There’s really a low risk of you getting it, but if you get it, there are going to be very high consequences.”

*“There’s really a low risk of you getting it, but if you get it, there are going to be very high consequences.”*

Florida’s feral rhesus macaque monkeys are native to southern and eastern Asia, and are particularly adorable and effective invaders. They got to the state the usual way – by hitching a ride with misguided humans who thought the cute little creatures could draw tourists. Between 1930 and 1950, a dozen rhesus macaques were introduced to central Florida’s Silver

Springs State Park, where they multiplied. By 2012, 1,000 rhesus macaques had been trapped and removed before public outcry stopped the control effort. (People sure love furry, feral, ecosystem-endangering mammals.) At last count in 2015, some 175 macaques were living in Silver Springs State Park.

Macaques can become a nuisance in new environments. They destroy crops, contaminate water, and chow down on native birds' eggs and chicks. They also can carry herpes B, which usually doesn't do anything to the monkeys, but sometimes causes cold sores, mouth ulcers, and eye irritation. After the initial infection, the virus hides out in the animal's nerves, flaring up only when the monkey gets sick or stressed. When it does, the monkey can become contagious, secreting the virus in its spit, pee, or poop. That's how the virus can spread to people. In humans, herpes B causes a devastating brain disease that the CDC says is deadly about 70 percent of the time — especially without treatment.

*"We found feces on children's slides, and in the playground."*
The weird thing is that the reported cases of herpes B are mainly in lab workers or veterinarians who caught the virus from a bite or exposure to infected bodily fluids at work. None have been reported in people who were bitten by a wild monkey, Wisely says. (That happened at least 23 times near Silver Springs State Park between 1977 and 1984.) The wild monkeys also poop everywhere, Wisely says, so there could be plenty of chances for exposure that way. "To be honest with you, we found feces on children's slides, and in the playground," she says.

To find out exactly how common the herpes B virus was in Florida's feral monkeys, Wisely's team analyzed blood tests collected by trappers trying to control the population. They found that roughly 25 percent of the monkeys contained antibodies to the virus, which was probably an underestimate, Wisely says. Trappers tended to target younger monkeys who probably hadn't been exposed to the virus yet. If the

researchers only analyzed the adults, infections became much more common: 75 percent of the older monkeys they tested carried the virus.

*“It was kind of a targeted toss at particular monkeys.”*
Carrying the virus doesn’t necessarily mean a monkey was infectious, so the team also tested the monkeys’ spit a couple times during 2015. To get the spit, they dipped cotton swabs in sugar water, and lobbed them at the monkeys. “It was kind of a targeted toss at particular monkeys,” Wisely says. “And then they chew on it for awhile and go, ‘Wait, this isn’t food,’ and then spit it out.” Since the researchers couldn’t always track a spitball back to the monkey who made it, the exact numbers are a little vague. But they estimate that between 4 and 14 percent of the monkeys shed the virus during the breeding season, which is stressful for both the males and the females. They didn’t detect the virus in the spit at any of the other times they checked, or in the fresh feces they sampled.

So how worried should people actually be about those herpes B-infected monkeys in Florida? Not terrified, but cautious, Wisely says. The Florida Fish and Wildlife Commission said in a statement that it supports “active management to remove these threats.” In the meantime, Wisely says, if you are tempted to feed, snuggle, or attempt a selfie with the wildlife, just don’t. “It doesn’t do the wildlife any good,” Wisely says, “and it doesn’t do you any good.”

https://www.theverge.com/2018/1/11/16880126/florida-herpes-b-virus-monkeys-silver-spring-state-park-rhesus-macaques