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## Talk about going viral: Touch-screen devices can harbor flu germs

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A squeeze, a flick, a touch – but keep those grimy, germ-infested hands off that iPhone. Who knows where those fingers have been?

Personal touch-screen devices – iPads, BlackBerrys and Droids – are now seemingly everywhere, potentially harboring the germs and viruses that turn voices raspy and send noses running.

Want to peek at a digital snapshot, a friend's Facebook status or to show off the latest YouTube video? Best to just look, not touch – or risk going viral yourself.

"If you're sharing the device, then you're sharing your influenza with someone else who touches it," said Timothy Julian, a Stanford University doctoral student who co-authored a study on the spread of viruses.

As the seasonal influenza strikes again, the ubiquity of touch-screen devices is just another thing for a germaphobe to worry about.

British researchers provide some stomach-churning data: Mobile phones harbor 18 times more bacteria than a flush handle in a typical men's restroom.

According to Julian's study, published online in July by the Journal of Applied Microbiology, the risks of transmitting pathogens from glass surfaces to a person's skin are relatively high.

"If you put virus on a surface, like an iPhone, about 30 percent of it will get on your fingertips," Julian said. In turn, "a fair amount of it may go from your fingers to your eyes, mouth or nose," the most likely routes of infection.

Of course, no one can be sure how many people have gotten sick from sharing touch-screen electronics. But the devices add to the growing list of so-called fomites – frequently handled objects – that can spread pathogens such as the flu virus.

Handrails, elevator buttons, computer keyboards, automatic teller machines – remember Mom's advice about dirty money – certainly all have the potential of spreading disease.

Jessica Rucker is keenly aware of germs getting on her iPhone. She's a registered nurse in the cardiac unit at the UC Davis Medical Center. "We carry our phones a lot on our floor, so there's a lot of risk for spreading things," she said.

But does she worry?

"I don't share my phone. I don't want anybody dropping it. The screen is so fragile," Rucker

said.

Another iPhone user, Waleed Shabbir, a psychology major at California State University, Sacramento, makes it a habit to swab his screen against his pants. "I have no idea why I do it. It's just a habit," Shabbir said.

Germs? Maybe. "We've become a society where we don't touch each other anymore. Now, we have to worry about our phones, too," he said.

That might explain the growing market for wipes to sanitize screens that get touched, pinched and flicked.

One company that sells an antimicrobial case, Proporta, calls it an "alarming" and "not entirely surprising fact that the filthiest things we encounter on a regular basis are computer keyboards and our mobile phones." The company asserts that the average mobile phone has 25,127 germs per square inch.

Despite such marketing pitches, Julian, the Stanford doctoral student, isn't that worried about contracting illness from his Motorola Droid. "In day-to-day life, I don't know how much risk a phone will really have" for spreading influenza, he said.

He guards his phone, but not for health reasons. "I think smart phones have so much personal information in them," he said. "My worry is more about security rather than about infectious disease."

Airborne particles — from coughs and sneezes – could be more serious threats. That's why public health officials launched a campaign at the height of last year's H1N1 pandemic to observe the common courtesies of covering coughs and sneezes.

"People need to clean their hands, and people need to clean their stuff. That will go a long, long way to preventing transmission" of the flu virus, said Amy Nichols, a registered nurse and director of infection control at the UC San Francisco Medical Center.

Frequent hand-washing, routine disinfecting of your cell phone and, most importantly, getting vaccinated will help control the spread of the flu virus, she and other health experts say.

The federal Centers for Disease Control and Prevention predicts that this flu season could be a typical one – unlike last year's H1N1 flu pandemic. The novel strain of influenza caused a worldwide scare amid vaccine shortages, but turned out to be less widespread and lethal than feared.

Health officials say there is enough flu vaccine to go around this year, with a single dose to boost immunity against the most prevalent strains of influenza.

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