

0912 H1N1 - As H1N1 looms, study shows students aren't protecting themselves -- As public health experts warn of potential widespread outbreaks of H1N1 flu this school year, a new study from North Carolina State University shows that students do not comply with basic preventative measures as much as they think do. In other words, the kids aren't washing their hands.

"Hand washing is a significant preventative measure for many communicable diseases, from respiratory diseases like H1N1 to foodborne illness agents, such as norovirus," says Dr. Ben Chapman, assistant professor of family and consumer sciences and food safety extension specialist at NC State. The new study, which examined student compliance with hand hygiene recommendations during an outbreak of norovirus at a university in Ontario, finds that only 17 percent of students followed posted hand hygiene recommendations – but that 83 percent of students reported that they had been in compliance. Norovirus causes gastrointestinal problems, including vomiting and diarrhea. Every year there are 30 to 40 outbreaks of norovirus on university campuses, affecting thousands of students.

Chapman, who co-authored the research, says this is the first study to observe student hygiene behavior in the midst of an outbreak. Previous studies examined self-reporting data after an outbreak – and the new research shows that the self-reporting data may be inaccurate.

"Typically, health officials put up posters and signs and rely on self-reporting to determine whether these methods are effective," Chapman says. "And people say they are washing their hands more. But, as it turns out, that's not true.

"The study shows that while health authorities may give people the tools we think they need to limit the spread of an outbreak, the information we're giving them is not compelling enough to change their behavior. Basically, it doesn't work. But we do it again with every outbreak, and we're doing it now with H1N1."

Chapman says the study shows that health officials need to target specific audiences, such as students in a particular dorm or who eat at a particular cafeteria, and tailor their information to those audiences. For example, telling them where the nearest washrooms are, or pointing out where hand sanitizer units are located. "The more specific the information is for an audience, the better off you are," Chapman says.

Chapman adds that health authorities also need to use language appropriate to their target audience. "For example, don't refer to something as a 'gastrointestinal illness,'" he says, "instead, tell them 'this could make you puke' or 'dude, wash your hands.' The idea is to craft compelling messages that create discussion in that audience. Make them talk about it."

Chapman also says that health officials should take advantage of social media, such as text messaging and Facebook, to raise awareness. "If your audience consists of students," he explains, "you should use media that students use.

"Campuses need to expect outbreaks will happen and plan accordingly. Have the response tools in hand."

The study, "University Students' Hand Hygiene Practice During a Gastrointestinal Outbreak in Residence: What They Say They Do and What They Actually Do," was co-authored by Chapman, Dr. Douglas Powell of Kansas State University and Brae Surgeoner, a former graduate student at the University of Guelph. The study was published in the September issue of the Journal of Environmental Health.