



Compiled by Myra Wright

## UNC Researchers Say Stomach Flu Vaccine Could Be Possible

Every year, millions of people are infected with noroviruses, commonly called "stomach flu," which often results in up to 72 hours of vomiting and diarrhea. While most people recover in a few days, the symptoms can lead to dehydration and in rare cases, especially among the elderly and infants, death.

Now, researchers at the University of North Carolina School of Public Health have discovered that the virus mutates genetically, similar to the virus that causes influenza. And, like the flu, a vaccine could be possible.

"One of the mysteries of medicine has been why do they keep infecting people when you'd think we'd be developing immunity," said Lisa Lindesmith, one of the lead authors of the study. "Mechanisms of GII.4 Norovirus Persistence in Human Populations," recently published in the online medical journal PLoS Medicine. "What




we've found is that the GII.4 am [of the noroviruses] keeps changing. Whenever we're seeing big outbreaks of norovirus, we're also seeing genetic changes in the virus."

Noroviruses are the leading cause of viral acute gastroenteritis. They are highly contagious, often causing epidemic outbreaks in families and communities, on cruise ships, in hospitals and in assisted living facilities. Often, infection can mean many miserable hours, with time lost from work, school and other activities. There is no treatment to stop the infection.

"Noroviruses are very contagious," Lindesmith said. "It may only take one or two viral particles to become infected. Good hand washing is critical when the virus is present. A vaccine may someday have an important role, too, especially among the elderly and other people particularly vulnerable to the effects of the illness."

## New First-Aid Kit Package Available From me4kidz

As the weather turns warmer, kids are finally able to run free outdoors. Unfortunately, a side effect of all that running around is scraped knees and elbows, head bumps and bee stings. Me4kidz is expanding its first-aid products with the addition of Medibuddy, a kid-friendly and compact first-aid kit that includes a brightly colored carrying case, crayon-shaped bandages, knee and elbow bandages, sting relief pads, gauze pads, antiseptic wipes, burn relief cream, antibiotic ointment and smiley-face stickers. The manufacturer's suggested retail price is \$4.95. For more information, visit [www.me4kidz.com](http://www.me4kidz.com). 

## New Finding May Help Explain Development of Preeclampsia

In a study of pregnant women, those with pregnancy-induced high blood pressure were found to have higher levels of a peptide that raises blood pressure in the pieces of tissue linking mother and fetus, according to researchers at Wake Forest University Baptist Medical Center. The finding, reported in the current issue of *Hypertension*, may help explain how the disorder develops.

Preeclampsia, or high blood pressure induced by pregnancy, affects 7 to 10 percent of pregnancies in the United States and is the second-leading cause of maternal mortality. It is the leading cause of pre-term delivery and contributes significantly to stillbirths and death in newborns.

The researchers found that in women with preeclampsia, levels of angiotensin II (Ang II), a hormone that constricts blood vessels and causes blood pressure to rise, was doubled in the chorionic



villi, part of the placenta that links mother and fetus and supplies food and oxygen.

"This finding may be part of the preeclampsia puzzle," said Lauren Anton, a graduate student who is first author on the research. "Anything that gets us closer to understanding this disease is important because there is no treatment and no cure and women are still delivering babies too early."

The researchers theorize that Ang II may restrict the fetal vessels that lie within the chorionic villi,

which not only raises blood pressure, but also lowers oxygen and nutrient flow to the baby and may result in lower birth weight and other complications of preeclampsia.

The study involved 21 women with preeclampsia and 25 women without the disorder. After delivery, tissue sections were taken from the center of the placenta for analysis.

Ang II is part of the renin angiotensin system (RAS) that regulates blood pressure. The system has been shown to play an important role in preeclampsia. However, changes in the system also occur in women who don't develop the condition. In normal pregnancies, estrogen causes increased levels of several hormones, including Ang II, in the blood. Despite the increase of Ang II in the blood during pregnancy, most women do not develop preeclampsia.

The researchers hope that the findings may one day lead to treatment for preeclampsia.