

EPI Update for Friday, April 7, 2017
Center for Acute Disease Epidemiology (CADE)
Iowa Department of Public Health (IDPH)

Items for this week's EPI Update include:

- **Theory on fewer microcephaly births in Brazil in 2016**
- **Picking a better snack**
- **CDC study shows influenza vaccine effectiveness against pediatric death**
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Theory on fewer microcephaly births in Brazil in 2016

One purpose of surveillance is to predict the occurrence of illness. After so many births of babies with microcephaly in Brazil in 2015, officials prepared for an increase in 2016. While there were still reports of babies with microcephaly, a large increase was not observed. Here are three possible theories to explain why there may have been fewer babies with microcephaly born, even with the resurgence of Zika virus infections early in 2016:

1. the increase in fever and rash illness in 2016 could have been from another arboviral disease, such as Chikungunya, and would reasonably account for the increase observed with Guillain-Barré syndrome (GBS) seen in 2016 and not microcephaly (most likely);
2. for Zika virus infection to cause microcephaly a co-factor must be present; and
3. there may have been fewer pregnancies in 2016 or higher rates of elective terminations.

To read the full article, visit www.nejm.org/doi/full/10.1056/NEJMc1608612.

Picking a better snack

New research suggests delaying access to tempting vending machine junk food by less than half a minute can shift one's choice to healthier snacks (vending machines are the most prevalent source of high-calorie snacks in the U.S. and there are 1.3 million snack vending machines across the U.S.).

A new vending machine system, with a technology called the DISC system (Delays to Improve Snack Choices), employs a "delay" bar that separates the healthier snacks from the less nutritious options. When an individual selects a less nutritious snack, the system begins a 25-second time delay and has an LED screen that displays the delay times for less healthy snack items, and a delivery countdown, which allows an individual to change their snack choice to a healthier option.

Study findings with the DISC vending machine system suggest that relatively brief time delays can nudge people to purchase healthier snacks at least some of the time. For more information, visit psychcentral.com/news/2017/04/03/smart-vending-machine-encourages-healthier-selections/118571.html.

CDC study shows influenza vaccine effectiveness against pediatric death

Influenza vaccination significantly reduces the risks of pediatric death from influenza infection. A CDC study (data from 2010-2014) found that vaccination against influenza reduced the risk of influenza-associated death by half (51 percent) among children with high-risk medical conditions and by nearly two-thirds (65 percent) among healthy children. During the study period, 358 laboratory-confirmed, influenza-associated pediatric deaths were reported and of the pediatric deaths with known vaccination status (291), only one in four children (26 percent) had been vaccinated.

Read the full report at pediatrics.aappublications.org/content/early/2017/03/30/peds.2016-4244. For more information on influenza and influenza vaccination, visit idph.iowa.gov/influenza.

Correction to March 10, 2017 article

In the EPI Update article on Ebola, the correct title was "Ebola virus **RNA** detected in Ebola survivor 565 days after recovery." Detection of Ebola virus RNA by PCR does not necessarily indicate infectiousness.

In the news: Healthy gums may signal a longer life

nytimes.com/2017/03/30/well/live/healthy-gums-may-signal-a-longer-life.html

Infographic: National Public Health Week 2017



Happy National Public Health Week to all of our partners! For more information the NPHW 2017, visit www.nphw.org.

Meeting announcements and training opportunities

None

Have a healthy and happy (and hopefully less rainy) week!

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