

Incidence density of influenza illness during pregnancy in Suzhou, China, 2015–2018

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June 2, 2021

Abstract

Background: Data on influenza incidence during pregnancy in China are limited. **Methods:** From October 2015–September 2018, we conducted active surveillance for acute respiratory illness (ARI) among women during pregnancy. Nurses conducted twice weekly phone and text message follow-up upon enrollment until delivery to identify new episodes of ARI. Nasal and throat swabs were collected [?]10 days from illness onset to detect influenza. **Results:** In total, we enrolled 18,724 pregnant women median aged 28yo, 37% in first trimester, 48% in second trimester and 15% in third trimester, with 7 self-reported vaccination during pregnancy. In the 18-week epidemic period during October 2015–September 2016, influenza incidence was 0.7/100 person-months (95% CI:0.5–0.9). In the 29-week epidemic during October 2016–September 2017, influenza incidence was 1.0/100 person-months (95% CI:0.8–1.2). In the 11-week epidemic period during October 2017–September 2018, influenza incidence was 2.1/100 person-months (95% CI:1.9–2.4). Influenza incidence was similar by trimester. More than half of the total influenza illnesses had no elevated temperature and cough. Most influenza-associated ARIs were mild, and <5.1% required hospitalization. **Conclusions:** Influenza illness in all trimesters of pregnancy was common. These data may help inform decisions regarding the use of influenza vaccine to prevent influenza during pregnancy.

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