Summary of Enterovirus D68 Community of Practice Surveillance Discussion

Introduction

On September 19, 2014, ISDS hosted a Community of Practice Webinar on surveillance for Enterovirus-D68 (EV-D68). 95 participants listened to updates from Stacey Hoferka (Illinois), Fatema Mamou (Michigan), Alex Garza (FirstWatch) and Mike Coletta (CDC / BioSense) and then discussed approaches to using syndromic surveillance to monitor increases in severe respiratory illness among children.

Poll Results

In addition to the panelist presentations and group discussion, participants participated in a poll. The results are as follows:

73% of Webinar participants were conducting syndromic surveillance to monitor specifically for increased illness that may be the result of EV-D68. Of those, 90% are using emergency department data, 16% inpatient data, 12% ambulatory data, 12% EMS data and 13% using other data sources. Syndromes used to monitor for potential illness related to EV-D68 are shown in Table 1.

Table 1: Percent of Webinar Poll Respondents Are Using this Syndrome to Monitor for Illness that may be related to EV-D68

Syndrome	**Percentage**
Respiratory	89%
Asthma	67%
Cough	59%
Shortness of Breath	37%
Other	37%

Only 9% of participants are sharing information and/or collaborating on response efforts with their health department's asthma program.

Jurisdiction Examples

Most jurisdictions participating in the discussion are seeing increases in respiratory illness and asthma-related ED visits. While this increase is typical in September every year, several jurisdictions are reporting increases above what was seen in September 2013. Examples from Michigan and Boston are shown below.

Figure 1: Michigan Daily Respiratory Syndrome Visits (Source: Fatema Mamou)

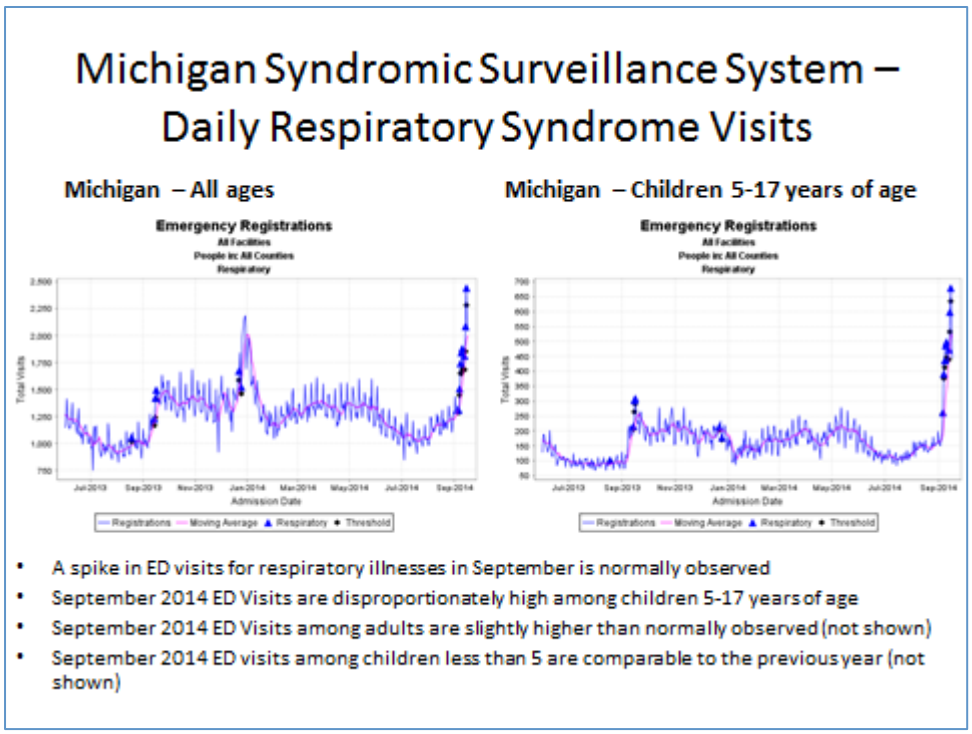


Figure 2: Michigan Respiratory Syndrome Visits by Complaint (Source: Fatema Mamou)

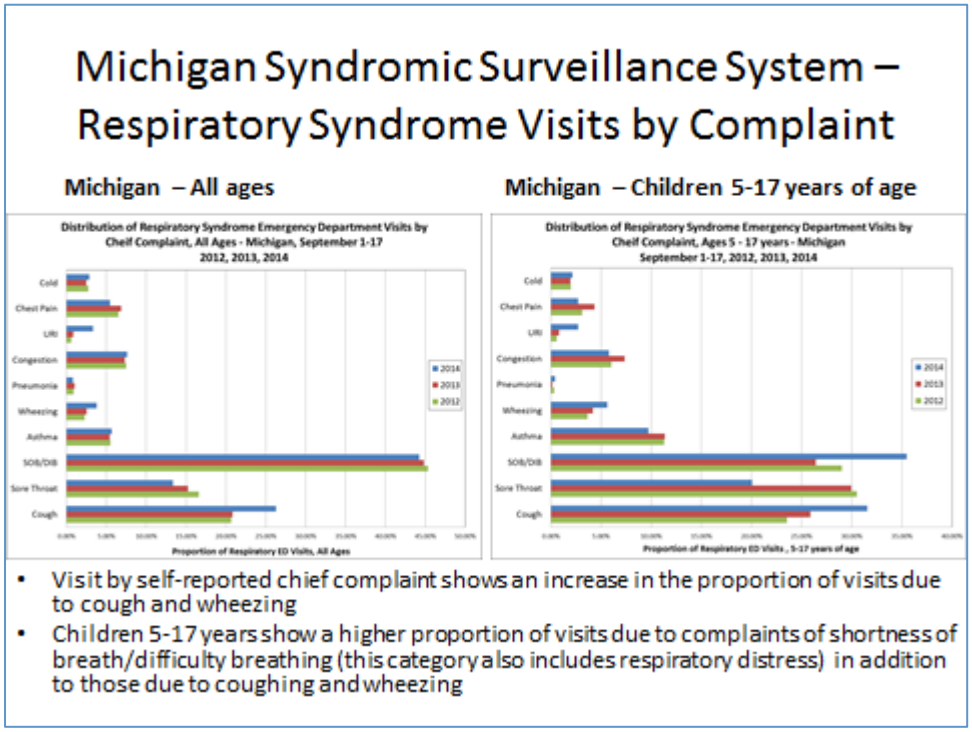


Figure 3: Boston Public Health Commission, Percentage of ED Visits for Asthma Syndrome in Patients <18 Years of Age Source: Julia Gunn

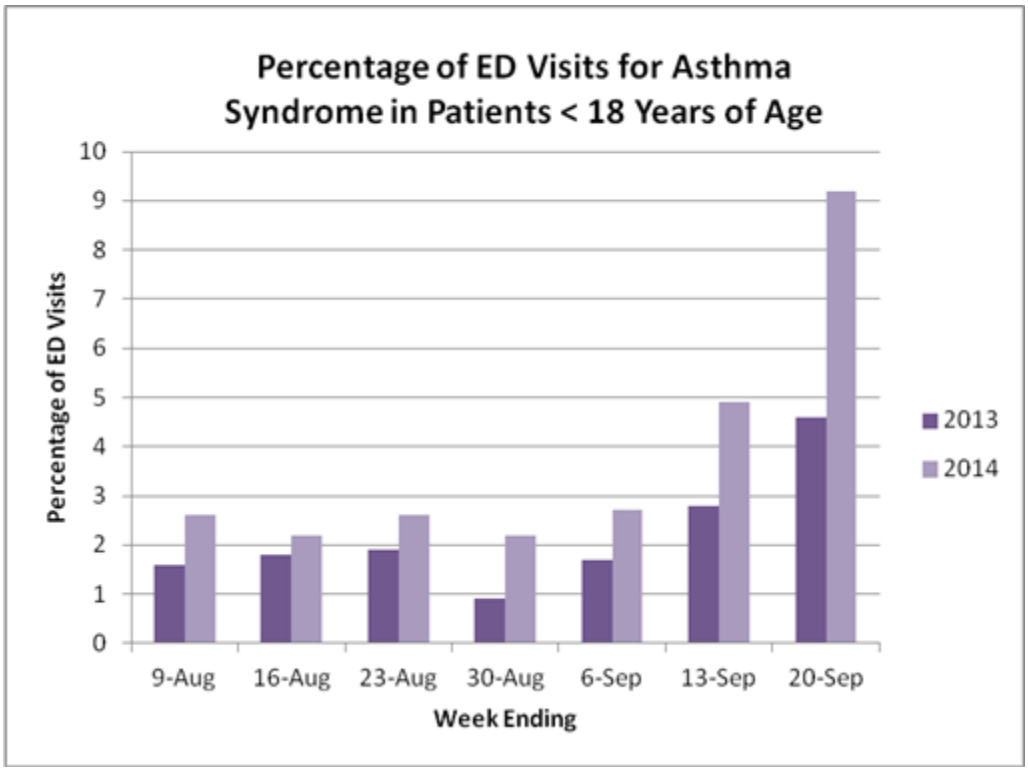
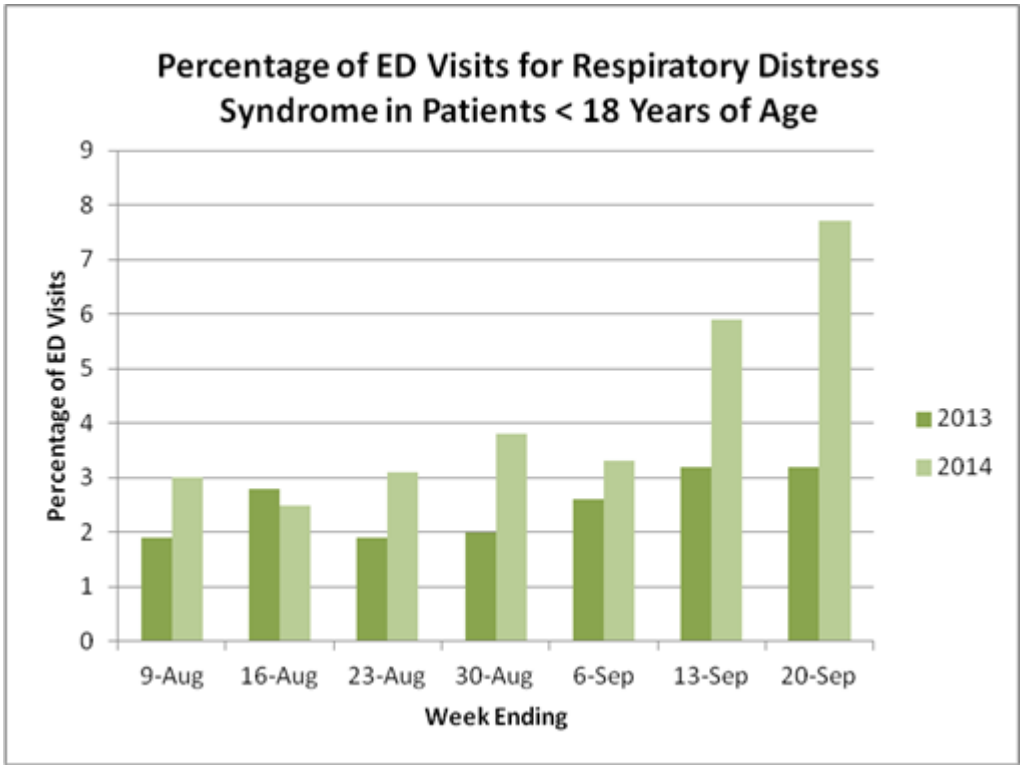


Figure 4: Boston Public Health Commission, Percentage of ED Visits for Respiratory Distress Syndrome in Patients <18 Years of Age, Source: Julia Gunn



Syndromic surveillance systems that include disposition information can track increases in percentage of children admitted for respiratory complaints compared to 2013 (data not shown).

BioSense

Tips for monitoring respiratory illness in BioSense have been reported by Mike Coletta:

We looked in BioSense binning rules and discovered that the best way to pick out these terms was to query for cough and dyspnea combined. We were able to confirm among data sources that share details with us that this combination of symptoms pulled appropriate records including cough, difficulty breathing, and wheezing.

Communication with Asthma Programs

The majority of laboratory-confirmed cases of EV-D68 have underlying history of asthma / wheezing.[1] Sharing of syndromic information and coordination of response activities with health department asthma programs can improve awareness among and outreach to high-risk populations. For example, the Boston Public Health Commission Asthma Prevention and Control Program has shared syndromic reports with over 3,900 of its contacts, including school nurses, Head Start, and Breathe Easy at Home participants among others.

Additional Resources

Continue to check the ISDS Severe Respiratory Illness web page for EV-D68 Resources: http://www.syndromic.org/resources/topic-based-surveillance/822-severe-respiratory-illness-surveillance

For comments and/or questions please contact Brooke Evans at bevans@syndromic.org.

1. Midgley CM et al. Severe Respiratory Illness Associated with Enterovirus D68 — Missouri and Illinois, 2014. MMWR 63(36);798-799. September 12, 2014. Available online at http://www.cdc.gov/mmwr/pdf/wk/mm63e0908.pdf.