

Technical Challenges from the Public Health Practice Community

ISDS Webinar - May 28, 2009

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For Disease Surveillance

Federal Need

Pandemic and All-Hazards Preparedness Act

*“the Secretary, in collaboration with State, local, and tribal public health officials, shall establish a near real-time electronic nationwide public health situational awareness capability through an interoperable network of systems... **Such network shall be built on existing State situational awareness systems or enhanced systems that enable such connectivity.**”*

109th Congress of the United States, Amendment to the Public Service Act.
Pandemic and All-Hazards Preparedness Act. (2006). Pub L No. 109-417, 101 et seq.
<http://www.govtrack.us/data/us/bills.text/109/s/s3678.pdf>



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Federal Need

Presidential Directive (HSPD-21)

“The Secretary of Health and Human Services shall establish an operational national epidemiologic surveillance system for human health, with international connectivity where appropriate, that is predicated on State, regional, and community-level capabilities and creates a networked system to allow for two-way information flow between and among Federal, State, and local government public health authorities and clinical health care providers.”



Public Health Need and Utility

Surveillance systems already exist for monitoring influenza-like morbidity.



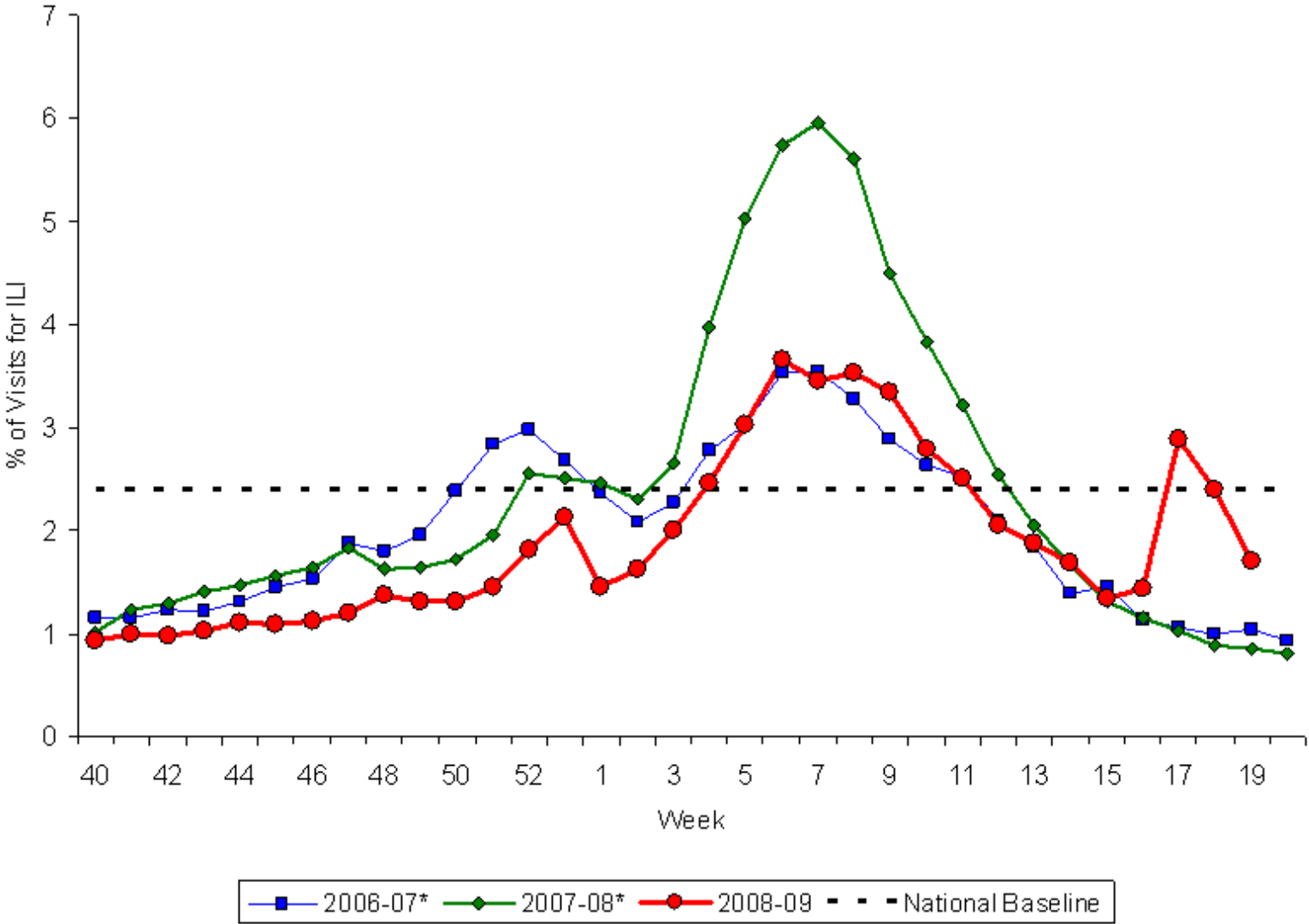
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CDC Press Briefing - May 26, 2009

Anne Schuchat: When we overlay our virologic surveillance on influenza-like illness, what we see is the vast majority of influenza-like illness that has a viral isolate associated with it. Right now that's the novel H1N1 virus. A few weeks ago, there was a bit more of the seasonal flu still circulating, but right now, almost all the positives we have is this novel H1N1 virus. When we look more broadly at the influenza-like illness trends, while almost all of the influenza-like illnesses (are due to) this new virus, the actual percent of visits that are influenza-like visits are going down in most regions of the country. So we can see that overall we're below -- you know, we were over baseline for this time of year, which is really extraordinary for the past several weeks. And now we're down below the baseline again. With our nine regions of the country, I think there's only one that is still at an elevated level. Actually two levels, region one and two are still a bit higher than you would expect for this time of year. The others are all on the downswing. So that your question gets to of the viruses that are circulating, is this novel H1N1 the major culprit? Yes. But how much disease is circulating? Probably less now than a week ago.

Anne Schuchat: The question about has the virus peaked is a complex one. I like to use the analogy of weather and while most of the country may be entering the warmer months or even summer, cold fronts could happen in any particular location. So, we know that diseases are still very active in New York City and a few other parts of the country and they may not feel that this condition has peaked. We don't know whether the warming up in a lot of areas is permanent or they might have some more disease to come. Our national statistics and most of our regional statistics suggest that we may have passed the peak here for this time of year. We're also thinking that the later we go, the more of the warm summer months ahead may give us a little bit of respite.

Percentage of Visits for Influenza-like Illness (ILI) Reported by the US Outpatient Influenza-like Illness Surveillance Network (ILINet), National Summary 2008-09 and Previous Two Seasons



*There was no week 53 during the 2006-07 and 2007-08 seasons, therefore the week 53 data point for those seasons is an average of weeks 52 and 1.

Public Health Need and Utility

Why DiSTRIBuTE?

CDC stated: Efforts to improve existing Sentinel and Syndromic systems have not succeeded

- CSTE/CDC influenza surveillance working-group, 2007*
- CSTE Position Statement "Influenza in the U.S." 08-ID-10*

CDC asked local public health agencies to make electronic Syndromic surveillance systems work, and to share their successes.



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DiSTRIBuTE Methodology

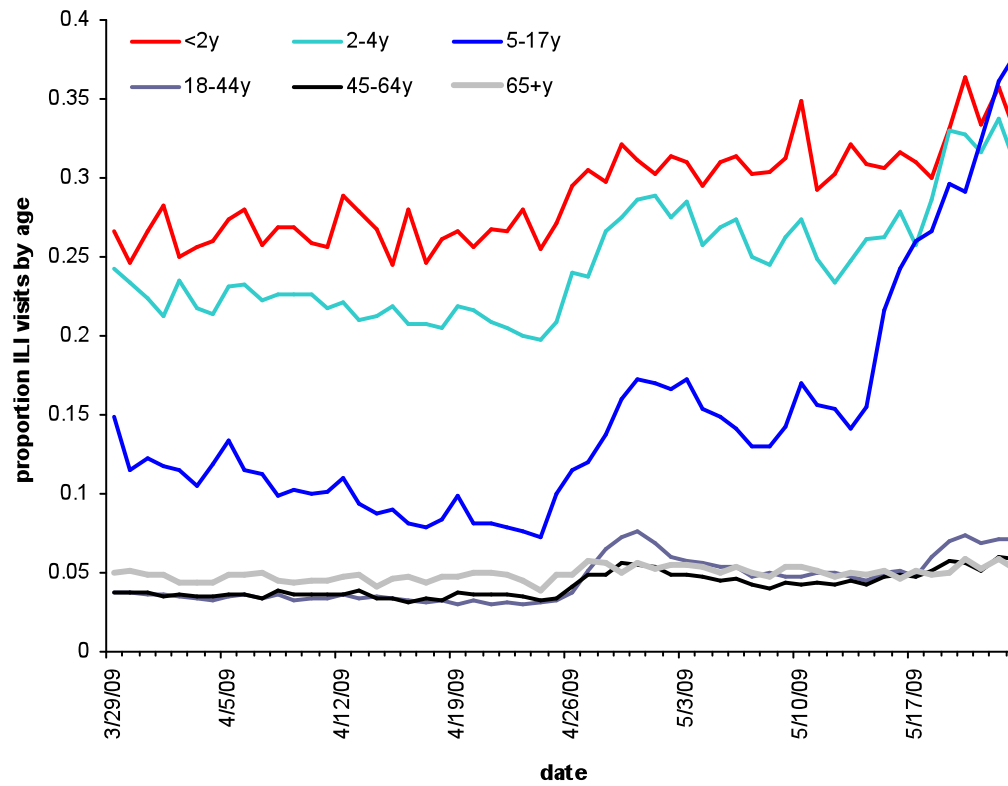
- Share summarized counts
- Based on existing local surveillance systems
- Febrile, respiratory or influenza-like-illness (ILI) syndromes reported by age group



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DiSTRIBuTE

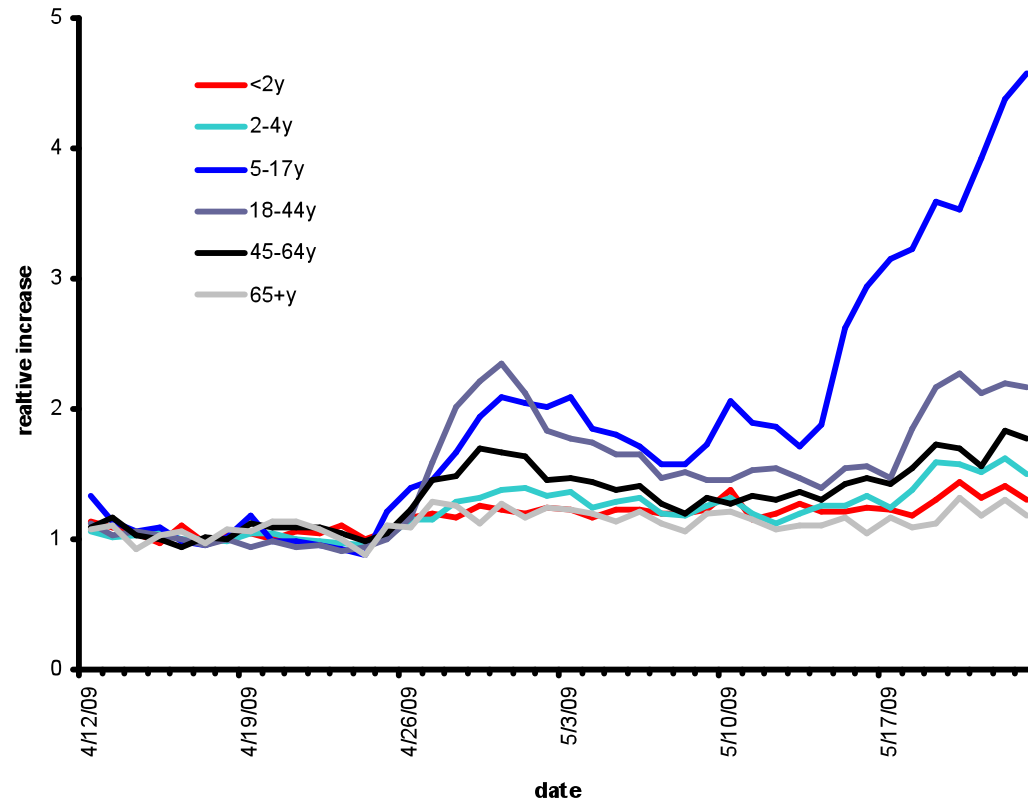
%ILI in ISDS DiSTRIBuTE - All Sites



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Realtive Increase %ILI in ISDS DiSTRIBuTE - All Sites



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DiSTRIBuTE Philosophy

Local Systems working in a Collaborative Network



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