Novel H1N1 Influenza
Guidelines/Discussion Points
Pima County Pediatrics Society
September 8, 2009

Infection Control

- Engage all staff in discussion of importance of infection control in protecting both patients and staff
- Employees with ILI symptoms should be excluded for 7 days or until 24 hours after symptoms abate, unless another diagnosis is confirmed
- Patients with ILI symptoms who can tolerate it should be asked to wear a surgical mask (signage plus receptionist intervention)
- When possible, place patients with ILI symptoms in a separate waiting area from "well" patients or move rapidly to exam room
- When possible, staff should maintain 6 feet distance from patients with ILI symptoms
- Education and signage to promote respiratory etiquette and frequent hand washing
- Access for patients/staff to tissues or surgical mask and handwashing facilities or alcohol based hand sanitizer (>60% strength)
- Cleaning standards for healthcare facilities basically sufficient with enhanced attention to regular wipe down of frequently touched surfaces
- Those providing direct patient care to people with ILI symptoms should follow contact and droplet precautions unless performing aerosol generating procedure, in which case N95 or equivalent respirator is recommended
- Configure reception area to permit 6 feet between receptionist and registering clients

"Surge"

- It is likely that patients presenting for care with ILI symptoms this season will exceed systems capacity to handle under ordinary operating procedures
- Educate your patient as to when and how to seek care, including home care instructions when appropriate
- Consider enhancing phone triage capacity
- Consider enhancing acute care hours on schedule, including evenings and/or weekends
- Consider registering as a volunteer so as to be pre credentialed should their be urgent need to extend hospital services or to open alternate care sites (state: http://www.azdhs.gov/volunteer/az-esar-vhpFAQ.htm and county: www.AZvolunteer.com

Countermeasures

Vaccine

- All children aged 6 months- 18 years, as well as the caregivers of infants under 6 months are encouraged to get seasonal influenza vaccine (as soon as available)
- Novel H1N1 vaccine is expected to start becoming available around mid October. Most manufacturers' vaccine is likely to require 2 doses 3 weeks apart (and it takes ~2 additional weeks to establish full immunity). All providers who have capacity and can order in quantities of 100 doses are encouraged to pre register to receive vaccine, which will be shipped with supplies directly to the provider's office. Providers may not charge for the vaccine, but may charge or bill an administration fee. Healthcare workers with direct patient contact, children and young people 6 months through 24 years, and caregivers of infants under 6 months are among the targeted groups to receive initial novel H1N1 vaccine.

Diagnosis and Treatment

- Rapid test is only ~50% sensitive for novel H1N1 (but highly specific)
- PCR testing revealing Influenza A, but negative for H1 and H3 – highly likely to be novel H1N1
- Viral culture may give false negatives
- Novel H1N1 is predominant influenza virus circulating in southern hemisphere as well as N. America – this may shift as season unfolds
- Consider performing rapid test, but if high risk patient, do not rely on negative result
- Further testing (PCR, culture) may be more useful to confirm outbreaks than in providing an individual patient's care
- Do NOT wait on results to isolate patients with ILI symptoms and to make treatment decisions.
- There are currently broadly permissive guidelines for use of antivirals (neuraminidase inhibitors) for prophylaxis and treatment of influenza. However, it is becoming increasingly clear that many if not most without high risk conditions will recover uneventfully without therapy. Special attention should be given to consideration of treatment of those with high risk conditions and those who are critically ill. High risk conditions include age under 5 (and especially age under 2), immune compromise, persons with chronic disease, especially neurodevelopmental disease, pregnanacy, daily aspirin therapy in those under 19, and possibly obesity.
- Be aware of potential for severe bacterial coinfections and treat accordingly. Obtain appropriate cultures to direct treatment when possible and empirically treat to cover organisms such as *S. aureus (including MRSA), S. pneumoniae and S. pyogenes*.

Patient Education

- Instructions for supportive care (hydration, fever control)
- Instructions for self isolation until 24 hours after fever is gone (without use of antipyretics). Note: those attending preschool/day care environments, where most children are "high risk" due to being under 5, the longer exclusion of 7 days after onset of symptoms is recommended.
- Instructions to care giver to minimize risk of their acquiring the infection
- Recommend the ill child not spend time with anyone other than care giver, and to wear a surgical mask if must be in same room as others
- Respiratory etiquette
- When to seek follow up care

Highlights from recent CDC analysis of pediatric deaths due to novel H1N1
(www.cdc.gov/mmwr/preview/mmwrhtml/mm5834a1.htm?s_cid=mm5834a1_e)
36 pediatric deaths (through Aug. 8, 2009)

5 (14%) < 2 years
7 (19%) <5 years median age 9 years
11 (30%) >12 years
24 (67%) had any of the high risk medical conditions
22 (61%) had neurodevelopmental conditions (13 of these children had multiple neurodevelopmental conditions and 9 of them had a chronic pulmonary condition)
6 (17%) >5 years and no high risk medical condition

23 children with culture or pathology reports

10 (43%) with lab confirmed bacterial coinfections, including all 6 children who had no high risk condition including age