Know flu, no sepsis: Prevention at the beginning

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Goals

• Discussion of sepsis reduction through Flu prevention
• What’s new with Flu 2018
• Questions
Flu/Sepsis Connection

• High correlation between influenza pneumonia and sepsis
**Flu/Sepsis Connection**

- Ohio has the 16th highest influenza pneumonia rate in the United States
- Influenza pneumonia prevalence approximately 43% in 2009 H1N1 study *(Clinical Infectious Diseases, 2012 March 20; 54(9): 1221-9)*
- 18% of pneumonia cases progressed to sepsis (vs. 3% without pneumonia)
- 17% mortality with sepsis from pneumonia
**Flu/Sepsis Connection**

- Pneumonia more common in flu patients who are:
  - over 65
  - had one chronic condition (diabetes, COPD)
  - nursing home resident
- Ohio Hospital Association goal: reduce sepsis mortality by 30 percent
What we know about Influenza Immunization

- Hospitalized, vaccinated adults over age 18 were less likely to require ICU admission AND less likely to die
- Also decreased hospital LOS (ages 50-65)

So what to do?

- Sepsis is everyone’s problem
What’s new with the Flu

• **Possibly** going to be milder this year
• Flu morbidity in Australia much better than last season
• H1N1 predicted to be dominant this year (H3N2 was dominant last flu season).
• H1N1 dominance = generally better match to vaccine than H3N2
What does this mean? Vaccines

• Flu vaccine effectiveness may “look” better than last year
• Quadrivalent and trivalent are both recommended
• Flumist making a comeback after two years (better H1N1 efficacy)
• Remember high dose flu vaccine for adults over 65
Other Flu Thoughts

• Never too late in the season to get a flu shot
• Best time to immunize is in October, but catch patients whenever you can
• Everyone over six months of age including pregnant patients can get a flu shot over six months of age
Toolkits and Resources

- Flu Vaccine finder: https://www.osap.org/page/Issues_Influenza
- The Organization for Safety, Asepsis and Prevention (OSAP) https://www.osap.org/page/Issues_Influenza
- Vaccinefinder: https://vaccinefinder.org/
- CDC Sepsis Information: https://www.cdc.gov/sepsis/education/hcp-resources.html
Thoughts on patient cajoling

- Re: poor efficacy - “If you had a coupon for 30% off, would you use it?”
- Re: I get the flu with the shot “you likely already were exposed to the flu when you had the shot.” Recommend getting vaccine earlier
- Re: needle-phobia “The flu nasal spray is back” (for ages 2-49 years only)
Summary

- Prevent sepsis through flu
- Flu season has been milder in Australia
- Remember cajoling techniques
- Go forth and IMMUNIZE!
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