Use and Timing of Antiviral Therapy for Influenza in Hospitalized U.S. Children, 2016–2020

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BACKGROUND

According to the 2018 Infectious Diseases Society of America (IDSA) clinical practice guidelines and Centers for Disease Control and Prevention (CDC) guidance, clinicians should start antiviral treatment as soon as possible for children who are hospitalized with suspected or confirmed influenza. We assessed the use of influenza-specific antiviral therapy in children hospitalized with symptoms of acute respiratory illness and laboratory-confirmed influenza.

2. METHODS

- Design: Active, population-based viral surveillance study.
- Setting: Seven U.S. medical centers that comprise the CDC New Vaccine Surveillance Network (12/01/2016–02/28/2020)
- Population: Children hospitalized with fever and/or respiratory symptoms. We excluded children who did not undergo clinical testing (by rapid antigen testing or nucleic acid amplification test [NAAT]) or research testing (by NAAT) for influenza, those who presented out of influenza season (site- and season-specific), and those whose date of antiviral therapy or whether antiviral therapy was given was unknown.
- Analysis: We assessed the use of influenza-specific antiviral therapy in this cohort and defined timely antiviral therapy as administration within 2 days of hospitalization.

3. RESULTS



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1,149 INFLUENZA + 154 clinical testing only

428 research testing only



ANTIVIRAL THERAPY

620 children (54.0%) received influenza-specific antivirals, and therapy was timely in 572 cases (92.3%).

OF THOSE WHO TESTED POSITIVE CLINICALLY...

445/721 (61.7%) received timely antiviral therapy 38/721 (5.3%) received delayed antiviral therapy 238/721 (33.0%) received no antiviral therapy

The distribution of antiviral-treated cases varied by race and Hispanic origin and study site.









4. CONCLUSION

Although antiviral therapy is recommended for all influenzaassociated hospitalizations in children, antiviral prescribing remains suboptimal. Further studies would help identify and address barriers to antiviral therapy in children with influenza.

The distribution of antiviral-treated cases did not vary by age at presentation or influenza season.