

Table 1. Proportion of patients with at least one event

	Baloxavir (n=5,080)					Oseltamivir (n=10,160)				
	15-day Follow-Up		p-value			30-day Follow-Up		p-value		
	N	%	N	%		N	%	N	%	
All-cause HRU										
ED Visits	72	1.4%	174	1.7%	0.17	111	2.2%	264	2.6%	0.12
Hospitalizations	11	0.2%	35	0.3%	0.17	15	0.3%	55	0.5%	<0.01
OP visits	1411	28%	2925	29%	0.19	2168	43%	4299	42%	0.67
RX fills	1641	32%	3197	31%	0.30	2447	48%	4742	47%	0.08
All Resp HRU										
ED Visits	26	0.5%	105	1.0%	<0.01	29	0.6%	124	1.2%	<0.01
Hospitalizations	7	0.1%	22	0.2%	0.29	9	0.2%	25	0.2%	0.40
OP visits	561	11%	1160	11%	0.49	808	16%	1569	15%	0.46
Select Resp HRU										
ED Visits	13	0.3%	69	0.7%	<0.01	13	0.3%	70	0.7%	<0.01
Hospitalizations	4	0.1%	20	0.2%	0.13	5	0.1%	21	0.2%	0.15
OP visits	176	3.5%	454	4.5%	<0.01	194	3.8%	508	5.0%	<0.01

ED, Emergency Department; HRU; Healthcare resource utilization; OP, Outpatient; RX, Prescription

Conclusion: These findings suggest that treatment of influenza with baloxavir may improve outcomes and lower HRU costs compared with oseltamivir treatment.

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1519. Reduction of healthcare-associated viral infections during COVID-19 pandemic

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Session: P-68. Respiratory Infections - Viral

Background. Healthcare-associated viral infections (HAVI) are a common cause of preventable harm, particularly in pediatric patients. We utilized routine hospital-wide surveillance data for HAVIs at a quaternary care pediatric hospital in order to assess the impact of enhanced public health measures on rates of HAVI at our institution during the COVID-19 pandemic.

Methods. Patient cases of HAVI were detected through routine house-wide microbiologic surveillance. Compliance with our institutional prevention bundle, which includes hand hygiene, appropriate use of isolation precautions and personal protective equipment (PPE), maintaining a clean and clutter free environment, employee illness policy, and restrictions on sick visitors, was measured through use of Kamishibai-card rounding.

Results. During the most acute period of the COVID-19 pandemic, intensification of the majority of elements of the HAVI bundle occurred by nature of our institutional response, including use of PPE monitors in certain locations, increased use of eye protection, universal masking for staff and caregivers, re-education for employees on not coming to work sick, and further restrictions to visitation. The monthly HAVI rate in the acute phase of the COVID-19 pandemic was lower in March (0.76), April (0.27) and May (0.0) 2020 compared to the same time period last year (0.8, 0.8, 0.56). Bundle compliance during those months in 2020 was 83%, 89%, and 100%, respectively. In May, zero HAVIs were identified. (Figure 1)

Healthcare-associated viral infections rate and bundle compliance after COVID-19 prevention measures



Conclusion. The intensification of routine infection prevention practices aimed at minimizing the transmission of COVID-19 may also reduce rates of HAVI. During our COVID response, we identified a decrease in our institutional HAVI rate compared to the same time last year, reaching lower special cause in May with a rate of 0. We will have ongoing measurement of the HAVI rate throughout the pandemic to determine if this reduction can be sustained and understand which intensified bundle elements need to be maintained in non-pandemic hospital operations.

Disclosures. All Authors: No reported disclosures

1520. Respiratory Syncytial Virus Hospitalizations (RSVH) and All-Cause Bronchiolitis Hospitalizations (BH) Among Children Aged ≤ 24 Months at the Start of RSV Season With Bronchopulmonary Dysplasia/Chronic Lung Disease of Prematurity (BPD/CLDP) Before and After the 2014 American Academy of Pediatrics (AAP) Policy

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Session: P-68. Respiratory Infections - Viral

Background. The AAP, in 2014, stopped endorsing palivizumab for use in children with BPD/CLDP born at < 32 weeks' gestational age (wGA) between the ages of 12 to 24 months not requiring medical support during the 6 months before the start of RSV season and all children with BPD/CLDP born at > 32 wGA. We sought to understand the impact of the guidance change on RSVH and BH in children no longer advised for RSV immunoprophylaxis with palivizumab.

Methods. Children with BPD/CLDP aged ≤ 24 months at the RSV season start and hospitalized for RSV or bronchiolitis during the 2010-2017 RSV seasons (November-March) were studied. RSVH, BH, and BPD/CLDP were defined by International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and ICD-10-CM codes. ICD-9 codes for wGA combine 31 and 32 wGA into one code. Therefore, for BPD/CLDP, we classified group 1 as children aged 12 to 24 months who were born at < 31 wGA and group 2 as those born at ≥ 31 wGA. The Children's Hospital Association's Pediatric Health Information System (PHIS) data set was used to describe frequency and characteristics of RSVH and BH and disease severity (including intensive care unit [ICU] admission and mechanical ventilation [MV]) before and after the 2014 AAP policy. Statistical analyses were done using z-tests; SAS version 9.4.

Results. Among children with BPD/CLDP, RSVH rates were 1.7% (1035/59,217) before 2014 and 2.1% (973/45,470) after 2014 (P< 0.0001). RSVH rose after the policy change vs before among children with BPD/CLDP in both group 1 (0.40% vs 0.26%; P< 0.0001) and group 2 (0.22% vs 0.14%; P=0.002). Similarly, BH also increased for both group 1 (P< 0.0001) and group 2 (P=0.002) after the guidance change vs before. Although ICU admissions increased significantly for children with BPD/CLDP in both group 1 (P< 0.0001) and group 2 (P=0.0004), use of MV (P=0.002) increased after 2014 for children with BPD/CLDP in group 1 only. Similar results were observed for BH.

Conclusion. This analysis highlights the increase in RSVH, BH, and associated severity among BPD/CLDP subgroups within the PHIS health system after 2014. Further study of long-term complications associated with RSVH in these children is warranted.

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1521. Risk factors associated with complications of influenza A or B infection, southern Puerto Rico, 2016-2019

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Session: P-68. Respiratory Infections - Viral

Background. Influenza is one of the most common viral respiratory diseases in the United States with 9-45 million cases per year. In Puerto Rico, more than 18,000 cases of influenza were reported during the 2019/20 season. The Sentinel Enhanced Dengue Surveillance System (SEDSS) conducts acute febrile illness surveillance for inpatient and outpatients at a southern Puerto Rico tertiary care hospital.

Methods. We performed a retrospective analysis of disease severity among laboratory-confirmed influenza cases enrolled in SEDSS. Cases with complications such as pneumonia or bronchitis evidenced by chest x-ray or clinical diagnosis were classified as severe.

Results. Between January 2016 and December 2019, there were 2,835 laboratory-confirmed influenza cases. More than half (1,662, 59%) were aged 0-20 years, 51% (n=1,447) were female, and 4% (n=124) required hospital admission. Among all influenza cases, influenza A virus was most common (n = 1,963, 69%) followed by influenza B virus (n = 872, 31%). Odds of having influenza A were higher among adults (OR=1.62; 95% CI:1.38-1.92). Chronic disease history among influenza cases