definition and trigger points combined with appropriate clinical care for mechanically ventilated patients while avoiding unnecessary triggering of the VAE definition by avoiding small unneeded changes in PEEP or FIO2. Methods: We performed a chart review of 283 patients who had a reported VAE to the NHSN between January 1, 2019, and December 31, 2020. We collected data including type of VAE, VAE triggering criteria, and clinical course. Results: Of the 283 VAEs, 59 were triggered by a PEEP increase from 5 to 8 with stable or decreasing FIO2. Of the 59 VAEs, 33 were VACs, 18 were infection-related ventilator- associated complications (IVACs), and 8 were possible ventilator-associated pneumonia (PVAP). Most of these transient changes in PEEP were deemed clinically unnecessary. A 21% reduction of VAEs reported to the NSHN over the 2-year review period could have been avoided by knobmanship. Conclusions: The VAE definition may often be triggered by provider bias to the ventilator settings rather than what the patient's clinical-condition requires. Attention to knobmanship may result in substantial decrease in reported VAE.

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Impact of a Comprehensive SARS-CoV-2 Infection Prevention Bundle on Rates of Hospital-Acquired Respiratory Viral Infections

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**Background:** We evaluated the impact of a comprehensive SARS-CoV-2 (COVID-19) infection prevention (IP) bundle on rates of non-COVID-19 healthcare-acquired respiratory viral infection (HA-RVI). Methods: We performed a retrospective analysis of prospectively collected respiratory viral data using an infection prevention database from April 2017 to January 2021. We defined HA-RVI as identification of a respiratory virus via nasal or nasopharyngeal swabs collected on or after hospital day 7 for COVID-19 and non-COVID-19 RVI. We compared incident rate ratios (IRRs) of HA-RVI for each of the 3 years (April 2017 to March 2020) prior to and 10 months (April 2020 to January 2021) following full implementation of a comprehensive COVID-19 IP bundle at Duke University Health System. The COVID-19 IP bundle consists of the following elements: universal masking; eye protection; employee, patient, and visitor symptom screening; contact tracing; admission and preprocedure testing; visitor restrictions; discouraging presenteeism; population density control and/or physical distancing;

Table 1.

Period		Hospital Days	Incident Rate (per 1,000 patient days)			upper95% CI	
4/2017-3/2018	278	452,043	0.615	2.73	2.14	3.49	< 0.001
4/2018-3/2019	194	464,320	0.418	1.86	1.44	2.40	< 0.001
4/2019-3/2020	175	466,734	0.375	1.67	1.28	2.16	0.0001
4/2020-1/2021	83	368,899	0.225	1			

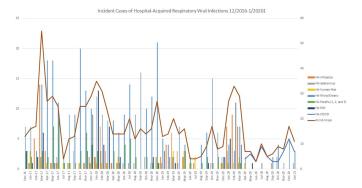


Figure 1.

and ongoing attention to basic horizontal IP strategies including hand hygiene, PPE compliance, and environmental cleaning. **Results:** During the study period, we identified 715 HA-RVIs over 1,899,700 inpatient days, for an overall incidence rate of 0.38 HA-RVI per 1,000 inpatient days. The HA-RVI IRR was significantly higher during each of the 3 years prior to implementing the COVID-19 IP bundle (Table 1). The incidence rate of HA-RVI decreased by 60% after bundle implementation. COVID-19 became the dominant HA-RVI, and no cases of HA-influenza occurred in the postimplementation period (Figure 1). **Conclusions:** Implementation of a comprehensive COVID-19 IP bundle likely contributed to a reduction in HA-RVI for hospitalized patients in our healthcare system. Augmenting traditional IP interventions in place during the annual respiratory virus season may be a future strategy to reduce rates of HA-RVI for inpatients.

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