transmission in Canada, Mexico, and the U.S., primarily driven by low vaccination rates among unvaccinated or under-vaccinated populations. In August 2025, Mexico City experienced a surge in measles cases, prompting an urgent call to boost immunization coverage among targeted groups through mass vaccination of children, adolescents, healthcare workers (HCWs), and adults under 50. We report post-vaccination mumps cases among HCWs from six hospitals. **Methods:** A retrospective study of individuals vaccinated with the Serum Institute of India measles, mumps, and rubella (MMR) vaccine, which contains the Leningrad-Zagreb (L-Z) strain, was conducted at six national referral tertiary care hospitals affiliated with the Mexican Ministry of Health. We included all individuals under 50 years who, 10-30 days after vaccination, developed salivary gland swelling with or without malaise, headache, lymphadenopathy, or fever. We performed a descriptive analysis and calculated the incidence rate of vaccine-related mumps per 1000 doses of the MMR vaccine. **Results:** Between 08/21/2025 and 11/30/2025, 10,590 HCWs received the Serum Institute of India MMR vaccine; 27 (2.5 X MMR 1000 vaccines) developed parotid swelling (7 bilateral, 20 unilateral), with concomitant fever in 7 (25.9%); lymphadenopathy, 10 (37%); pharyngitis, 11 (40.7%); arthralgias, 8 (29.6%); and headache, 11 (40.7%). One person developed a rash and malaise. The median time from vaccination to mumps was 16.8 days. No cases of meningitis or other complications were reported. The average duration of symptoms was 8.2 days. No secondary mumps cases were detected. Discussion: Post-vaccination mumps and aseptic meningitis after MMR vaccination are rare and infrequently reported, though prevalence varies by strain. Despite similar efficacy among MMR vaccines, the Serum Institute of India vaccine includes the L-Z strain, which carries a higher risk of mumps (approximately 4.4%) than the Jeryl-Lynn strain used in the MMR-II® (0.5-1.6%), which is primarily used in high-income countries. In our cohort, the prevalence of post-vaccine mumps with the Serum Institute of India MMR, a lower-cost vaccine, was low and consistent with other reports. No cases of aseptic meningitis were reported. With the rising number of measles cases worldwide and the need to increase vaccination coverage against measles in under-vaccinated populations, reinforcing the similar efficacy and safety of different vaccines is crucial. All HCWs must be protected.

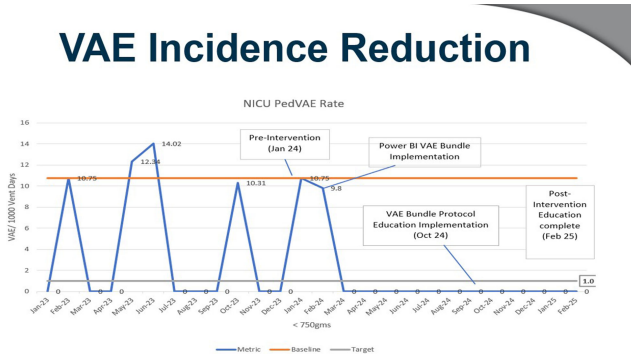
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Poster Presentation

Ventilator Associated Event (VAE) Reduction Utilizing Bundle Sets in the Neonatal Intensive Care Unit‡

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Background: Ventilator-associated events (VAEs) are episodes of respiratory deterioration after stability during mechanical ventilation, posing significant risks for morbidity and mortality. Extremely low birth weight neonates (<750 g), particularly those born at 22–24 weeks gestation, are highly vulnerable. In our Neonatal Intensive Care Unit (NICU), eight VAEs occurred in the previous year, leading to prolonged ventilation, increased infection risk, and higher mortality. Reducing VAEs is essential for improving patient safety, health equity, and family experience while meeting NHSN benchmarks and regulatory goals. **Methods:** A structured, evidence-based approach was implemented using failure mode effects analysis (FMEA) to identify risk factors and guide interventions. A multidisciplinary team developed a formalized VAE prevention bundle, which included: - Formation of a multidisciplinary task force - Process measures tied to critical clinical tasks - Creation of an EHR tool for real-time



Ventilator Associated Event Care Bundle (VAE Bundle)

Bundle element	Responsibility	Other disciplines
Intubation and extubation	RRT	MD- order or concur with RRT decision. RN- help gather supplies, handle baby.
Determine size of ETT	RRT	
Closed circuit	RRT	RN and MD also visualize
Elevate Head of Bed	RN	Respiratory Therapy and MD
Mouth care with colostrum	RN	
General mouth care	RN	Respiratory Therapy
Suction- oral or in line	RN	Respiratory Therapy
De-escalation of mechanical ventilation	RN, RRT, Provider	During Interprofessional Rounds (Daily)
Audit bundle	RN	(Night shift RRT Samantha, RN Jessica)
Assess readiness to extubate	RRT, Provider	RN also
Meticulous handwashing	All	
CHG bath	RN	Weekly
Linen changes	RN	
Log roll or 2-person	RN	Respiratory Therapy
Kangaroo care- skin to skin	RN	Respiratory Therapy assist
Touch time	RN	Respiratory Therapy
Angel frame	RN, RRT	Hold Mechanical Vent circuit off baby

compliance monitoring - Staff education and workflow alignment - Cultural engagement initiatives to reinforce best practices Pre- and post-intervention data were collected and analyzed for neonates <750 g per NHSN guidelines. **Result:** Post-implementation, VAE rates decreased from 9.8 to zero per 1,000 ventilator days, achieving an SIR ?1.0 and meeting national benchmarks. Mortality among extremely low birth weight neonates declined by 60%. Integration of EHR visualization and Power BI dashboards enabled real-time monitoring and sustained compliance. The initiative generated an estimated annual cost savings of $2.1 million through reduced length of stay and infection-related expenses. **Conclusion:** Structured care bundles, integrated data tools, and multidisciplinary engagement can eliminate VAEs in high-risk neonates. Broader adoption across NICUs could enhance patient safety, reduce healthcare costs, and improve outcomes systemwide. Innovative clinical practice plays a pivotal role in sustaining these improvements through adherence to prevention bundles, leveraging technology for real-time compliance, and fostering a culture of accountability. Standardized frameworks and education strategies can be scaled across institutions for continuous improvement.

References Bondarev DJ, Ryan RM, Mukherjee D. (2024). The spectrum of pneumonia among intubated neonates in the neonatal intensive care unit. Journal of Perinatology, 44(9), 1235–1243. https://doi.org/10.1038/s41372-024-01973-9 Niedzwiecka T, Patton D, Walsh S, Moore Z, O'Connor T, Nugent L (2019, October). What are the effects of care bundles on the incidence of ventilator-associated pneumonia in pediatric and neonatal intensive care units? A systematic review. Journal for Specialists in Pediatric Nursing: JSPN. https://pubmed.ncbi.nlm.nih.gov/31332968/

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