

**Program Evaluation: Assessing the Opioid Overdose Training Program for Staff in the
Bellevue School District**

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Author Note

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Abstract

The purpose of this program evaluation was to investigate educational program methods and effectiveness in the Bellevue School District (BSD) for unlicensed assistive personnel (UAP) administering naloxone. The evaluation was the first formal evaluation since the program's inception in 2020. Following the Centers for Disease Control and Prevention's (CDC) framework for evaluation in public health, the evaluation addressed the current training program by engaging BSD stakeholders, describing the current program, gathering credible evidence, and sharing lessons learned (CDC, 2024). The data collection was two-fold and included both quantitative and qualitative data. A questionnaire for nurses gathered quantitative data on nurses' perceived training responsibilities, training methods, readiness to train, and concerns about training, as well as qualitative data on ideas for district improvement. A questionnaire for unlicensed assistive personnel assessed their knowledge, satisfaction, and confidence with the current training. The evaluation offered recommendations for improvement including two levels of training, delegation of training to specific staff, and adoption of the Office of Superintendent of Public Instruction (OSPI) model policy. Increasing opioid overdose mortality rates, along with recent updates to Washington state law requiring naloxone in all public schools, created a strong rationale for a program evaluation on opioid overdose training within the BSD.

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Drug overdose is the third leading cause of death among children and adolescents in the United States, with overdose deaths in this population increasing by 121% between 2010 and 2021 (Calihan et al., 2024). Fentanyl, a potent synthetic opioid, is the driving force behind these increases (CDC, 2024). Washington State legislation states naloxone should be distributed or administered by school nurses, health care professionals, trained staff, and designated trained personnel in schools (RCW 28A.210.390; RCW 28A.210.395). OSPI statewide data show steep increases in the numbers of naloxone administrations across school districts from less than five doses administered per year in 2021, to 45 doses administered in 2023 (OSPI, 2022). Decades of public health research confirms the efficacy of community-based naloxone distribution, training, and administration as part of a comprehensive harm-reduction strategy to reduce opioid overdoses (Abud et al., 2020; Feuerstein-Simon et al., 2020; McCabe et al., 2012; Rudisill et al., 2024; Walley et al., 2013). Naloxone availability and training must extend beyond youth with previous substance use, overdose, or other commonly acknowledged risk factors, as 65% of children and adolescents who die from an opioid overdose do not have a history of opioid use (Calihan et al., 2024).

Project Description

A needs assessment for the BSD was conducted with the Director of Health Services and Special Education, Carrie Lang, and Karla Rimmer, incumbent Health Services Coordinator, in March 2024. It was determined that an assessment of the current opioid overdose training program would help the district understand current practices and align them with legal and supervisory agency guidelines. The intervention was deemed timely and significant given

updates to the revised code of Washington (RCW) in Spring 2024 and the Office of the Superintendent of Public Instruction's (OSPI) Fall 2024 release of a model policy. Approval for the project was obtained from Washington State University College of Nursing.

A literature review undertaken for this program evaluation found abundant support for the safety and efficacy of opioid overdose recognition training and naloxone administration by non-medical personnel (Cipriano & Zaric, 2018; Devries et al., 2017; Giglio et al., 2015; Walley et al., 2013). With regards to training content, though there are countless guidelines for community naloxone training, school specific guidance is not encapsulated in the extant literature but rather illuminated in practice guidelines such as the OSPI model policy and NASN naloxone toolkit (NASN, 2023; OSPI, 2022). Literature also describes persisting stigma and false beliefs about naloxone, such as that it is not needed in schools or that it promotes drug use, as ongoing barriers to more widespread distribution (Bennett & Elliot, 2021; McDonald et al., 2019).

Questionnaires of nurses working in the BSD, covering elementary through high school, were conducted to determine the current state of training and elicit feedback regarding their concerns, readiness to intervene, and recommendations for improving their current staff training. A separate questionnaire was distributed to UAPs who received training measuring their knowledge, confidence, and training satisfaction. Quantitative and qualitative data were collected and analyzed to answer the project questions and offer insight to BSD stakeholders including administrators, nurses, and trained UAPs. Data was analyzed and outcomes were compared with guidelines from the OSPI model policy and the NASN naloxone tool kit. A close reading of RCW 28A.210.390 and RCW 28A.210.395 confirmed the legal requirements for the training and suggested that select staff may be delegated this responsibility.

Key Findings

The nurse questionnaire revealed they were well informed regarding the civil liabilities of administering naloxone. They were also unanimous in their desire to do whatever was necessary to assist with an overdose and their dedication to having naloxone widely available in their schools. However, nearly a quarter of the nurses stated they did not know their precise responsibilities regarding training staff in this skill, suggesting that the logistics of this responsibility are not fully understood. The data also revealed that training methods are inconsistent across nurses. These findings answer the clinical questions regarding training process and efficacy and suggest that despite being informed on the legality of naloxone administration in schools and having access to high quality internal resources, there is a lack of consensus around how training should occur as well as who should be trained and how often.

Current training process

Current BSD resources, such as their 2023 internally developed PowerPoint, address the four training content categories identified by OSPI: what are opioids, what is an opioid overdose, signs and symptoms of an overdose, and actions to take when a suspected opioid overdose occurs (OSPI, 2022). Most nurses also reported using “other” online resources. The Washington State DOH website was the most identified resource with 38% using this OSPI preferred resource.

When comparing the current training process at the BSD to the OSPI model policy and the National Association for School Nurses (NASN) naloxone toolkit, three areas are notable for improvement: the use of training checklists and logs, hands on demonstrations, and training staff more than once per year (NASN, 2023; OSPI, 2022). Currently, 12% of nurses use a training checklist or maintain a log of trainees. The OSPI model policy both recommends practices and supplies relevant tools including a checklist covering knowledge and administration skills as well

as a log that includes the trainer and trainee name, training dates, location, and format (OSPI, 2022). The questionnaire also revealed that 28% of nurses perform a demonstration for staff. Hands on demonstration, which is alluded to by OSPI and commonly used in emergency procedures such as cardiopulmonary resuscitation (CPR), automated external defibrillator (AED), and hemorrhage control training, is recommended to enhance trainee performance (Zwislewski et al. 2019). Finally, only four of 17 nurses indicated they trained staff more than once per school year, a practice recommended by OSPI.

UAP knowledge, confidence, and satisfaction with training

UAPs trained in opioid overdose recognition and reversal obtained a mean score of 14.8 on a 20-point knowledge scale. Seventy percent of those trained stated they were satisfied with the training they received; however, only fifty-five percent stated they were confident in their ability to respond to an opioid overdose.

Implications

The program evaluation suggests nurses require more time, standardization, and district support to effectively disseminate their knowledge to school staff and improve staff confidence and satisfaction with training. The following areas are recommended for targeted program improvement.

Practice implications

RCW 28A.210.395, regarding the opioid overdose reversal medication treatment requirements, includes language about trained staff and designated trained personnel. Under Washington state law, school nurses are required to train staff in several health topics and may delegate select nursing duties to UAPs (SNC, 2022). To standardize current practices and further disseminate naloxone administration, two levels of education on naloxone administration should

occur: general training available annually for all staff and additional training for delegated staff. The BSD emergency treatment procedure has identified numerous school staff¹ as requiring first aid and emergency care training; these same staff members are ideal candidates to whom nurses can delegate naloxone administration (BSD 3418P). The formal process of delegation can include the use of a training checklist, creation of a log, and hands on demonstration. School personnel undergoing delegation would be trained during tier one and receive more in-depth training during delegation using the OSPI recommended tools.

Education and Policy implications

Adoption of the OSPI model policy and its associated tools, two-tiered naloxone education with pre-determined delegees, and supplementary district tools are recommended to clarify training responsibilities and increase standardization of this life-saving training. Utilizing the online educational platform Vector solutions is one way the district might standardize training and address nurses' concern about the lack of available training time. There are two online training modules covering OSPI's training content recommendations that may be assigned to certificated staff covering what opioids are, what an overdose looks like, good Samaritan laws, medication storage, opioid withdrawal symptoms, and naloxone administration. This tool would support nurses by providing a group of staff with mandatory and standardized tier one training.

Research implications

While research exists on how to train nurses, there is a gap in research as to how school employees should be trained in health-related subjects such as emergency medication

¹ Principals, assistant principals, any school office staff designated for health room responsibilities, educational assistants with health room duties, playground educational assistants, teachers who case manage medically fragile students, special education paraeducators, teachers of physical education, athletic coaches and directors, Vocational Education teachers, personnel working in school based licensed child-care facilities, Early Learning and Head Start; and any other positions that may be required by law to be trained in First Aid/CPR/AED (BSD, 2020).

administration. In the interim, training on naloxone administration can reference literature on school administrations of other emergency medications and procedures (Zwislewski et al., 2019). Existing guidelines such as the OSPI model policy and the NASN naloxone toolkit should be adopted by the BSD for consolidation and standardization of training resources and expectations.

Project Limitations

While the project met its aims and purpose, there was a low participation rate among UAPs. Responses from UAPs were likely biased toward increased satisfaction and confidence as participants were self-selecting. Nurses declined to engage in semi-structured interviews due to time constraints, and the project had to pivot toward questionnaires to collect their input. Ideally, the evaluation would have included more qualitative data from participants.

Summary and Recommendations

The program evaluation of the BSD naloxone training methods yielded important insights into how nurses train UAPs and the efficacy of their training. Training methods were revealed to be heterogenous, and training responsibilities poorly understood. UAP knowledge, confidence, and satisfaction with training can be improved by adopting the OSPI model policy, offering online training modules to certificated staff, and delegating training to staff outlined in BSD emergency procedure 3481P. The findings from this program evaluation can be transferred and adopted to Washington state school districts with and without current naloxone training programs as they provide further standardization, awareness of opioid overdose, and identify key staff for whom delegation is appropriate.

References

- Abudu, B., Burton, B. N., Said, E. T., Wilkins Y Martinez, L., Brzenski, A., & Gabriel, R. A. (2020). A population-based study of sociodemographic and clinical factors among children and adolescents with opioid overdose. *Journal of Clinical Anesthesia*, 59, 61–66. <https://doi.org/10.1016/j.jclinane.2019.06.026>
- Bellevue School District [BSD]. (2020). *3418P: Emergency Treatment*. (n.d.). Retrieved February 22, 2025, from <https://www.bsd405.org/about-us/school-board/policies-and-procedures/policy-and-procedure-details/~board/policies-procedures/post/3418p>
- Bennett, A. S., & Elliott, L. (2021). Naloxone’s role in the national opioid crisis-past struggles, current efforts, and future opportunities. *Translational Research: The Journal of Laboratory and Clinical Medicine*, 234, 43–57. <https://doi.org/10.1016/j.trsl.2021.03.001>
- Calihan, J. B., Carney, B. L., Schmill, D. M., & Bagley, S. M. (2024). The Call for a School-Based Approach to Opioid Overdose Prevention. *American Journal of Public Health*, 114(12), 1305–1308. <https://doi.org/10.2105/AJPH.2024.307849>
- Centers for Disease Control and Prevention [CDC]. (2024, October 30). *Fentanyl*. Overdose Prevention. <https://www.cdc.gov/overdose-prevention/about/fentanyl.html>
- Center for Disease Control and Prevention. (2024). CDC framework for program evaluation. <https://www.cdc.gov/evaluation/php/evaluation-framework/index.html>
- Cipriano, L. E., & Zaric, G. S. (2018). Cost-effectiveness of naloxone kits in secondary schools. *Drug and Alcohol Dependence*, 192, 352–361. <https://doi.org/10.1016/j.drugalcdep.2018.08.003>

- Devries, J., Rafie, S., & Polston, G. (2017). Implementing an overdose education and naloxone distribution program in a health system. *Journal of the American Pharmacists Association*, 57(2, Supplement), S154–S160. <https://doi.org/10.1016/j.japh.2017.01.002>
- Feuerstein-Simon, R., Lowenstein, M., Sharma, M., Dupuis, R., Luna Marti, X., & Cannuscio, C. (2020). Local health departments and the implementation of evidence-based policies to address opioid overdose mortality: Substance abuse. *Substance Abuse*, 41(4), 468–474. <https://doi.org/10.1080/08897077.2019.1709250>
- Giglio, R. E., Li, G., & DiMaggio, C. J. (2015). Effectiveness of bystander naloxone administration and overdose education programs: A meta-analysis. *Injury Epidemiology*, 2(1), 10. <https://doi.org/10.1186/s40621-015-0041-8>
- King, R. (2016). Science Over Stigma: Saving Lives—Implementation of Naloxone Use in the School Setting. *NASN School Nurse*, 31(2), 96–101. <https://doi.org/10.1177/1942602X16628890>
- McCabe, S. E., West, B. T., Veliz, P., McCabe, V. V., Stoddard, S. A., & Boyd, C. J. (2017). Trends in Medical and Nonmedical Use of Prescription Opioids Among US Adolescents: 1976–2015. *Pediatrics*, 139(4), e20162387. <https://doi.org/10.1542/peds.2016-2387>
- McDonald, C. C., Pinto-Martin, J., Compton, P., Parikh, M., & Meisel, Z. F. (2020). School nurse reported supply and administration of naloxone in schools. *Public Health Nursing*, 37(3), 347–352. <https://doi.org/10.1111/phn.12715>
- National association of school nurses [NASN]. (2023) *NASN naloxone toolkit v.4*. Retrieved February 22, 2025 from <https://learn.nasn.org/courses/58011>
- Nursing care quality assurance commission [NCQAC]. (n.d.). *Registered nurse delegation in school settings: kindergarten-twelve (k-12) grades, public and private schools*. Retrieved

February 22, 2025, from <https://doh.wa.gov/sites/default/files/2022-02/NCAO15.pdf?uid=62715c9048e39>

Rudisill, T. M., Ashraf, A. J., Linn, H. I., Sayres, S., Jeffries, J. E., & Gurka, K. K. (2021). Facilitators, barriers and lessons learnt from the first state-wide naloxone distribution conducted in West Virginia. *Injury Prevention: Journal of the International Society for Child and Adolescent Injury Prevention*, 27(4), 369–374.

<https://doi.org/10.1136/injuryprev-2020-043666>

Walley, A. Y., Xuan, Z., Hackman, H. H., Quinn, E., Doe-Simkins, M., Sorensen-Alawad, A., Ruiz, S., & Ozonoff, A. (2013). Opioid overdose rates and implementation of overdose education and nasal naloxone distribution in Massachusetts: Interrupted time series analysis. *The BMJ*, 346, f174. <https://doi.org/10.1136/bmj.f174>

Washington Office of Superintendent of Public Instruction [OSPI]. (2022). Opioid-related overdose policy guidelines and training in the school setting. Retrieved February 22, 2025, from https://ospi.k12.wa.us/sites/default/files/2023-08/opioidrelatedoverdosetraininginschools_ada_1_13_2022mmhdocx.pdf

Wash. Rev. Code 28A.210.390. *Opioid overdose reversal medication—Standing order—Administration*. (n.d.). Retrieved February 22, 2025, from <https://app.leg.wa.gov/RCW/default.aspx?cite=28A.210.390>

Wash. Rev. Code 28A.210.395. *Opioid overdose reversal medication—Policy guidelines and treatment requirements—Grant program*. (n.d.) Retrieved February 22, 2025, from <https://app.leg.wa.gov/RCW/default.aspx?cite=28A.210.395>

Washington State School Nurse Corps [SNC]. (2022). *Washington state school staff health training guide*. Retrieved February 22, 2025, from

<https://ospi.k12.wa.us/sites/default/files/2023-08/washington-state-school-health-training-manual-2022.pdf>

Washington State Department of Health [Washington DOH]. (2024). *Department of Health offers naloxone to high schools to combat youth opioid overdoses*. Retrieved March 28, 2024, from <https://doh.wa.gov/newsroom/department-health-offers-naloxone-high-schools-combat-youth-opioid-overdoses>

Zwislewski, A., Nanassy, A. D., Meyer, L. K., Scantling, D., Jankowski, M. A., Blinstrub, G., & Grewal, H. (2019). Practice makes perfect: The impact of Stop the Bleed training on hemorrhage control knowledge, wound packing, and tourniquet application in the workplace. *Injury*, 50(4), 864–868. <https://doi.org/10.1016/j.injury.2019.03.025>