NECP SPOTLIGHT:
ENHANCING ALERTS, WARNINGS AND NOTIFICATIONS IN K-12 SCHOOLS

INTRODUCTION

During times of crisis at schools, first responders and parents need to be notified as soon as possible to mitigate threats and worries quickly and efficiently. An alerts, warnings and notifications (AWN) system is a communication method created to disseminate information quickly to a mass group of people about emergencies such as severe weather alerts and school closures. With more than 98% of the U.S. population having access to a mobile device, these notifications can also reach emergency personnel, parents and school staff.[1]

The National Emergency Communications Plan (NECP) emphasizes the significance of using AWN to inform the public and share information with first responders across multiple communication channels. This spotlight will examine how AWN has played a key role in kindergarten-12th grade (K-12) school safety.

AN IN-DEPTH LOOK

School emergencies such as active threats, school closures or natural disasters are becoming increasingly more frequent in the United States. Approximately 71% of U.S. schools reported at least one violent crime during the 2017-2018 school year.[2] Due to these events, parents often sign up for their school district's emergency notification system to stay informed, and first responders use alert systems to respond to incidents. These advanced notification systems provide faster emergency response times, reunite students with their families, and enhance communications coordination.

After a series of evacuations due to reports of a student having a weapon on campus, the Coachella Valley Unified School District in California installed a new emergency phone application (app) system for their schools. This system improves communication with first responders and sends out alerts updating families every thirty minutes during emergencies. This new system also allows teachers to take attendance on the app to ensure that all students are accounted for during emergencies and can be reunited safely with their families.

AWN systems have four ways to improve emergency response during a crisis. AWN often provides two-way communication with first responders and school personnel, multi-channel messaging to send over social media, text, email, etc., audience grouping to tailor messages to certain populations, and location mapping and geofencing to share with first responders.

With an average of 500 students in each public school in the U.S., these AWN systems have the potential to reach and help thousands of individuals in each school district including families, school staff and first responders.[3] For example, Bangor School Department, a local school district in Maine, spent $409,000 on a five-year contract with a private company to develop a new emergency alert system focusing on wearable badges for school staff. These badges alert law enforcement quickly when activated and the response time is expected to be faster than with a 911 call.[4]

Currently, more than 90% of schools use an emergency notification system for crises. With the use of smart phones, these emergency notification systems are becoming more and more advanced, especially when students themselves can bring their own cell phones to school to increase information sharing during emergencies. While school emergencies may continue to occur, these emergency notification systems provide ways to increase communications coordination and response speed during a crisis, saving lives.

[1] "How an SMS Alert System Can Benefit Students, Parents, and Faculty." EZ Texting, https://www.eztexting.com/blog/how-sms-alert-system-can-benefit-students-parents-and-faculty.
[2] Frederique, Nadine. "What Do the Data Reveal about Violence in Schools?" National Institute of Justice, Justice.gov, 13 Nov. 2020, https://nij.ojp.gov/topics/articles/what-do-data-reveal-about-violence-schools.
[3] "Improving School Communication with a Mass Notification System." AlertMedia, Alert Media, Inc., 12 Feb. 2019, https://www.alertmedia.com/blog/mass-notification-system-for-schools/#:~:text=system%20for%20schools.-,The%20Role%20of%20Emergency%20Communication%20Technology,and%20notifications%20in%20real%20time.
[4] "Bangor School Department Implements New Emergency Alert System." FOX 22/ABC 7, Bangor Communications, 19 Jan. 2023, https://www.foxbangor.com/archive/default/bangor-school-department-implements-new-emergency-alert-system/article_c5caed33-a5b5-56eb-9747-e3a8ad270e54.html.

NECP ALIGNMENT

Alerts, warnings and notifications systems prioritize increasing governance and leadership, communications coordination and technology and infrastructure. In alignment with the NECP, AWN systems also emphasize the importance of sharing information across first response agencies to keep students safe at school. The chart below describes real world examples that align directly with the goals and objectives of the NECP.

NECP Goal	Objective	Objective Description	Real World Example
Goal 1: Governance and Leadership	1.1	Formalize governance through policy, documentation and adequate funding	When emergency communications strategies and plans are written into policy with adequate funding, they can be more successful. In 2021, spending on the nation's educational security market, including but not limited to AWN, surpassed $3.1 billion. With this amount of funding, more than 90% of schools now have an electronic emergency notification and video surveillance system to ensure school safety.[5]
Goal 4: Communications Coordination	4.2	Enhance coordination and effective usage of public safety communications resources at all levels of government	An effective public safety communications system is essential to ensuring that all relevant stakeholders are coordinating efficiently. In California's Coachella Valley Unified School District the district is using a new notification and alert system, created by a private company, which allows school administrators to communicate with each other and parents.[6]
Goal 4: Communications Coordination	4.3	Develop or update operational protocols and procedures to support interoperability across new technologies	Schools need to be able to contact emergency personnel and families as soon as possible during emergencies. For example, Minneapolis Public Schools is using a new technology to send important information through text alerts to parents and families of students. These text alerts allow families to tailor their preferences, add multiple children to the same account, and review any missed notifications.[7]
Goal 5: Technology and Infrastructure	5.2	Ensure communications and information sharing systems meet public safety's mission-critical needs	Information sharing systems are essential to provide the best emergency response during school crises. Private companies are developing emergency notification software to send fast notifications and emergency alerts to parents during K-12 school emergencies. To share information efficiently, some systems contain multiple features such as multiple communication methods, a parent call-back hotline, and ready-made message templates for faster delivery.[8]

RESOURCES

AWN can play a large role in effective emergency response for K-12 schools. New advanced systems have the potential to enhance communications coordination with emergency personnel and families to ensure that students are well protected in schools. AWN systems' capabilities also directly support the NECP's goals of information sharing and technological and infrastructure advancements potentially saving lives during a crisis.

For more information on the NECP, visit: www.cisa.gov/necp. Want to share your organization's success and alignment to the NECP? Email us at: necp@cisa.dhs.gov

[5] Caffrey, Michelle Staff. "Spending on School Security Tops $3 Billion, with Focus on New Surveillance and Tech." Market Brief, Education, Inc., 26 July 2022, https://marketbrief.edweek.org/marketplace-k-12/spending-school-security-tops-3-billion-focus-new-surveillance-tech/.
[6] Ventura, Bianca. "CVUSD Switching to New Emergency Management System in Light of Recent Evacuations." News Channel 3, 24 Jan. 2023, kesq.com/news/news-headlines/2023/01/24/cvusd-holding-two-day-safety-drill/.
[7] "School Messenger." Minneapolis Public Schools, mpls.k12.mn.us/school_messenger. Accessed 29 June 2023.
[8] "Mass Notification System for K-12 Schools - SWIFTK12." SwiftReach, SwiftReach Networks, Inc., 30 May 2018, https://swiftreach.com/solutions/swiftk12/.