Fostering a safer learning environment for students, faculty and staff

Halo Smart Sensors and Halo Cloud for Holy Family Catholic Regional Division

CASE STUDY

Holy Family Catholic Regional Division (HFCRD) is a K-12 educational organization located in Peace River, Alberta, Canada. Covering an area of over 12,000 square kilometers (4,630 square miles), HFCRD operates nine schools with 1,750 students, 174 certified staff and 132 support staff. Committed to fostering a safe and inclusive learning environment, HFCRD continuously seeks innovative solutions to protect students and staff.

Holy Family
Catholic Regional Division

CUSTOMER PROFILE

Holy Family Catholic Regional Division
Alberta, Canada

INDUSTRY

Education sector

SOLUTIONS

- HALO Smart Sensor 2C
- HALO Smart Sensor 3C
- Halo Cloud subscription

BENEFITS

- Ease of installation and use
- Reliable and tamper-resistant design
- Actionable data for informed decision-making
- Improved student and staff safety

Challenges

Improving student safety

Following the COVID-19 pandemic, HFCRD experienced a surge in student vaping incidents, predominantly in school washrooms and change rooms. Concerned parents and school administrators sought an effective solution to detect and deter vaping while maintaining a secure school environment. The division required a centralized security system capable of real-time alerts to immediately address incidents and enforce school policies.

The solution

To combat vaping and enhance school safety, HFCRD implemented Halo Smart Sensors. The school division strategically deployed HALO 2C and HALO 3C sensors across its facilities, primarily focusing on washrooms and change rooms where incidents frequently occurred. HFCRD integrated Halo Cloud for a centralized security system, real-time alerts and quick response times.

Key features utilized:

- Vape and THC detection: alerts administrators of vaping activity
- Air quality monitoring: identifies environmental hazards, including wildfire smoke
- Aggression detection: helps ensure student safety
- Tamper alerts: notifies staff if sensors are interfered with
- Real-time notifications: email alerts for quick response

"This project stemmed from a student-led initiative to make schools safer. The risk of not doing it was pretty obvious to us. We would be enabling a school environment that allowed these kinds of activities to occur...we wanted to do something."

KELLY WHALEN
Board Chair

Implementation and results

HFCRD initially ran a trial in high-risk areas to evaluate Halo's effectiveness before securing board approval for a broader rollout. The facilities team, led by Shane O'Connor (Occupational Health and Safety Coordinator/Maintenance North), handled the installation process, leveraging guidance from their integration partner. Additionally, the school division opted for an annual Halo Cloud subscription to optimize device management.

- Incident reduction: Vaping incidents dropped from 90 to approximately 28 — a 70% decrease YoY (2023-2024) in the month of November.
- Accurate information: Real-time alerts and integration with security cameras allow administrators to promptly identify and address safety concerns.
- Air quality awareness: During Alberta's wildfire season, Halo sensors detected elevated particulate levels, enabling schools to adjust HVAC systems for improved air quality.
- Community engagement: The initiative fostered collaboration with other school divisions, allowing HFCRD to share insights and best practices.

"Halo has been working effectively, resulting in safer spaces for our students. The cost of this investment is far outweighed by the safety benefits it brings to our schools."

ZACHARY SILVA
Secretary-Treasurer

The benefits

Significant reduction in vaping incidents

The installation of Halo Smart Sensors at HFCRD led to a dramatic decrease in vaping incidents, significantly improving student safety and reducing administrative burden. Before implementing Halo, the school division was grappling with hundreds of vaping incidents per month, particularly in unsupervised areas such as washrooms and change rooms. Students often took advantage of these secluded spaces, making it difficult for staff to manage and enforce school policies effectively.

Halo Smart Sensors also uncovered an unexpected issue: vaping among elementary school students. School administrators were surprised to find that young students were engaging in vaping, a behavior typically associated with older students. This discovery prompted immediate action to address the issue at its root, leading to enhanced education efforts, parental engagement and stronger preventative measures at the elementary level. This unanticipated insight underscores the broader value of Halo Smart Sensors — not only as a deterrent but also as a tool for early intervention.

After deploying Halo sensors, vaping incidents dropped by approximately 70%, with the number of recorded cases continuing to decline in subsequent years, highlighting the deterrent effect of the sensors. Knowing that their activities could be detected in real-time, students became more hesitant to vape on school grounds.

More effective use of staff resources

Before implementing Halo, school administrators and teachers spent significant time patrolling washrooms and other high-risk areas to detect and prevent vaping. This manual supervision took valuable time away from their primary responsibilities — teaching and supporting students. The need for constant vaping supervision placed an undue burden on school staff, diverting attention from more meaningful educational and administrative duties.

With Halo in place, staff members could shift to a proactive response. Instead of patrolling blindly, administrators received instant alerts when a vaping incident occurred, allowing them to intervene immediately and address the issue. This real-time detection also ensured that violations were addressed fairly and consistently, preventing students from feeling unfairly targeted based on assumptions.

"Having that ability to monitor aggression made it easier for our admin at the schools. They were able to respond to people fighting in the bathroom or shouting and made those normally unmonitored areas a little more actively looked into."

BRENDON NICHOLS
Principal

"The instantaneous response is probably the best feature. The other area is having data. If there are parents who question if the event happened, we have information now to pull up and show them."

VICTORIA CORNICK
Assistant Superintendent

Enhanced safety with aggression detection

Beyond vaping prevention, HFCRD leveraged Halo's aggression detection feature to improve overall school security. The sensors detected elevated noise levels and distress signals, helping staff identify potential student altercations before they escalated. By responding to aggression alerts in real time, administrators were able to diffuse conflicts more effectively, creating a safer school environment.

Integrating Halo sensors with the school's security cameras further strengthened these efforts. If an altercation or vaping incident was detected, administrators could cross-reference sensor alerts with video footage, ensuring accurate incident documentation. This capability not only improved enforcement but also provided valuable evidence for discussions with students and parents, fostering a more accountable and transparent disciplinary process.

Parental and community confidence

The implementation of Halo Smart Sensors at HFCRD has had a profound impact on parental and community trust. With vaping incidents on the rise, many parents and guardians were concerned about the health risks their children faced in school environments. By deploying Halo sensors and proactively addressing the issue, HFCRD reassured parents that student safety was a top priority.

One of the key factors in building this trust was transparency. The school division openly communicated with parents about the purpose and functionality of the sensors, ensuring they understood that the technology was being used solely for safety purposes. School administrators provided regular updates on vaping incident reductions and demonstrated how the sensors contributed to a healthier learning environment.

Additionally, the initiative gained attention beyond the school community. Local media covered HFCRD's efforts, recognizing the division as a leader in student safety and well-being. This positive exposure reinforced the district's reputation as an organization dedicated to fostering a secure and supportive learning atmosphere.

For parents, one of the most appreciated features of the Halo system was its ability to provide reliable data. Administrators could refer to concrete evidence if a student was suspected of vaping, allowing for fair and informed discussions with students and parents. This level of accountability not only discouraged vaping but also reassured parents that disciplinary actions were based on factual information rather than assumptions.

Data-driven decision making

Beyond its immediate impact on safety, HFCRD leveraged Halo Cloud analytics to make informed decisions that enhanced school security and well-being. By analyzing data trends, administrators identified high-risk areas where vaping or other safety concerns were more prevalent. This allowed them to strategically place additional sensors, optimizing coverage without unnecessary expenditures.

The school division also discovered new ways to use Halo's data beyond vaping detection. During Alberta's wildfire season, air quality monitoring became a critical feature. When particulate levels spiked, administrators received alerts and took proactive measures, such as adjusting HVAC systems, to maintain a healthier indoor environment. This unexpected benefit demonstrated the versatility of the Halo system and its ability to provide real-time, actionable insights beyond its initial use case.

HFCRD's commitment to data-driven decision-making extends beyond its schools. The division shared its findings with other educational institutions, fostering collaboration across the sector. This exchange of insights helped other schools refine their safety strategies, reinforcing the broader impact of Halo's technology.

Moreover, the accuracy of Halo sensors played a crucial role in decision-making. Unlike previous detection systems that generated numerous false alerts, Halo's high reliability allowed administrators to act confidently based on the data provided. The division is now exploring further improvements, including enhanced SMS alert integration, to ensure faster response times in critical situations.

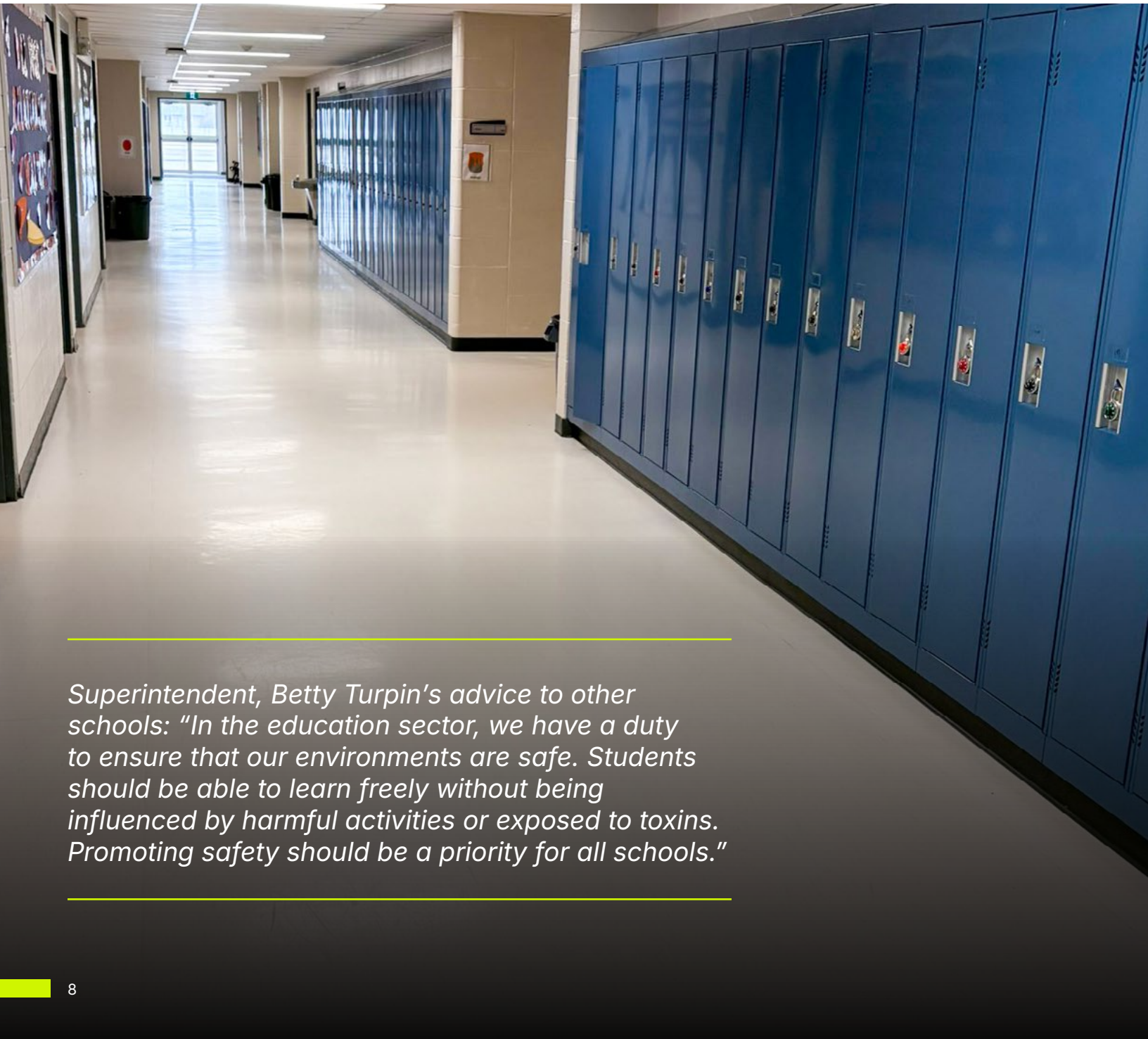
"We love the reliability of the data and the sensors themselves. We're not getting a whole lot of false triggering, which was the case with other devices that we tried out. Halo's are a lot more accurate."

SHANE O'CONNOR
OHS Coordinator

Conclusion

HFCRD remains committed to maintaining and expanding its use of Halo sensors. While cost considerations play a role in future expansion, the school division continues to prioritize student safety. The team is also working to improve SMS alert integration for even faster notifications.

By implementing Halo Smart Sensors, HFCRD has taken a proactive stance on school safety. The combination of vaping detection, air quality monitoring and aggression alerts has made a tangible impact, fostering a secure and supportive educational environment. HFCRD strongly recommends Halo as a best-in-class solution for any school looking to enhance student safety.



Superintendent, Betty Turpin's advice to other schools: "In the education sector, we have a duty to ensure that our environments are safe. Students should be able to learn freely without being influenced by harmful activities or exposed to toxins. Promoting safety should be a priority for all schools."

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