BCCSA mining "big data" to help construction employers improve safety outcomes

While we can't look into the future, the BC Construction Safety Alliance (BCCSA) is leveraging the next-best thing — a data analysis system that identifies employers who may need additional support exactly when they need it.

The BCCSA is leveraging that capability through a partnership with EHS Analytics, a provider of data solutions for occupational safety.

"WorkSafeBC provides us with aggregate data that encompasses every construction employer, including associated injury rates and the duration of claims," says Mike McKenna, executive director of the BCCSA. *"But even though the information we need is all there, it's difficult to use that database to extract more actionable insights to assist individual employers."*

That's especially true of smaller employers with five or fewer employees who represent the majority of BCCSA members. For example, if a small employer reports one worker injury over five years, is that statistically significant or is it an anomaly?

EHS Analytics has already worked with other construction safety associations in Canada to increase the value of available safety data. The BCCSA entered into a contract with EHS in 2023 to provide a digital "dashboard" that could direct assistance to employers who appear to need it most.

"Once an employer is identified, we can drill down to see exactly what type of assistance would be most beneficial," says Erin Linde, director, health and safety services, BCCSA. *"How were workers previously injured and what was their trade? If we see that the employer isn't COR®-certified, helping them achieve COR® certification could be the next step. The dashboard helps us to provide targeted outreach and assistance."*

Using this rich information, the BCCSA next contacts the employer, choosing the most appropriate ambassador to offer free services, including the Alliance's *Regional Safety Advisors*.

"It's been a game-changer," Linde says. *"We've been working with other construction associations across Canada who are using the same tool to discover how we can expand the possibilities of what we can learn. For example, we can fold in our own data, including results from Safety Climate Tool surveys and other information, to provide even richer insights and to determine industry safety trends."*

McKenna points out that insights derived from the data remain strictly confidential and will only be used to assist employers who want additional support.

"We're not a regulator," he says. *"We're here to help."*