

Safety spotlight

EMERGENCY
PARAMEDIC
AMBULANCE



Primary care paramedics James Land and Matt Wu demonstrate new mechanized stretchers that take the manual lifting out of transporting patients.

Powered stretchers and loading systems reduce injury risk for paramedics

By Lynn Welburn

Paramedics deal with patient injuries every workday, but having to lift patients for transport is heavy work with a risk of injury to the paramedics themselves. Now, mechanized equipment is changing the landscape for B.C.'s emergency medical responders and reducing the risk of injury from overexertion.

In 2017, 65 percent of lost staff time at British Columbia Emergency Health Services (BCEHS) was due to incidents of overexertion.

“BCEHS has over 500 ambulances around the province, and 3,700 paramedics and pre-hospital care staff,” says Mike Michalko, Business Standards and Evaluation director with BCEHS. “We have over 900,000 responses a year. That’s a lot of people doing a lot of heavy lifting.”

BCEHS is now hoping the statistics will look a little different in the future. They’re almost finished implementing a province-wide changeover to powered

stretchers, powered loading systems on ambulances, and lift cushions, all of which add up to a huge load off the backs and shoulders of paramedics around B.C.

Michalko is delighted with new equipment, which he says will show “dramatic reductions in injury and will likely mean longer careers for medics.”

Finding the right fit

The changeover began back in December 2014, through a collaboration with WorkSafeBC officers to identify the top MSI risks. Over the following year, the team determined high-risk activities and the best ways to reduce the risks.

“BCEHS analyzed the areas MSI injuries were occurring and it boiled down to eight key tasks around patient handling and stretcher use,” says Mike Ross, WorkSafeBC manager in Prevention Field Services.

Dealing with these was the next step. “We prefer to see hazards eliminated, but where that cannot be done, we look to employers to put in engineering controls like mechanization,” says Ross.

BCEHS began by researching smaller ambulance services elsewhere in Canada in 2016, and with input from ergonomic specialists from the Provincial Health Services Authority, landed on a few products that could mechanize the processes causing the most trouble. The products were powered stretchers, which raise and lower patients; power load systems for ambulances; and lifting cushions, which can be put under patients on the ground and then inflated to raise the patient.

They all reduce the risk of overexertion, so reduce the risk of injury, says Ross.

“WorkSafeBC safety officers and an ergonomic team were great helping us identify all the worst problem areas and choose the best equipment to manage those risks,” says Michalko.

“I can honestly say that this tool has made an enormous difference in enabling me to do my job. It has taken away my fear.”

—Marilyn Oberg, Vancouver Unit chief, BC Emergency Health Services

After setting up pilot projects in Metro Vancouver and Kelowna in 2017, Michalko says results were so positive that BCEHS decided to move full-steam ahead late that year. From an original five-year-plan, all changes will now be complete in under three.

“We’re just hitting six months with partial implementation and we’re already seeing things like maybe a 20 percent reduction in injury claims and people coming back to work sooner,” he says.

“Logistically it’s been a long journey for us in money and time, but the savings in direct and indirect costs is already significant. The results are that dramatic.”

The equipment is more comfortable for patients and could mean longer, healthier careers for paramedics, who often put themselves at risk by putting patient safety first, Michalko says.

“I worked from age 19 to 30 as a medic and suffered two majorly painful musculoskeletal injuries. It’s why I left the field,” he says.

“We are more than 80 percent changed over,” Michalko says. “By July, all operating ambulances will have power stretchers.”

B.C.’s paramedics are on board

Paramedics using the new equipment are enthusiastic.

“Having access to this stretcher has changed how I approach my job. I used to worry every time I had to turn or lift a patient, scared I would aggravate my back injury, which in turn led to extreme pain and sick days,” says Marilyn Oberg, Vancouver Unit chief and a paramedic for 33 years. “I can honestly say that this tool has made an enormous difference in enabling me to do my job. It has taken away my fear.”

And when paramedics don’t need to worry about injuring themselves, it improves patient care and means paramedics can look forward to a long career and a healthy retirement.

“This stretcher is a game-changer,” says Maple Ridge paramedic Mikael Nielsen. “It has removed the fear and uncertainty that crews often deal with, ultimately allowing us to provide better and safer care to our patients. I believe that this tool will also increase not only the likelihood that I make it to retirement, but also that I will retire healthy and uninjured.” ☺

Did you know?

Sprains and strains are among the most common injuries. Search **“sprains and strains”** on **worksafebc.com** to find out how to reduce the risk.

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