

Region 5 Maintenance employees get helicopter training

Responding to crash scenes is, unfortunately, a daily occurrence for ODOT maintenance workers. For serious injury crashes along remote sections of Oregon's vast highway network, speedy transport via Life Flight or other emergency helicopter service is often the best chance for patient survival.

To help get those flying caregivers a safe place to land and take off, and to help ensure the safety of all others at or near the crash site, Region 5 Maintenance crews have been talking with pilots and flight crews as part of a new core training curriculum focusing on helicopter safety.

"Over the last few years, we've seen an increase in helicopters on our roadways responding to crashes," said ODOT Region 5 District 13 Operations Coordinator Mike Barry. "With severe injuries, getting patients to a Type I or Type II trauma center quickly is critical. It can increase a person's chance for survival by eight percent. That's eight people out of one hundred that would have died."



Life Flight lands at Baker Maintenance Station

A Type II trauma center includes a brain surgeon on staff. A Type I facility also includes a burn center. Hospital care around the country changed when it was shown that more critically injured patients could be saved if they were transported immediately to these centers.

Time is the enemy

"The goal now is to get people to the highest level of care as soon as possible," Barry said. "That's why we're seeing more helicopters and even fixed wing aircraft transporting patients from crash sites."

And it's not just for crash trauma patients. Heart attack and stroke patients also have better outcomes when transported for immediate care to better equipped centers. Barry, who is also the Imbler Rural District Fire Chief, recounted a recent incident with a patient having heart trouble.

"The total time from when she called 911 to getting out of surgery with a stint in her heart was 14 hours," he said. "Twenty years ago, 76 hours was the national average for a similar case. Time is muscle, time is tissue, time is brain cells, and time is the enemy."

Besides getting to a trauma center faster, Life Flight crews can provide a higher level of care. They're staffed with a paramedic as well as a flight nurse who can administer whole units of blood, something ambulances typically cannot do.

"Together they make a great team to help solve a lot of problems," said Barry.

Helping keep everyone safe

More helicopters at crash scenes means more lives saved, but also a greater complexity in keeping everyone involved out of harm's way. That's why helicopter training has been added to the Maintenance core training curriculum. The new class involves safety requirements for working near helicopters and keeping clear of their rotors, how best to communicate with the pilot, and how to select and manage a safe landing zone while keeping in mind what resources are available to transport a victim to the copter.

Watching out for overhead electrical lines, road signs and potential flying debris is a critical part of scoping a landing site. A tarp in the back of someone's pick-up or even a hat that could get sucked into the helicopter's turbine is the type of thing ODOT crews are trained to consider.

"Every incident is different," said District 12 Bridge Crew Coordinator Robert Cash, who has helped coordinate several Life Flight landings over the past year. "There are a lot of little things you have to accommodate for every landing zone."



Lift Flight pilot talking to ODOT crews

“When you have small rural fire departments like we have (in eastern Oregon), the number of people available to coordinate with the helicopter crew is lower,” said Barry. “If ODOT folks are trained to help with that, it gives those paramedics and EMTs a chance to focus on patient care. It also gives ODOT a bit more control in keeping other motorists safe and getting the road open quicker, which by the way, also saves lives.”

One out of every five crashes is due to a secondary crash happening at or near an existing crash site. The chance for a secondary crash increases 2.8 percent for every minute a road is closed, so returning traffic patterns to normal as soon as feasible reduces the likelihood of a secondary crash.

“By helping decide where the helicopter might land, ODOT staff can set the scene for a safer road closure,” Barry said.

Landing a helicopter in the middle of the road might be best if it’s not going to be there that long, but an extended stop on the highway leaves few options for getting traffic moving after the injured have been transported out of the area. Barry recalled cases where the pilot had to shut down the engine while stopped on a highway and then had to wait for a mechanic before taking off again.

“Working safely around helicopters, being able to identify good landing zones for Life Flight, and being able to communicate all of that with the pilot and crew is an important tool for our Maintenance forces to have,” said Barry.

Cash agreed, adding, “The training has been a huge benefit.”