Situation awareness in young novice ambulance drivers: So much more than driving
*Safety Science, 108, 48-58*

Why do this research?
When you are new at something, we know you are at risk because you are learning and when we are learning we make errors. When you are a new young driver, these errors can be life threatening if they happen on the road. When you are a new paramedic, again these errors can be life threatening, not just for yourself but also for any patients that you are caring for. When we have new young drivers who are also paramedics, travelling to and from emergencies and caring for patients in a safety critical situation, there is a great potential for errors to occur and for people to be hurt. We wanted to know what were the risks experienced by young novice ambulance drivers, where are other potential risks, and what does the paramedic role in response to an emergency actually look like.

What did we do?
Part one of the project was figuring out exactly what the paramedic role looked like. We need to know what the role looks like in the first place so we can actually figure out how to minimise risks and to improve safety for all paramedics.

What did we find?
Being a paramedic is so much more than managing patient welfare. Just the same, we found that responding to an emergency situation is so much more than just driving from point A to point B for the new, young paramedic driver.

For example, we know that the paramedic needs to pay attention to any changes in their patient as they are commuting to the scene, and this information comes through electronic means such as the pager and through various in-car technology. We also know that as the paramedic is travelling to the patient, they are interpreting the potential risks for everyone at the emergency site. There could be other vehicles or there could be downed powerlines. They are also planning ahead the potential treatment for that patient. They may need to perform various medical procedures, so they start to gather a plan while they are driving. All of this impacts upon their behaviour but, most importantly, it can also act as a block or a filter to safety-critical and situation awareness-critical information coming through to the young paramedic driver.

What does it mean?
Getting from A to B can be problematic for new drivers who don't have a wealth of experience driving in different situations. Being a new paramedic can also be problematic getting from A (the hospital or the ambulance station from which they are dispatched) to B (the patient), taking the patient back to emergency treatment centres such as hospitals where they can be treated. The combination of paramedic-inexperience, driving-inexperience, and an emergency response place great safety-critical pressures upon the young paramedic driver. Our analysis points to new ways we may be able to train paramedics, including a focus on building situation awareness skills for safety critical situations.