

Key findings from the 2014-2015 Victorian Ambulance Cardiac Arrest Registry Annual Report

1. In 2014-2015, Ambulance Victoria (AV) attended 5,657 out-of-hospital cardiac arrest (OHCA) events.
2. Most OHCA patients were adults (5,573, 99%). Almost half of all adult arrest patients (48%) had resuscitation commenced by emergency medical services (AV paramedics, trained first responders or community emergency response teams).
3. There were more arrests per capita in rural regions than in metropolitan regions. Per 100,000 persons, there were 123.8 arrests in the rural region and 87.8 arrests in the metropolitan region.
4. More men and older individuals experience arrests. The incidence of OHCA in Victoria, after adjusting for sex and age, has decreased slightly over time (95.3 events per 100,000 persons in 2014-2015 compared to 97.0 per 100,000 persons in 2005-2006).
5. Most bystanders directed their first call for help to ambulance services (95%). Also, 85% of arrests were identified by the emergency call-taker during the bystander call.
6. The median emergency response time for all patients receiving emergency treatment was 8.0 minutes. In the metropolitan region this was 7.5 minutes and in the rural region this was 10.2 minutes.
7. Bystander CPR rates were the highest observed for the last decade (64% for bystander witnessed events). More patients who received bystander CPR survived to hospital discharge than those without bystander CPR (12% vs 6%, respectively).
8. Where bystanders witnessed an arrest, 4% of patients were first shocked by a bystander using an automated external defibrillator (AED) prior to the arrival of ambulance paramedics. Also, patients receiving bystander CPR were eight times more likely to be found in a shockable rhythm, the cardiac rhythm most favourable to survival.
9. Patients who arrested in a public location were more likely to survive than patients who arrested at home (23% vs 8%, respectively).
10. For adult patients found in a shockable rhythm, where emergency services commenced resuscitation efforts, 29% survived to hospital discharge. For adult patients arresting into a shockable rhythm and witnessed to arrest by ambulance paramedics, 71% were discharged alive from hospital. For adult patients found in a shockable rhythm in 2014-2015, the chance of survival was almost three times higher than in 2002-2003.
11. When considering all adult patients where emergency services commenced resuscitation efforts, 10% survived to hospital discharge. The chance of being discharged alive from hospital was more than two times higher in 2014-2015 than in 2002-2003.
12. Most survivors of cardiac arrest were discharged home (86%). Phone interviews with adult survivors showed most survivors maintained their independence and had a good quality of life 12 months after their arrest; 77% of patients who were working prior to their arrest had returned to work 12-months after their arrest.

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