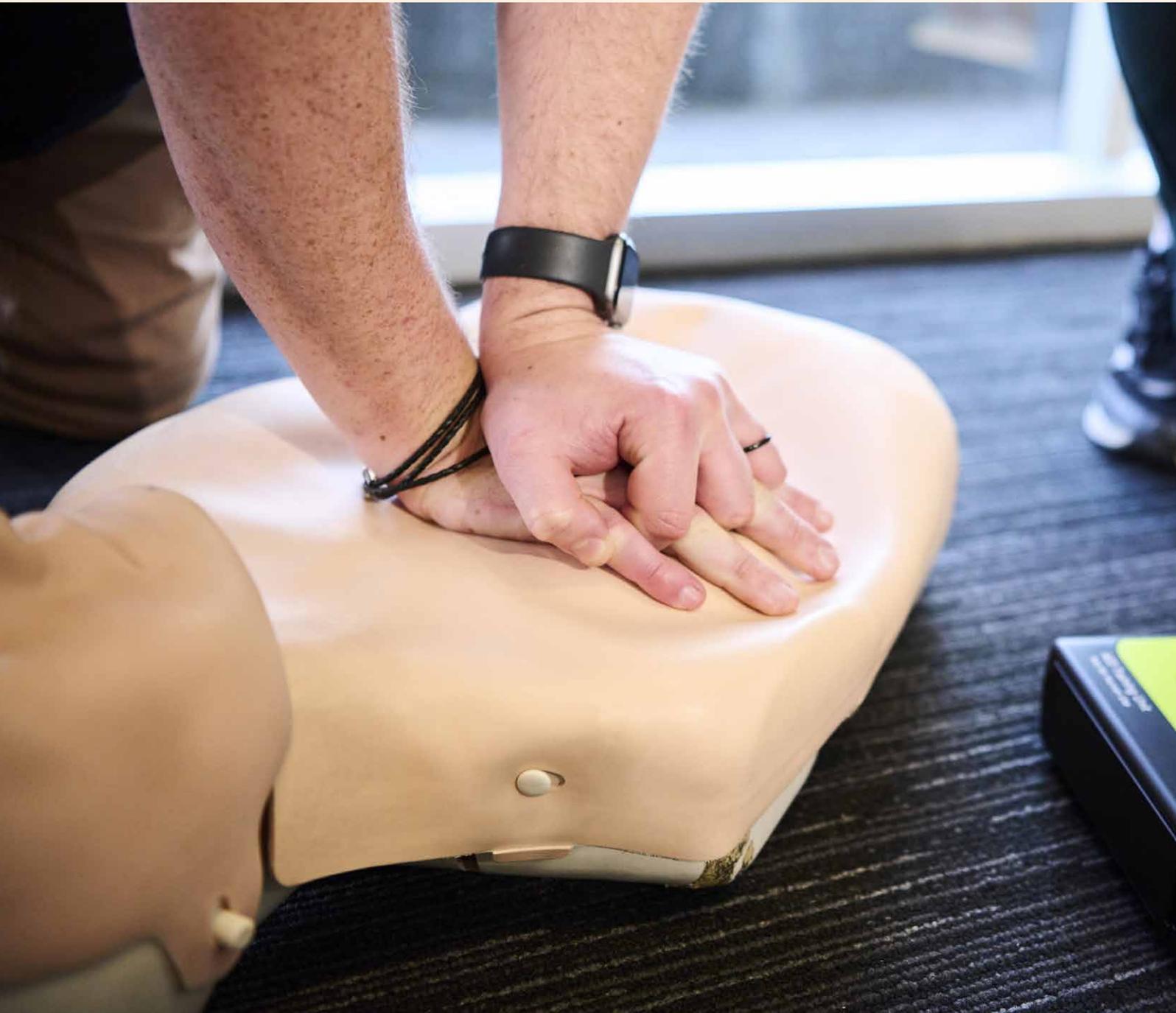


Out-of-Hospital Cardiac Arrest Registry

Rēhita Mate Manawa mō waho i te Hōhipera

Aotearoa New Zealand, National Report 2024/25



About this report

Mō tēnei pūrongo

The data presented in this report are for all OHCA attended by the Hato Hone St John and Wellington Free Ambulance EAS in the period from 1 July 2024 to 30 June 2025.

The data presented in this report primarily relate to events that were either 'attended' or where there was a 'resuscitation attempted' by EAS personnel. 'Attended' refers to all OHCA where EAS personnel arrived at the scene regardless of whether or not a resuscitation attempt was made. 'Resuscitation attempted' refers only to those events where an attempt at resuscitation was made by EAS personnel or successful defibrillation occurred prior to the arrival of EAS personnel.

Unless otherwise stated, all analyses exclude cardiac arrests witnessed by EAS personnel. Unless otherwise stated, survival refers to survival to 30 days post cardiac arrest.

All population figures in this report are derived from either Statistics New Zealand population data or the Te Whatu Ora Health NZ populations web tool.

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Introduction

Whakatakinga

Every year in New Zealand over 2,000 people are treated for a cardiac arrest that occurs in the community.

Cardiac arrest is the sudden loss of heart function, where the heart cannot effectively pump blood to vital organs. Without rapid intervention, cardiac arrest will always result in death. For every minute without CPR or defibrillation, a patient's chance of survival falls by 10–15 percent. Every New Zealander can make a difference in the chain of survival.

I ia tau i Aotearoa nei, nui ake i te 2,000 tāngata e haumanu ana i te mate manawa i te hapori.

Ko te mate manawa te ngaro ohorere o te mahi manawa, ā, tē taea e te manawa te whakarere toto pai ki ngā whēkau whakahirahira. Nā te korenga o te hāpaiora wawe, ko te otinga nui, ko te mate i ngā wā katoa. I ia miniti me te korenga o te CPR, o te whakahihiko manawa rānei, ka heke iho te āheinga o ngā tūrora ora tonu ai i te 10–15 paihēneti. He mana tō ngā tāngata katoa o Aotearoa i te raupapa whakaora.

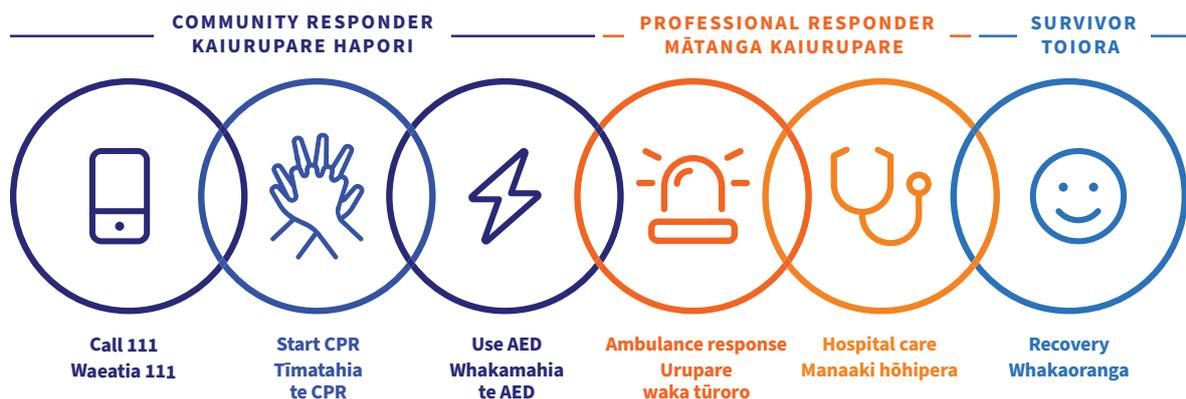


Figure 1: Chain of survival.^A

Survival from out-of-hospital cardiac arrest (OCHA) is largely due to the quick actions of bystanders who initiate CPR and use a defibrillator (or AED). Community initiatives such as free CPR awareness training, Shocktober, CPR in schools and the GoodSAM smartphone application prepare and enable everyday New Zealanders to respond.

The community – made up of bystanders and volunteer responders – works alongside dispatched teams including ambulance (EMS) and Fire and Emergency New Zealand (FENZ). Together, they play a vital role in influencing patient outcomes. In this report, we compare our resuscitation performance with international benchmarks, assessing the entire chain of response from the first actions taken in the community through to advanced life support.

How we respond to out-of-hospital cardiac arrest in New Zealand

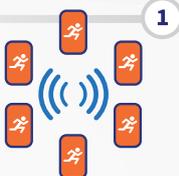
Aotearoa New Zealand (NZ) has an estimated population of 5.3 million, with 75% residing in the North Island. The median age of a New Zealander is 38 years and the life expectancy at birth for male New Zealanders is 80 years and for females is 84 years (stats.govt.nz).

The data presented in this report are for all out-of-hospital cardiac arrests (OHCA) attended by Hato Hone St John (HHStJ) and Wellington Free Ambulance (WFA). WFA services the greater Wellington and Wairarapa region (approximately 10% of NZ's population) and HHStJ services the remaining 90%. Clinicians from both ambulance services receive regular training in high-performance CPR and operate under the [Aotearoa New Zealand National \(EAS\) Clinical Practice Guidelines](#). These guidelines include advice on when it is appropriate to start and cease resuscitation attempts.

In NZ, phoning 111 will connect you with the Initial Call Answering Platform, who then forward the call to the appropriate emergency service provider (Police, Fire, Ambulance). Our ambulance communication centres use the Medical Priority Dispatch System for telephone triage.

When telephone triage indicates a potential cardiac arrest event, the following procedures are initiated:

The six closest GoodSAM responders within the designated alert radius of the incident are automatically notified.



1



2

Incident details are sent to the Fire Service for co-dispatch of Fire and Emergency (FENZ) personnel.

The closest available ambulance resource is immediately dispatched to the incident.



3



4

The closest available Critical Care Paramedic is concurrently dispatched to the incident.

An alert is broadcast over the relevant ambulance radio frequency, enabling nearby resources that may not be visible to the dispatcher to respond.



5



6

Whenever possible, the call handler provides telephone CPR instructions and may guide bystanders to the closest defibrillator.

Executive summary

Tuhinga whakarāpopoto nui

2,466

people this year were treated for an out-of-hospital cardiac arrest in New Zealand.

3.2% decrease from previous year

70% male

Median age (years)



72%

of cardiac arrests occurred at home



81%

of witnessed OHCA received bystander CPR



2.1×

increased survival when bystander CPR occurs^A

2.5×

increased survival for patients with an initial shockable rhythm if community defibrillation occurred^A

6%

received defibrillation by a Community Responder prior to ambulance arrival



1.7×

increased survival when at least one GoodSAM responder accepted an alert^A

43%

of events were accepted by at least one GoodSAM responder

94%

of events were co-responded to and attended by Fire and Emergency New Zealand



24%

had a pulse on arrival at hospital



The median time in which a dispatched responder^B reached a patient was **8 minutes** in urban communities and **11 minutes** in rural and remote communities

12%

of patients survived to 30 days post the event. (30% survival in the Utstein cohort)



All events, adult, resuscitation attempted: includes adults (≥ 15 years old), all-cause, resuscitation attempted. Excludes children, and EAS personnel witnessed events.

^A Odds ratio for period 1 July 2023 – 30 June 2025, adjusted for age and sex

^B A dispatched responder includes EAS ambulance and FENZ

Key metrics

Pūnaha matua

The number of OHCA cases where resuscitation was attempted fell slightly during 2024/25, 30-day survival is similar to previous years (figure 2).

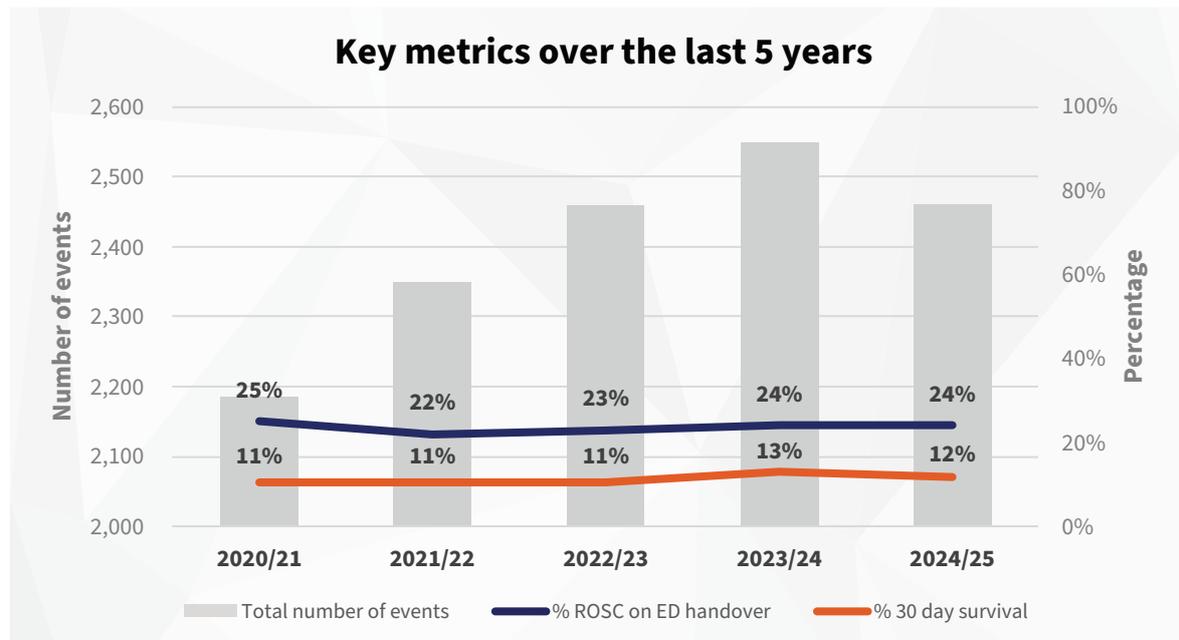


Figure 2. Key metrics over the last 5 years.^A



^A Includes adults (≥15 years), resuscitation attempted. Excludes EAS witnessed events

Utstein comparator group

Utstein whakataurite rōpū

One important international comparison uses a carefully standardised subgroup of patients known as the 'Utstein Comparator Group'. This subgroup requires that the following criteria be met: includes adults (≥ 15 years old), all-cause, resuscitation attempted, shockable presenting rhythm and bystander witnessed. Excludes children, EAS witnessed and no resuscitation attempt.

In the 2024/25 year, the survival rate for the Utstein comparator group was similar to previous years (figure 3).

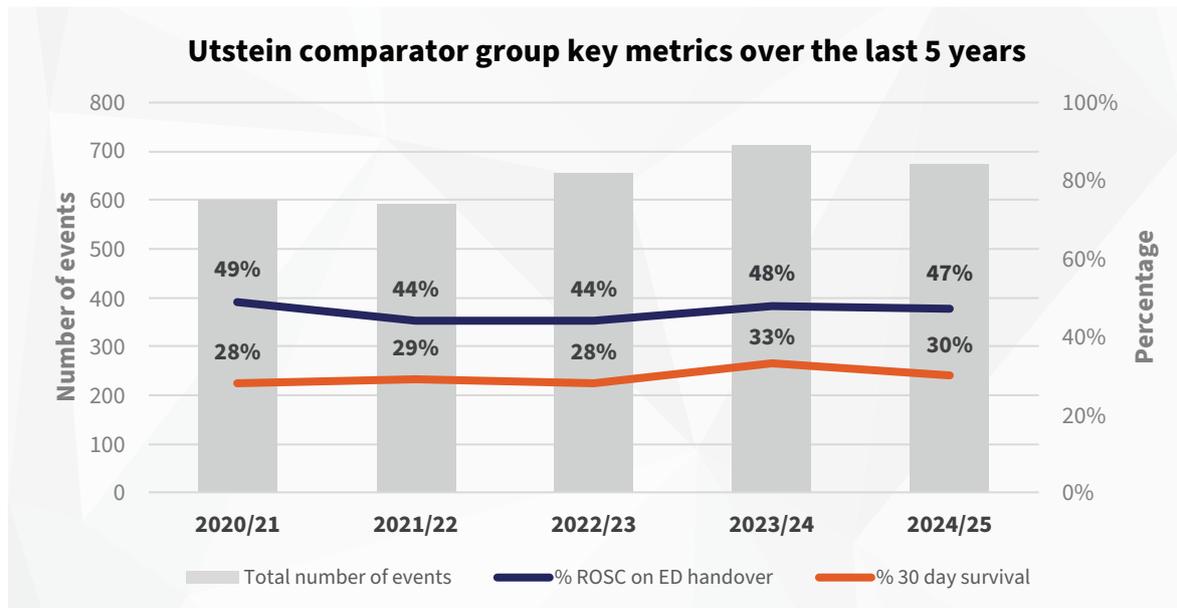


Figure 3. Utstein comparator group key metrics over the last 5 years.^A

Figure 4 compares the NZ Utstein comparator group survival rate with that of other ambulance services.

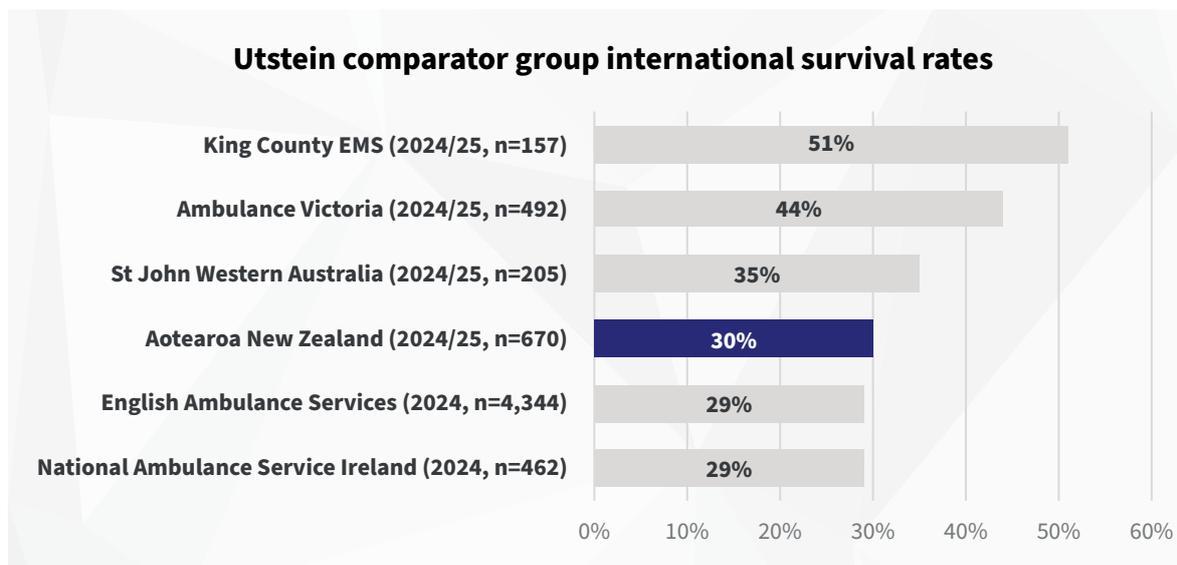


Figure 4. Utstein comparator group international survival rates.^{A,B,C,D}

- A** Includes adults (≥ 15 years), resuscitation attempted, shockable presenting rhythm, bystander witnessed. Excludes EAS witnessed events.
- B** NZ, English Ambulance Services, and St John Western Australia report on survival to 30 days, all other services report on survival to hospital discharge.
- C** English Ambulance Services report on all ages. National Ambulance Service Ireland reports on patients ≥ 17 years old.
- D** King County EMS exclude cardiac arrests with penetrating or blunt trauma mechanisms.



Incidence and demographics

Taupori pāpātanga me Taupori āhuatanga

Incidence

In 2024/25 the incidence of OHCA for adults was 128 per 100,000 person-years. For children, it was 13 per 100,000 person-years.

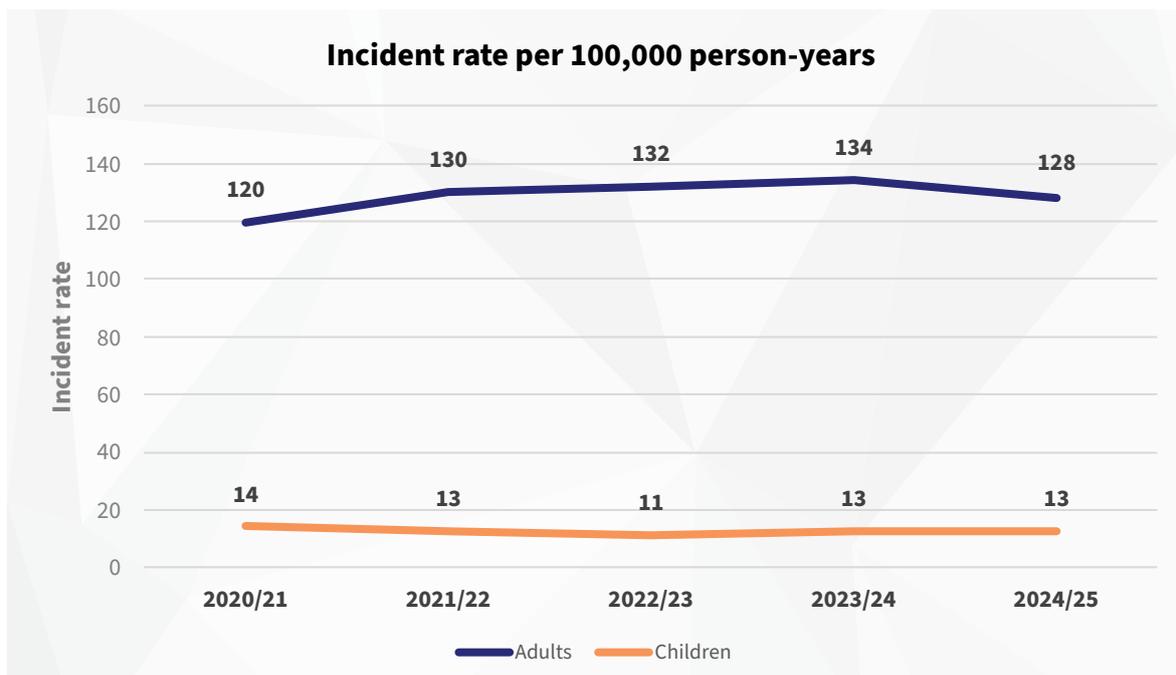


Figure 5. Incident rate per 100,000 person-years.^A

^A All events, attended, all cause, resuscitation attempted and no resuscitation attempted. Excludes EAS witnessed events. Population rates from Te Whatu Ora Health NZ populations web tool.

Subgroup comparisons of incidence rates

Figure 6 compares OHCA incidence by sex, rurality, ethnicity, and deprivation. Odds ratios above 1 mean that incidence is higher in the cohort of interest than the comparison group. An odds ratio below 1 means the incidence is lower in the cohort of interest. The horizontal bars show the 95% confidence interval.

In 2024/25 males had 2.1 times higher incidence of OHCA than females, and there was 1.4 times higher incidence of OHCA in rural areas compared to urban areas. Those living in the most deprived areas had 2.4 times higher OHCA incidence than the least deprived.

Māori had 1.4 times higher incidence than non-Māori, and Pacific peoples had 1.3 times higher incidence than non-Pacific peoples. Asians had a lower incidence of OHCA than non-Asians.

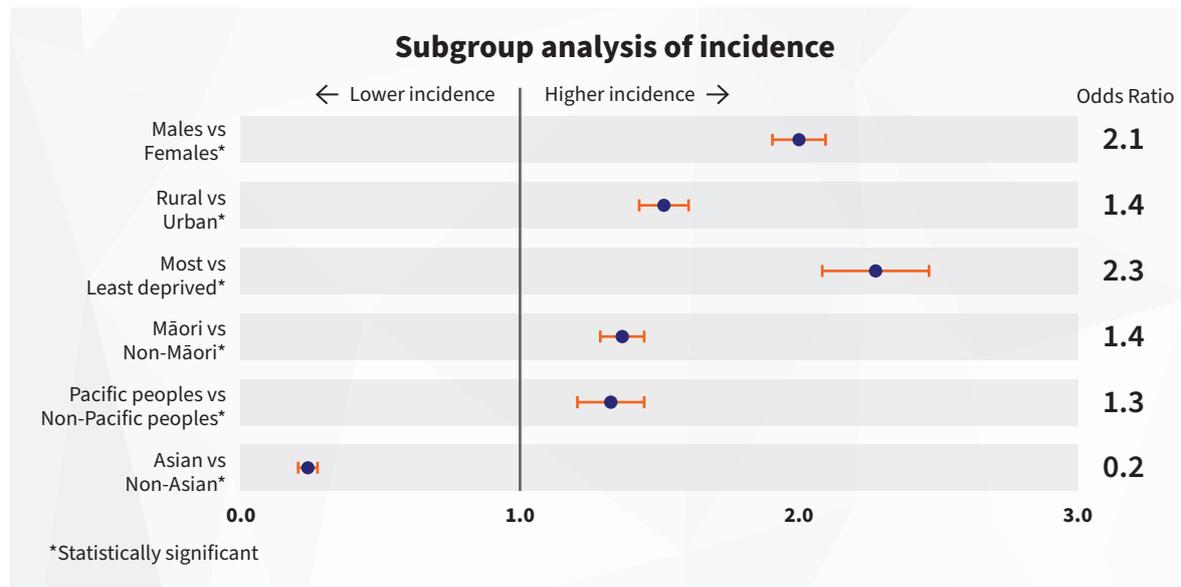


Figure 6. Subgroup analysis of incidence.^A

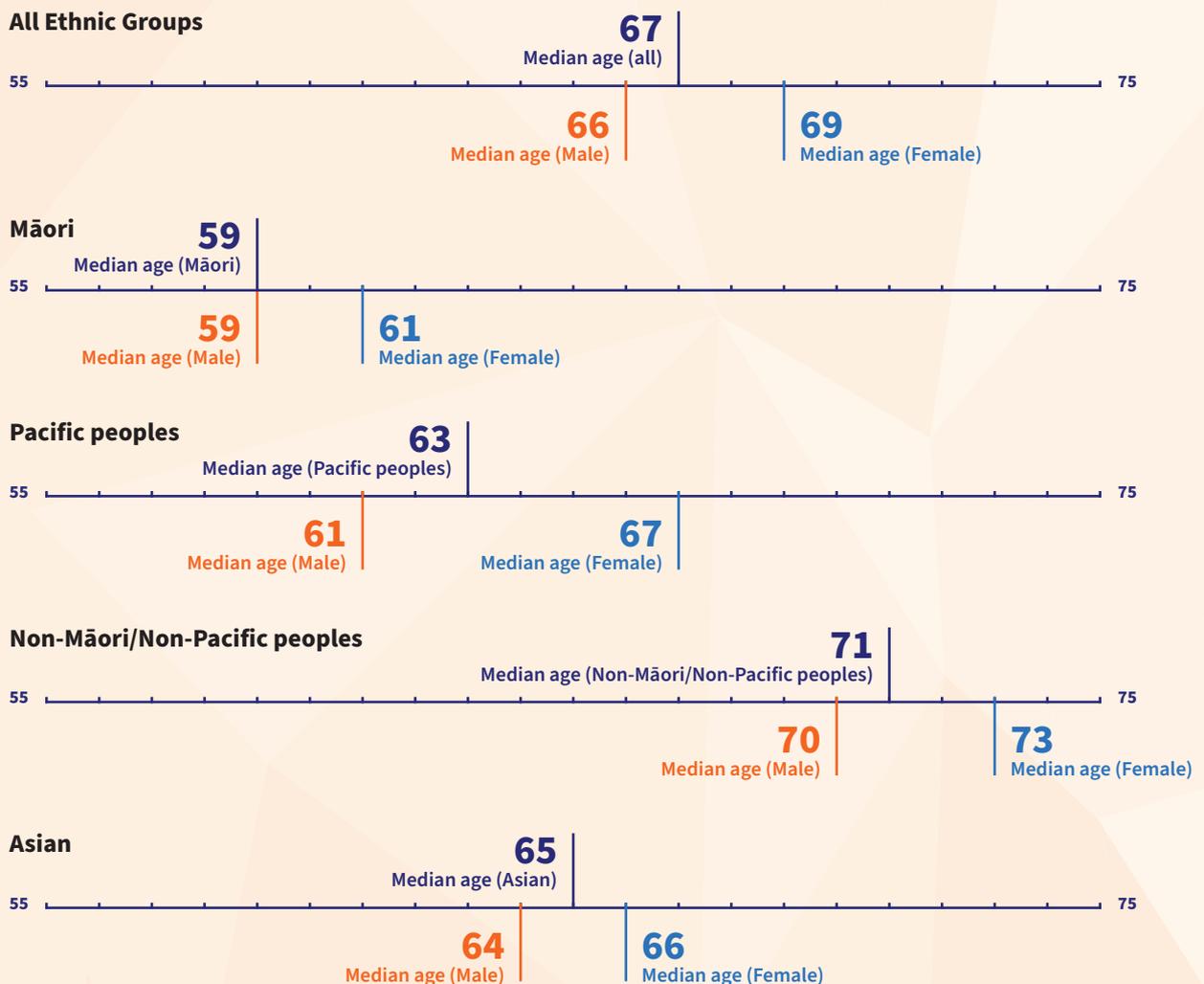


A All events, attended, all cause, includes adults and children, resuscitation attempted and no resuscitation attempted. Excludes EAS witnessed events. Ethnicity-specific rates were calculated based on the Manatū Hauora Ministry of Health prioritised ethnicity categories. Population rates for sex, ethnicity, and deprivation are from Te Whatu Ora Health NZ populations web tool. Rural and urban populations are derived from the Geographical classification for Health.

Key demographics	Adults (≥15 years)	Children
 Number of OHCA events	5,708	124
 % Male	67%	64%
 % Bystander witnessed	30%	25%
 % Resuscitation attempted	43%	70%

Figure 7: Key demographics.^A

Median age (years)

Figure 8: Median age of OHCA patients (years).^A

^A All events, attended, all cause, resuscitation attempted and no resuscitation attempted. Excludes EAS witnessed events.

Precipitating events

The most common aetiology of OHCA was that of a presumed cardiac cause (76%). An OHCA event is presumed to be of cardiac aetiology unless there is another clear cause.

The leading cause of OHCA in under 5-year-olds was respiratory causes followed by Sudden Unexpected Death in Infancy (SUDI).

In the 15–24 year age group, asphyxia (including hanging) and trauma were the most common causes (figure 9).

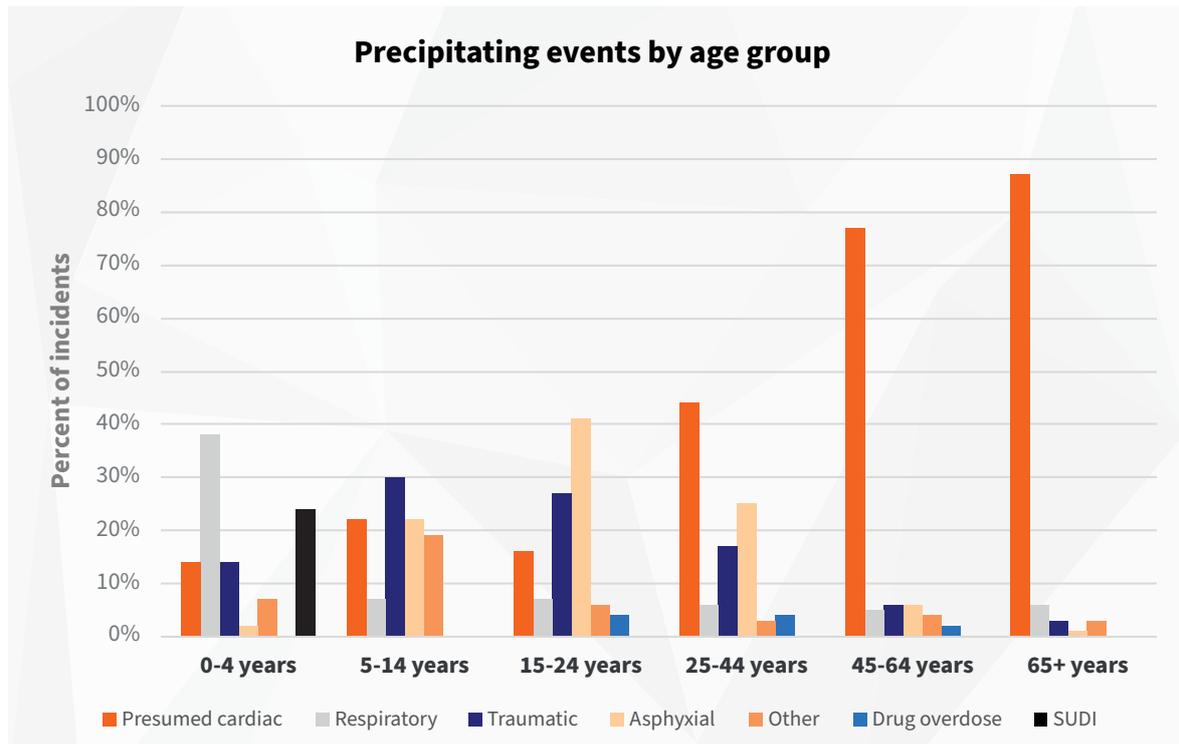


Figure 9. Precipitating events by age group.^A

OHCA location

The most common place for an OHCA to occur is in a person’s home (77%) followed by a public area (16%), which includes the workplace, street, shopping centre or similar (figure 10).

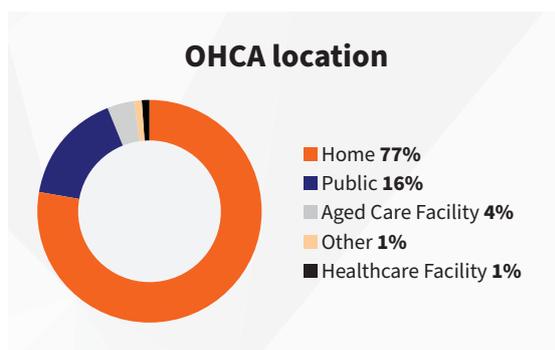


Figure 10. OHCA location.^A



^A All events, attended, all cause, resuscitation attempted and no resuscitation attempted. Excludes EAS witnessed events.

Interventions

Wawaotanga

Response times

Response time refers to the interval between the moment an ambulance call handler answers the 111 call and the arrival of the first dispatched responder at the scene. Dispatched responders include Emergency Ambulance Service (EAS) units and Fire and Emergency New Zealand (FENZ) personnel.

There has been minimal variation in urban and rural response times over the past five years. (figure 11).

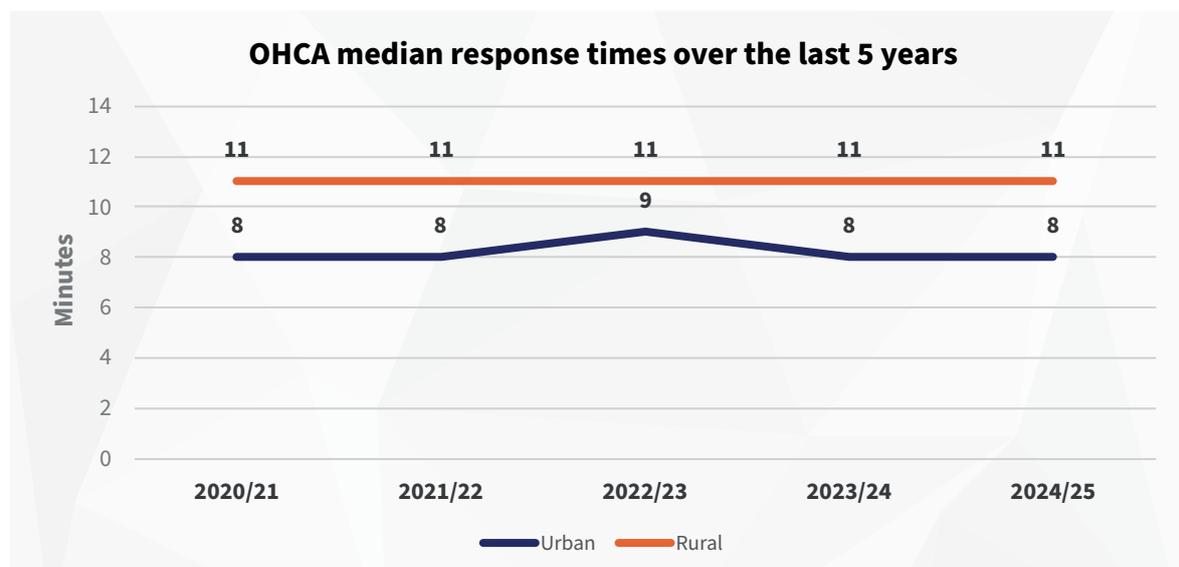


Figure 11. OHCA median response times over the last 5 years.^A

Bystander CPR

In 2024/25, 81% of bystander witnessed OHCA cases with resuscitation attempted received bystander CPR prior to the arrival of dispatched responders (figure 12). Bystander CPR rates have remained relatively steady over the last 5 years.

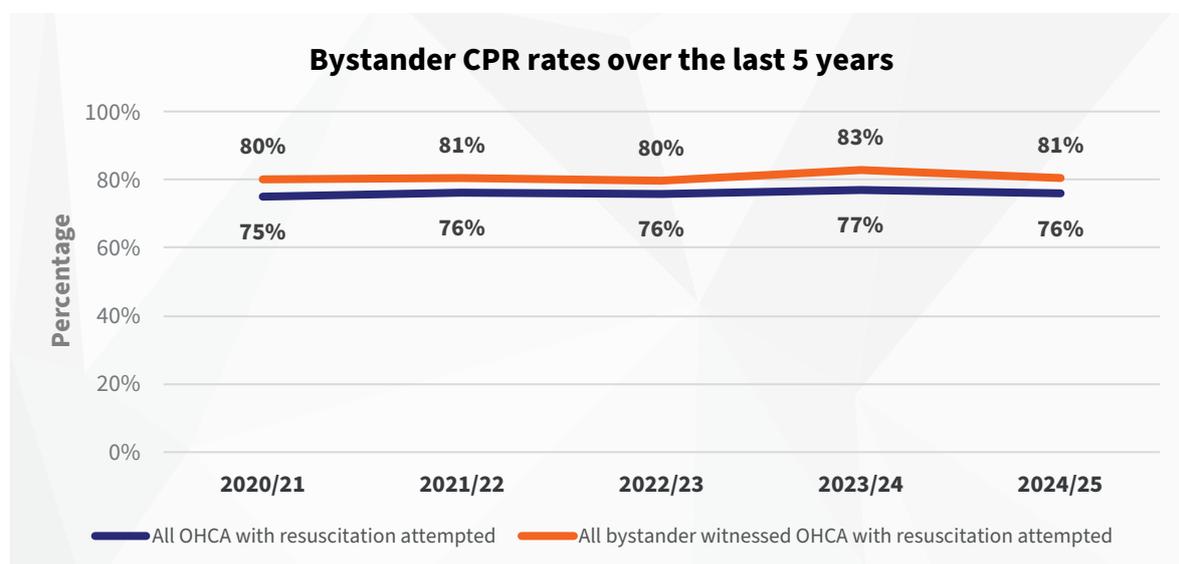


Figure 12. Bystander CPR rates over the last 5 years.^A

^A Includes adults (≥15 years), resuscitation attempted. Excludes EAS witnessed events.

Subgroup comparisons of bystander CPR

Figure 11 compares bystander CPR rates by sex, rurality, ethnicity, and deprivation. Ratios above 1 mean the odds of bystander CPR are higher in the cohort of interest than the comparison group. A ratio below 1 means the odds of bystander CPR are lower in the cohort of interest. The horizontal bars show the 95% confidence interval.

OHCA that occurred in the most deprived areas had 30% reduced odds of bystander CPR compared to those that occurred in the least deprived areas (figure 13).

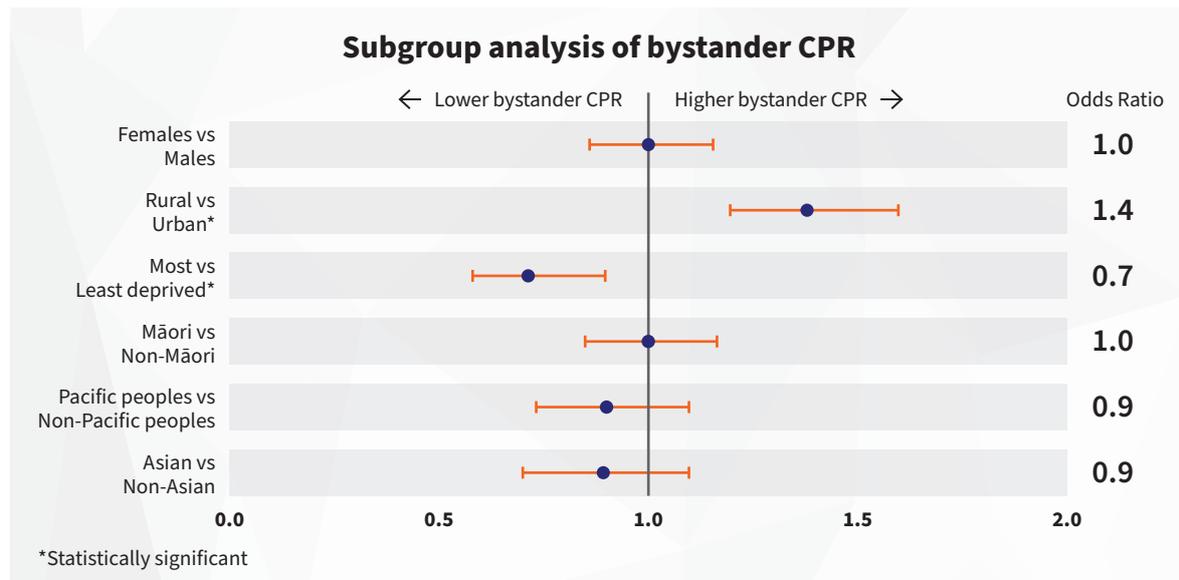


Figure 13. Subgroup analysis of bystander CPR.^A

CPR awareness sessions

Knowing CPR means you could save the life of a friend, a colleague, a member of your whānau or someone on the street.

3 Steps for Life

The mission of 3 Steps for Life is to empower members of the community to step forward when help is needed, and increase out-of-hospital cardiac arrest survival rates. Delivered by volunteer Community Educators, this programme consists of public awareness sessions around basic CPR and AED training. It gives participants the skills and confidence to take action in responding to someone in cardiac arrest by:

1 Calling 111 2 Starting CPR 3 Using an AED

You can find out details about this course and how to attend by visiting stjohn.org.nz/what-we-do/community-programmes/3-steps-for-life or email 3stepsforlife@stjohn.org.nz

Lloyd Morrison Foundation Heartbeat Programme

If you are in the Greater Wellington and Wairarapa area, Wellington Free Ambulance provides the Lloyd Morrison Foundation Heartbeat programme interactive training session free of charge. During the session you will learn everything you need to know about CPR and using an AED.

You can find out details about this course and how to attend by visiting wfa.org.nz/heartbeat or email heartbeat@wfa.org.nz

**3 steps
for life**

Supported by **mas**



^A 2 year period: 1 July 2023 – 30 June 2025. Adults, resuscitation attempted. Excludes EAS witnessed events. Adjusted for age and sex, with exception of females vs males which is adjusted for age only.

Community defibrillation

Defibrillation by bystanders or volunteer community responders decreased slightly in 2024/25. In 2024/25, 16% of adult patients with an initial shockable rhythm received community defibrillation (figure 14).

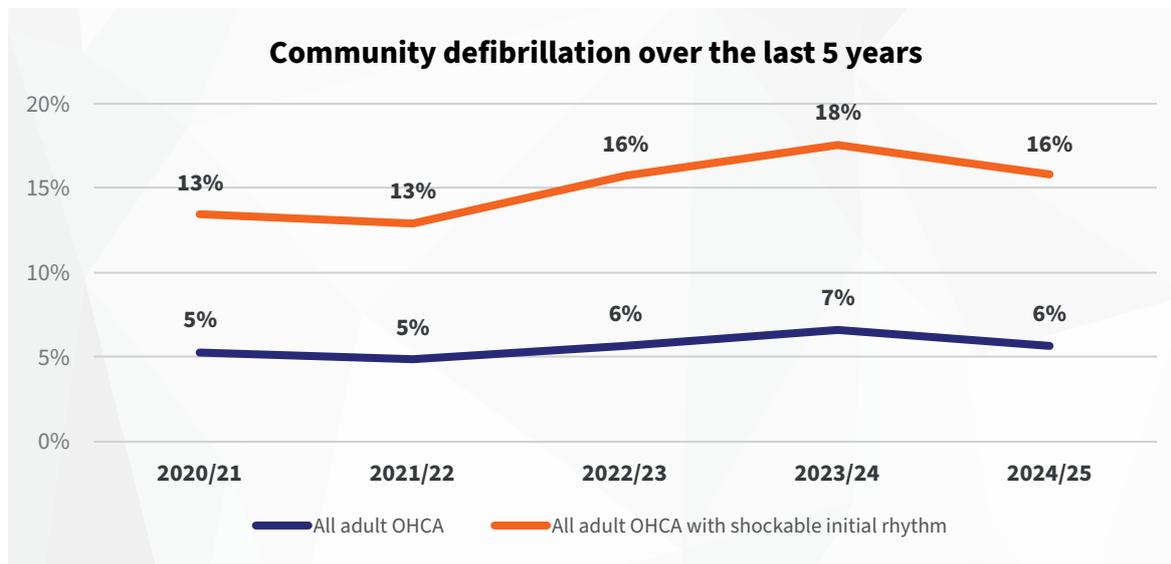


Figure 14. Community defibrillation over the last 5 years.^A

Subgroup comparisons of community defibrillation

Figure 15 compares community defibrillation rates by sex, rurality, and ethnicity.

Females had 60% lower odds of community defibrillation than males. Asians, Pacific peoples, Māori, and those who live rurally have lower proportions of community defibrillation, although these trends do not meet statistical significance.

Deprivation is not shown due to low numbers in each cohort.

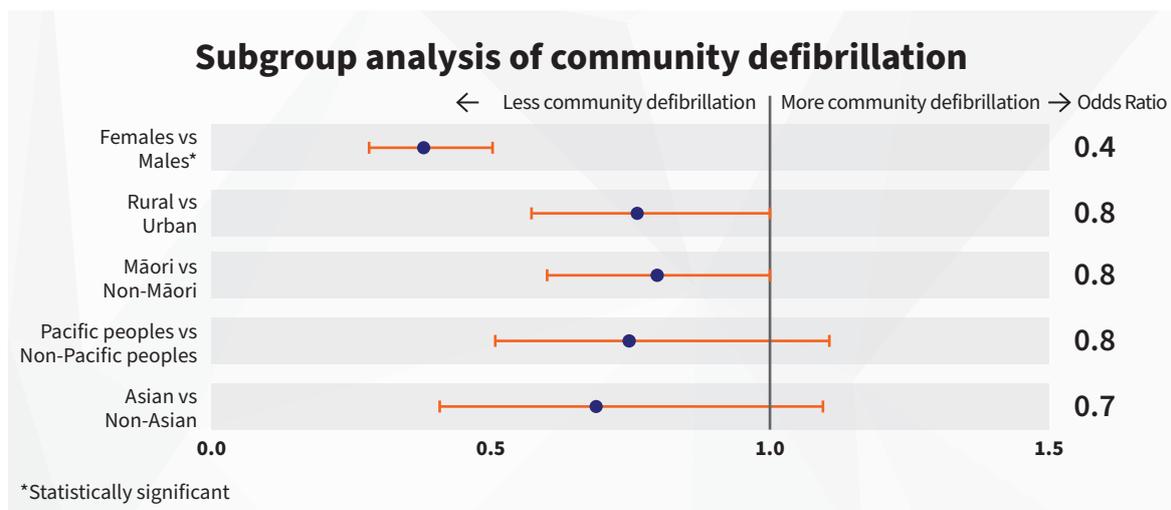


Figure 15. Subgroup analysis of community defibrillation.^B

A Adults, resuscitation attempted. Excludes EAS witnessed events.

B 2 year period: 1 July 2023 – 30 June 2025. Adults, resuscitation attempted. Excludes EAS witnessed events. Adjusted for age and sex, with exception of females vs males which is adjusted for age only.

Defibrillation by FENZ

In 2024/25, Fire and Emergency NZ (FENZ) attended 94% of OHCA events and arrived before EAS at 39% of them^A. FENZ defibrillated 17% of adult OHCA with a shockable initial rhythm.

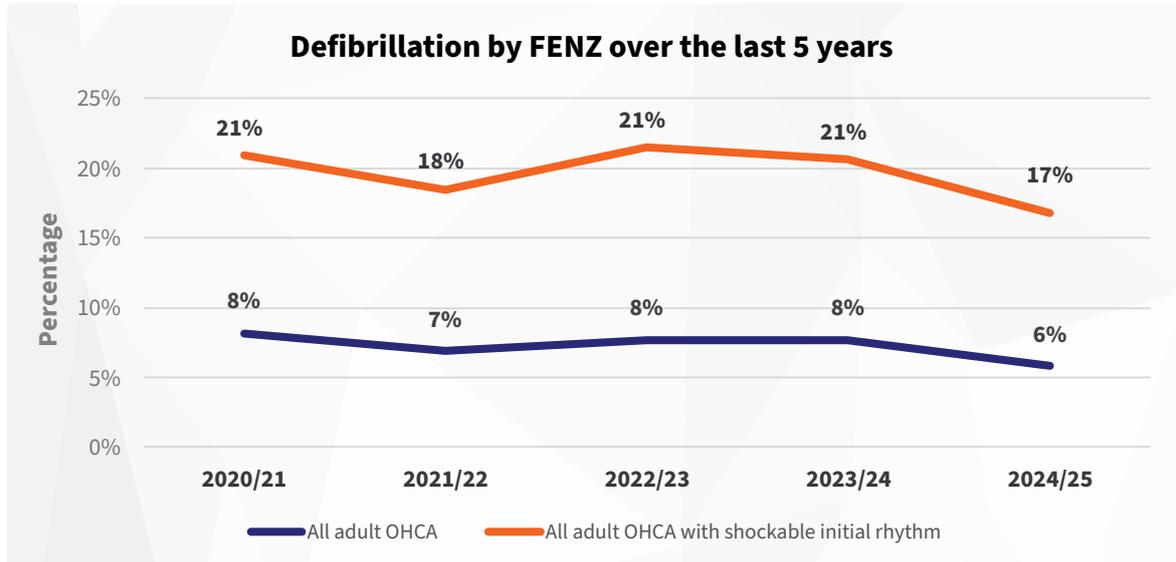


Figure 16. Defibrillation by FENZ over the past 5 years.^A



^A Adults, resuscitation attempted. Excludes EAS witnessed events.

GoodSAM responders

GoodSAM (Good Smartphone Activated Medics) is a mobile phone application that alerts volunteer community responders to nearby cardiac arrests. Anyone who is trained in CPR and how to use an AED is able to **register as a Good SAM responder** in New Zealand. The GoodSAM platform is linked to the ambulance communication centre, enabling it to automatically notify the six nearest GoodSAM responders whenever a cardiac arrest call is received. Each responder can then choose whether to accept or decline the alert.

Currently there are 16,330 people registered as GoodSAM responders in NZ.

The proportion of OHCA events with at least one accepted GoodSAM alert has increased over the past 5 years. GoodSAM responders are active in both urban and rural communities. In the 2024/25 year, 43% of all OHCA events had at least one accepted GoodSAM alert (figure 17).

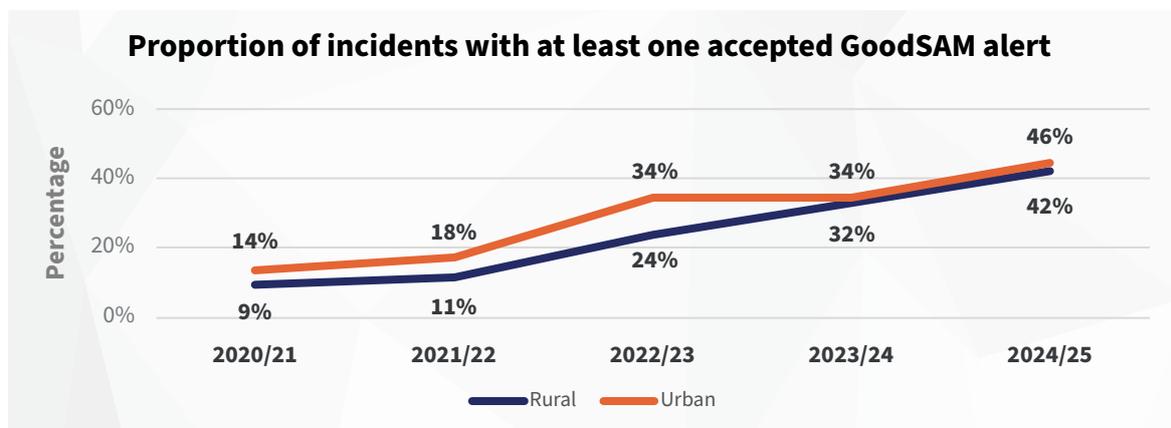


Figure 17. OHCA with accepted GoodSAM alerts.^A

GoodSAM acceptance subgroup comparisons

Figure 18 compares events where at least one GoodSAM responder accepted an alert with events that had no accepted GoodSAM alerts by sex, rurality, ethnicity and deprivation. Pacific peoples and those in the most deprived areas had lower odds of GoodSAM engagement compared with non-Pacific peoples and those in the least deprived areas respectively.

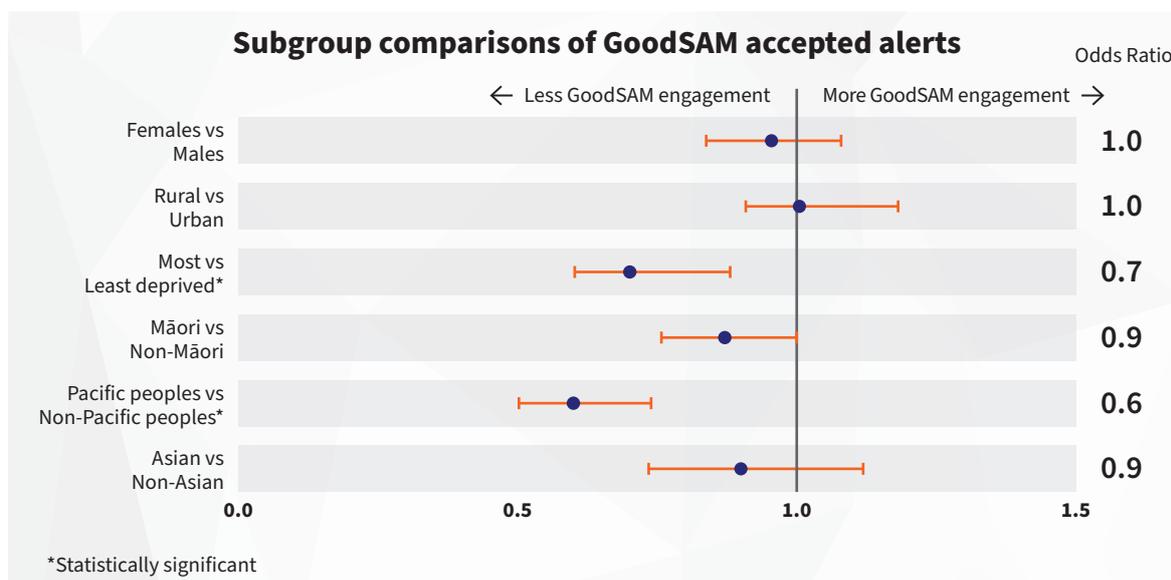


Figure 18. GoodSAM acceptance subgroup comparisons.^B

A Adults, resuscitation attempted. Excludes EAS witnessed events.

B 2 year period: 1 July 2023 – 30 June 2025. Adults, resuscitation attempted. Excludes EAS witnessed events. Adjusted for age and sex, with exception of females vs males which is adjusted for age only.

Outcomes

Whakataunga

The 30-day survival rate for 2024/25 for adult OHCA with resus attempted was 12%. For the Utstein comparator group this was 30%.

In 2024/25, there were 65 OHCA survivors per million population. Figure 19 shows the rolling two year OHCA survival per million population.

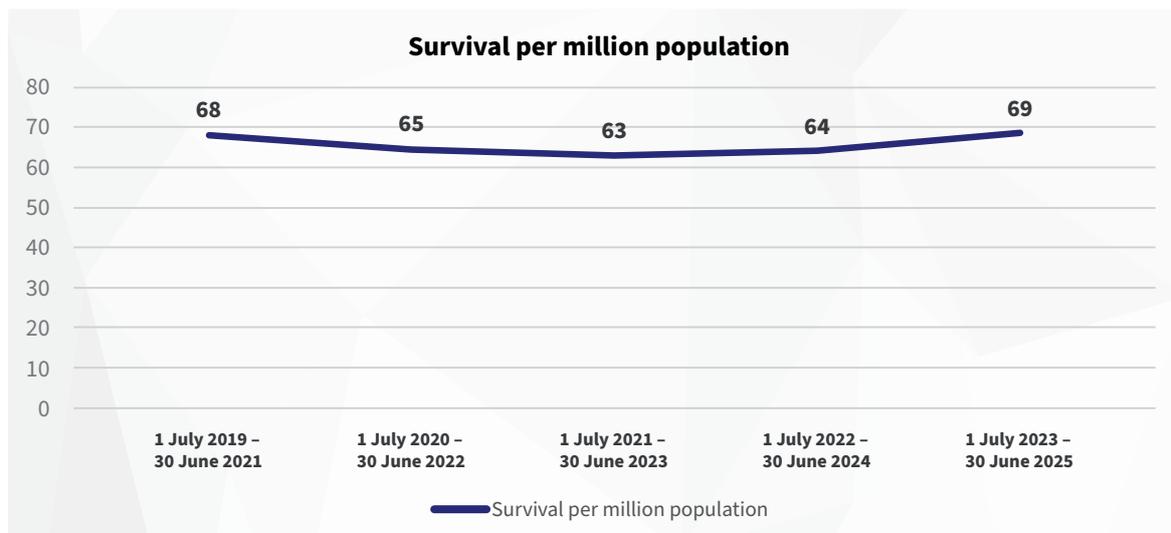


Figure 19. Survival per million population.^A

In 2024/25 the OHCA mortality across all ethnic groups was 487 per million population. Figure 20 shows the rolling two year OHCA mortality per million population. OHCA mortality per million is higher in Māori and Pacific peoples, and lower in the Asian ethnic group.

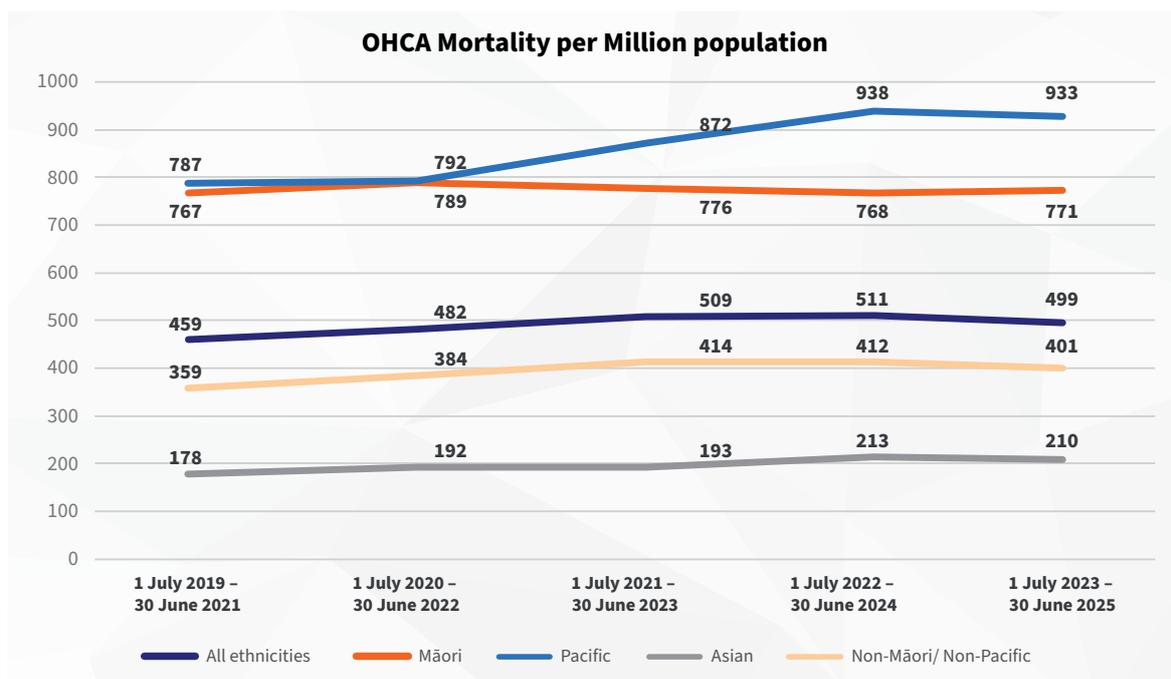


Figure 20. OHCA Mortality per Million population.^B

A 2 year period: 1 July 2023 - 30 June 2025. Adults, resuscitation attempted. Excludes EAS witnessed events. Population rates from Te Whatu Ora Health NZ population web tool.

B Adults, resuscitation attempted. Excludes EAS witnessed events. Population rates from Te Whatu Ora Health NZ populations web tool. Ethnicity-specific rates were calculated based on the Manatū Hauora Ministry of Health prioritised ethnicity categories.

Subgroup comparisons of 30-day survival – demographics

Figure 21 compares 30-day survival rates by sex, rurality, ethnicity, and deprivation. Females, Pacific peoples and Māori, OHCA occurring in rural locations, and those in the most deprived locations, have lower odds of survival than their comparator groups.

Although not statistically significant, figure 21 also shows a trend toward lower survival for Asians.

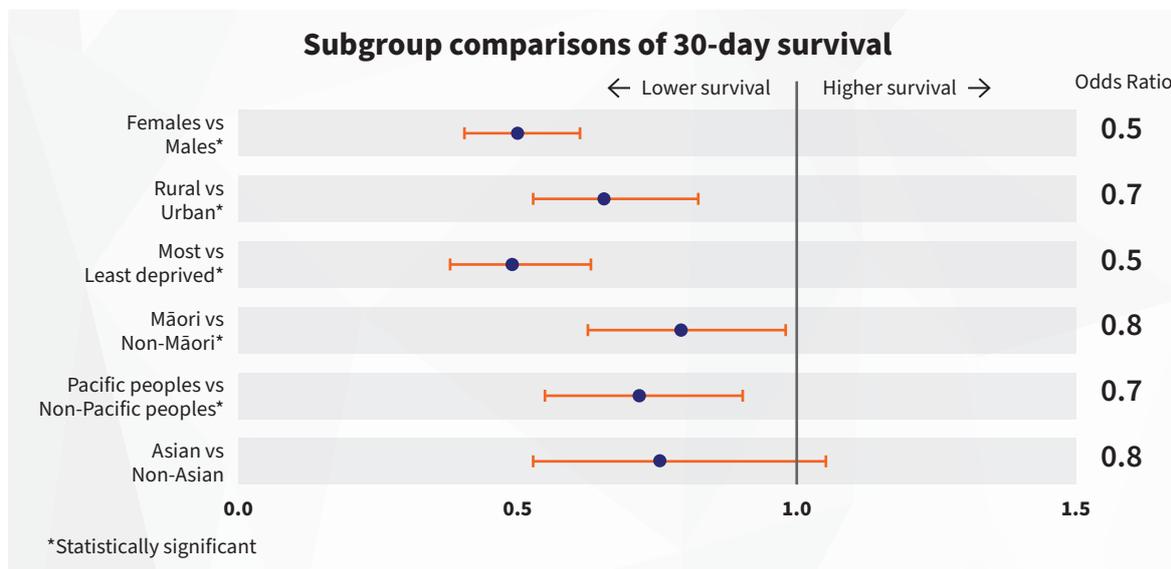


Figure 21. Subgroup comparisons of survival – demographics.^A

Subgroup comparisons of 30-day survival – interventions

Figure 22 shows the influence of community interventions, and EAS witnessed events on 30-day survival. All these factors increase the odds of survival.

OCHA events that occur while EAS is in attendance have 3.1 times higher odds of survival compared to when cardiac arrest happens prior to EAS arrival.

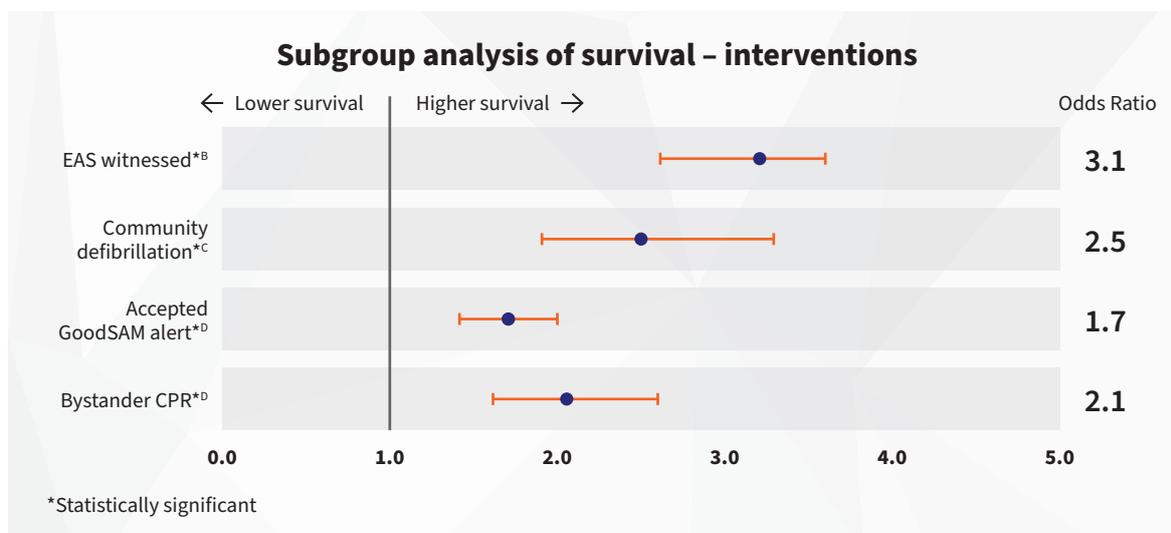
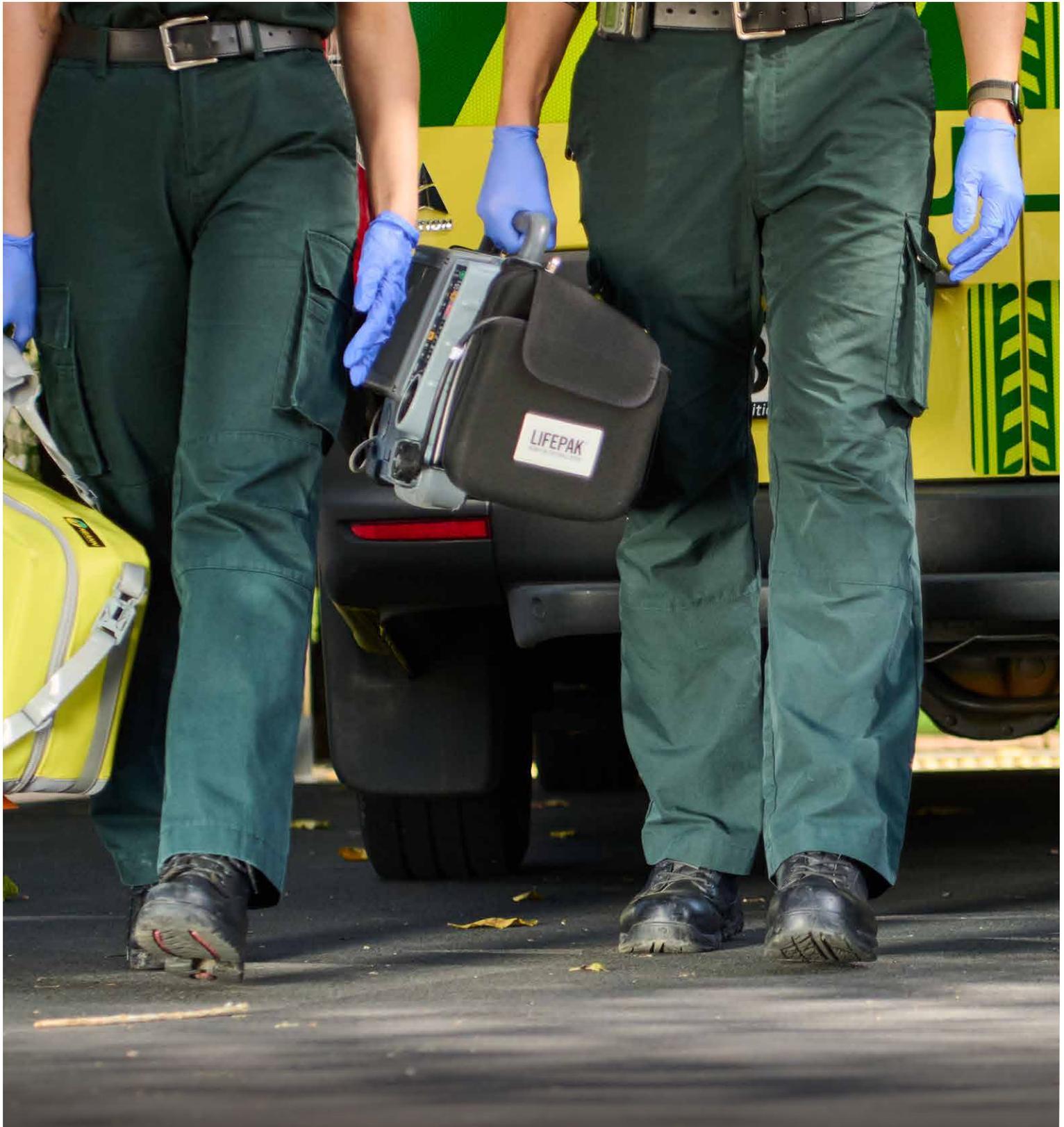


Figure 22. Subgroup analysis of survival – interventions. Two year period: 1 July 2023 - 30 June 2025.

- A** Two year period: 1 July 2023 - 30 June 2025. Adults, resuscitation attempted. Excludes EAS witnessed events. Adjusted for age and sex with exception of females vs males which is adjusted for age only.
- B** Adults, resuscitation attempted. Adjusted for age and sex.
- C** Adults, resuscitation attempted, shockable initial rhythm. Excludes EAS witnessed events. Adjusted for age and sex.
- D** Adults, resuscitation attempted. Excludes EAS witnessed events. Adjusted for age and sex.



Conclusion

Mutunga

The data presented in this report represent the 2024/25 results from the Aotearoa New Zealand National OHCA registry. Year on year, these reports provide an update on how the EAS is performing in the crucial management of OHCA.

Appendices

The Out-of-Hospital Cardiac Arrest Registry

The Hato Hone St John OHCA Registry was formally established in September 2013. In 2019, the Hato Hone St John and Wellington Free OHCA Registries were merged to create a National OHCA Registry.

In 2022, the national OHCA Registry was further integrated into the Aotearoa New Zealand Paramedic Care Collection (ANZPaCC) database. ANZPaCC includes all routinely collected clinical data from the electronic Patient Report Form (ePRF) for patients attended by road emergency medical services. It is co-governed by Hato Hone St John and Wellington Free Ambulance.

Analysis is conducted in collaboration with Wellington Free Ambulance by Hato Hone St John Clinical Evaluation, Research, and Insights investigators Heather Hutchinson and Sarah Maessen, along with Auckland University of Technology's ANZPaCC Principal Investigator Bridget Dicker.

Eligibility

The registry captures data on all OHCA events attended by EAS. A cardiac arrest is defined as a patient who is unconscious and pulseless with either agonal breathing or no breathing.

Inclusion and exclusion criteria are described in Table A1 and Table A2.

Data capture

The data is collated in the registry using a reporting template based on international definitions outlined in the Utstein style of reporting and the variables developed by the Australasian Resuscitation Outcomes Consortium (Aus-ROC).

In the data collection process there are three separate points where data is acquired:

- Computer Aided Dispatch (CAD) and supporting systems
- On scene by the EAS personnel in attendance
- Mortality data from the New Zealand National Health Index (NHI) records.

Computer aided dispatch

Patient and event details are collected by the Ambulance Communications Centre when a 111 call is received and an ambulance is dispatched, with data being entered into the CAD system. Data specifically related to cardiac arrest is obtained from the CAD system and transferred into the OHCA Registry.

Table A1: Inclusion criteria (all of the following).

1	Patients of all ages who suffer a documented cardiac arrest
2	Occurs in New Zealand where the ambulance service or one of its participating co-responders is the primary treatment provider
3	<ul style="list-style-type: none"> ➤ Patients of all ages who on arrival of the EAS are unconscious and pulseless with either agonal breathing or no breathing or ➤ Patients of all ages who become unconscious and pulseless with either agonal breathing or no breathing in the presence of EAS personnel or ➤ Patients who have a pulse on arrival of EAS personnel following successful bystander defibrillation

Table A2: Exclusion criteria (any of the following).

1	Patients who suffer a cardiac arrest in a hospital facility where the EAS may be in attendance but are not the primary treatment providers
2	Patients who suffer a cardiac arrest during an inter-hospital transfer where the EAS may be providing transport but are not the primary treatment providers
3	Bystander suspected cardiac arrest where the patient is not in cardiac arrest on arrival of the EAS personnel, and where defibrillation did not occur prior to ambulance arrival or no other evidence verifying a cardiac arrest state is present

On scene collection

Ambulance officers on scene attending a patient in cardiac arrest are required to record specific data. This is recorded on an electronic Patient Report Form (ePRF) and submitted electronically to a secure server.

NHI patient outcome data

The patient's NHI is collected by EAS personnel on scene or at hospital handover. If the NHI was not available at the time of the event then the NHI is determined by cross-reference of the patient's date of birth and name to the NHI database.

If a patient dies, the date of death is updated by the Manatū Hauora Ministry of Health identity data management team after matching NHI identity with the official death registrations on a monthly basis.

Data quality

The registry undergoes continuous quality-assurance processes, including systematic auditing and the revision of existing records when new, corrected, or previously unavailable information becomes accessible. As a consequence of these ongoing data-validation activities, annual datasets may demonstrate variance attributable to methodological updates rather than genuine changes in clinical or operational performance. Accordingly, figures presented in this report may differ from those published in prior years, reflecting enhancements in data completeness and accuracy rather than substantive shifts in outcomes.

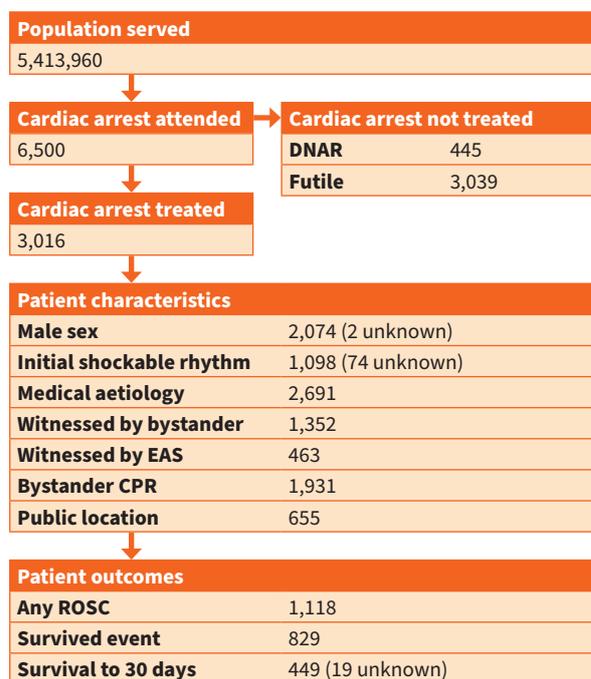
Ethical review

The OHCA Registry has been approved by the New Zealand Health and Disability Ethics Committee (Aotearoa New Zealand, Paramedic Care Collection (ANZPaCC), 13415).

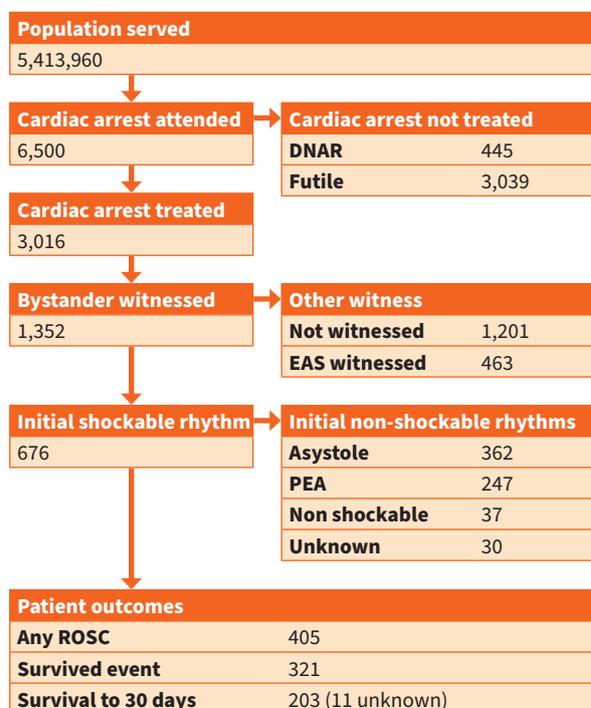
The registry is also subject to EAS internal research governance processes that include a locality review and locality authorisation as per the Standard Operating Procedures for Health and Disability Ethics Committees.

The OHCA Registry is held on a secure server which requires active directory permissions. At no stage is data that could identify individual patients or individual hospitals publicly released from this registry.

OHCA flowchart for system effectiveness (attempted resuscitation, all ages, includes EAS witnessed)^A



OHCA flowchart for system effectiveness (Utstein comparator, all ages)^A



Abbreviations

AED	Automated external defibrillator	HHStJ	Hato Hone St John
CAD	Computer aided dispatch	OHCA	Out-of-hospital cardiac arrest
CPR	Cardiopulmonary resuscitation	PEA	Pulseless electrical activity
DNAR	Do not attempt resuscitation order	ROSC	Return of spontaneous circulation
EAS	Emergency ambulance service	SUDI	Sudden unexpected death in infancy
ED	Emergency Department	VF	Ventricular fibrillation
EMS	Emergency medical services	VT	Ventricular tachycardia
FENZ	Fire and Emergency New Zealand	WFA	Wellington Free Ambulance
GoodSAM	Good Smartphone Activated Medics		



Glossary of terms

Adjusted rates	Rates are standardised to a control population.
Adult	Patients aged 15 years or older.
Asystole	The absence of any cardiac electrical activity.
Children	Patients aged less than 15 years.
Community responder	A member of the community who is not part of the EAS service who provides assistance at an OHCA event. For example, a member of the public, or an off duty ambulance officer or an off duty doctor or nurse.
EAS attended	This is the population of all patients following cardiac arrest where EAS personnel attended regardless of whether emergency treatment was provided.
EAS personnel	Emergency ambulance crews dispatched to a medical emergency.
Least deprived	Quintile 1 from NZDep2023 based on the patient's home address.
Most deprived	Quintile 5 from NZDep2023 based on the patient's home address.
Presumed cardiac aetiology	An OHCA is presumed to be of cardiac aetiology, unless it is known or likely to have been caused by trauma, drowning, poisoning or any other non-cardiac cause.
Resuscitation attempted	Performance of chest compressions (or other emergency care for cardiac arrests secondary to trauma) by responding EAS personnel, or the delivery of a shock at any time (including before ambulance arrival).
Return of spontaneous circulation	The patient shows clear signs of life in the absence of chest compressions for more than 30 seconds. Signs of life include any of the following: normal breathing, palpable pulse, increasing end tidal CO ₂ or active movement.
Rural and remote service area	Assigned according to the Geographic Classification for Health for the event location. Rural includes: R1, R2 and R3.
Shockable rhythm	Ventricular fibrillation, ventricular tachycardia or unknown shockable (AED).
Specific rates	Rates for specific segments/groups of the population (e.g. sex, age, ethnicity).
Survival to 30-days	The patient is alive at 30-days post-OHCA event.
Survived event	The patient has sustained ROSC to handover at hospital.
Urban area	Assigned according to the Geographic Classification for Health for the event location. Urban includes: U1 and U2.
Witnessed event	A witnessed cardiac arrest is one that is seen or heard by another person.

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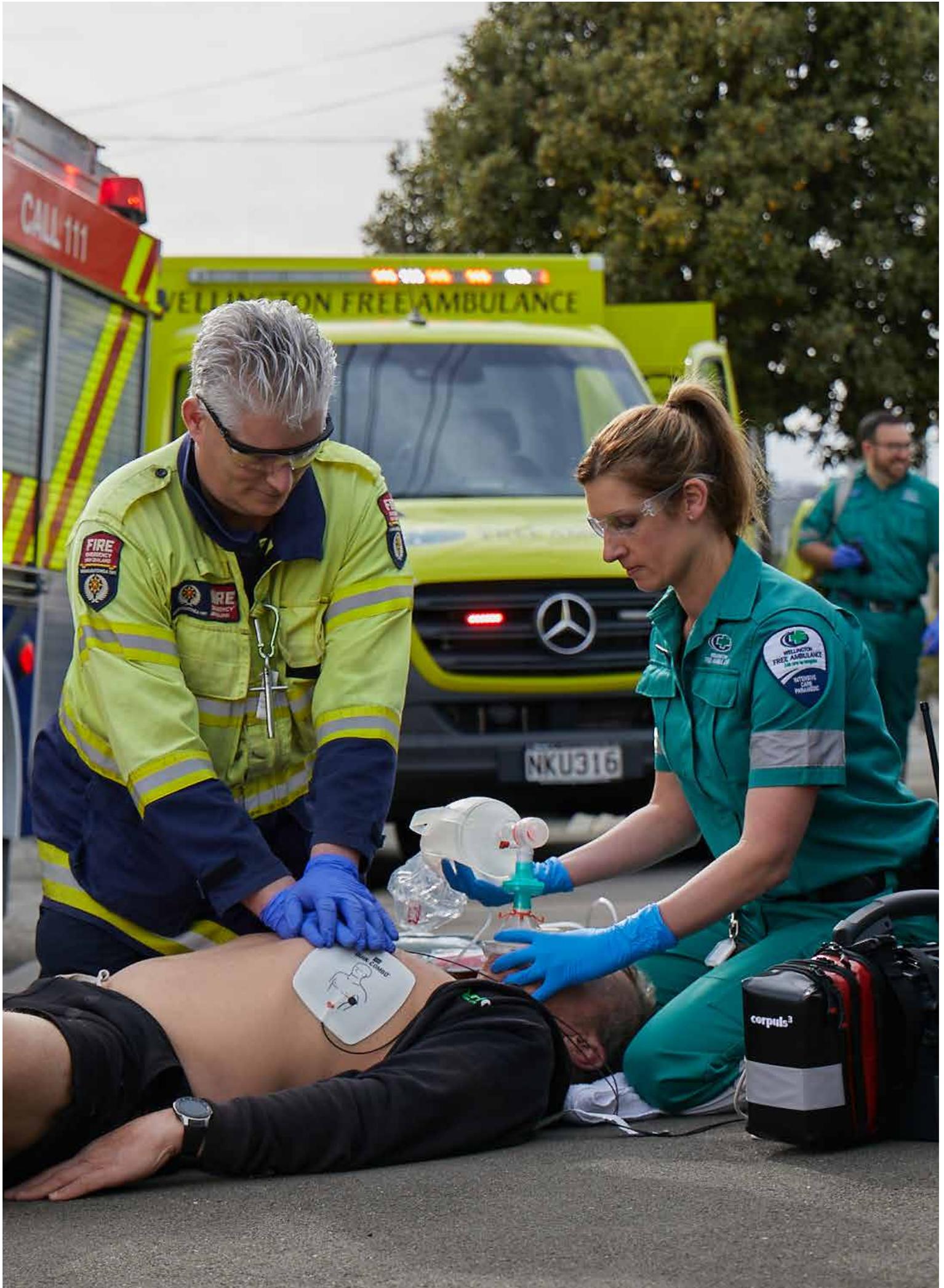
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