



## Ambulance services in Wales, 2018-19

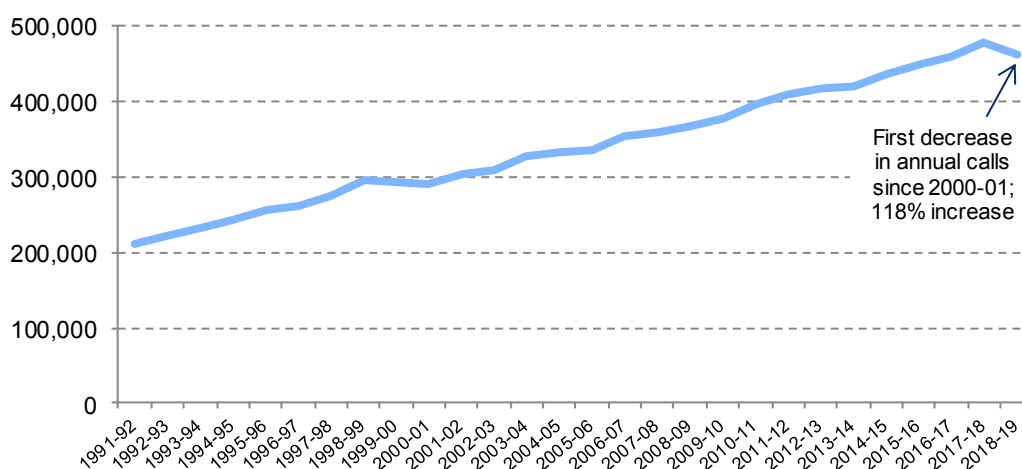
26 June 2019  
SFR 51/2019

This report presents data and analysis on ambulance services in Wales for the financial year 2018-19. The report focusses on call volumes, call categories, mean and median response times and performance against the 'red' call response time target. This report supplements monthly ambulance data published in the NHS Activity and Performance release

### Key points in 2018-19:

- 463,248 emergency ambulance calls were made during 2018-19.
  - This is an annual decrease of 3.4%, due to a reduction in green calls and the first decrease in total calls since 2000-01.
  - The number of calls has increased over the long term, with a 118% increase since 1991-92.
- 24,438 were red calls (immediately life-threatening), 5.3% of the total, and an increase of 6.8% on the previous year.
- 73.8% of red calls received an emergency response within 8 minutes, down from 74.6% in 2017-18.
- The median response time for red calls was 5 minutes and 7 seconds, nine seconds slower than in 2017-18. The median response time for amber calls was 24 minutes and 7 seconds, over five minutes slower than in 2017-18.

**Chart 1, total emergency calls, 1991-92 onwards**



NOTE: Different call classifications over the years but combined to be as comparable a basis as possible:

- Emergency calls and GP urgent patient journeys from 1991-92 to 1998-99
- Category A, Category B and GP urgent journeys from 1999-2000 until November 2011
- Category A, Category C and Category C (HCP) from December 2011 until September 2015
- Red, amber and green calls from October 2015 to date

### About this release

Following an initial trial starting on 1 October 2015, a new clinical response model for the ambulance service in Wales was implemented in February 2017. Under the new model, only the most serious calls, categorised as red (immediately life-threatening), have a response time target. All other calls receive an appropriate response, either face-to-face or telephone assessment, based on clinical need.

The Emergency Ambulance Services Committee also publishes [Ambulance Quality Indicators](#) each quarter.

### In this release

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## Summary of the year (2018-19)

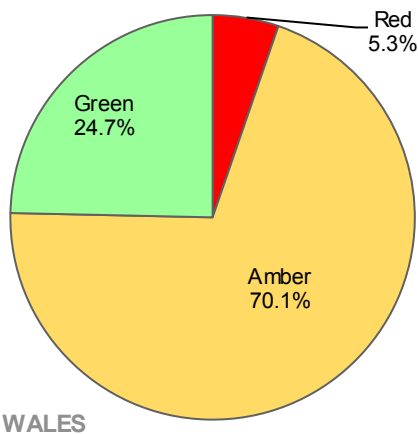
In Wales, calls to the emergency services where an ambulance is required are classified as follows:

**Red:** Immediately life-threatening (someone is in imminent danger of death, such as a cardiac arrest).  
The Wales target is for 65% of emergency responses to arrive within 8 minutes.

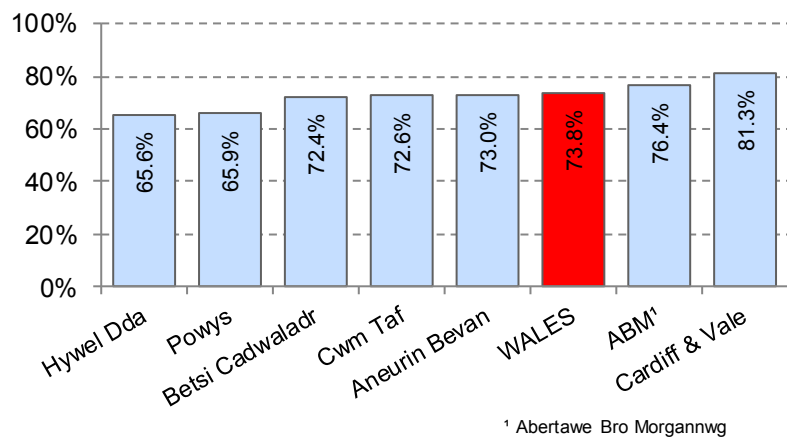
**Amber:** Serious but not immediately life-threatening (patients who will need treatment to be delivered on the scene and may then need to be taken to hospital)

**Green:** Non urgent (can often be managed by other health services) and clinical telephone assessment.

**Chart 2: Emergency calls, 2018-19**

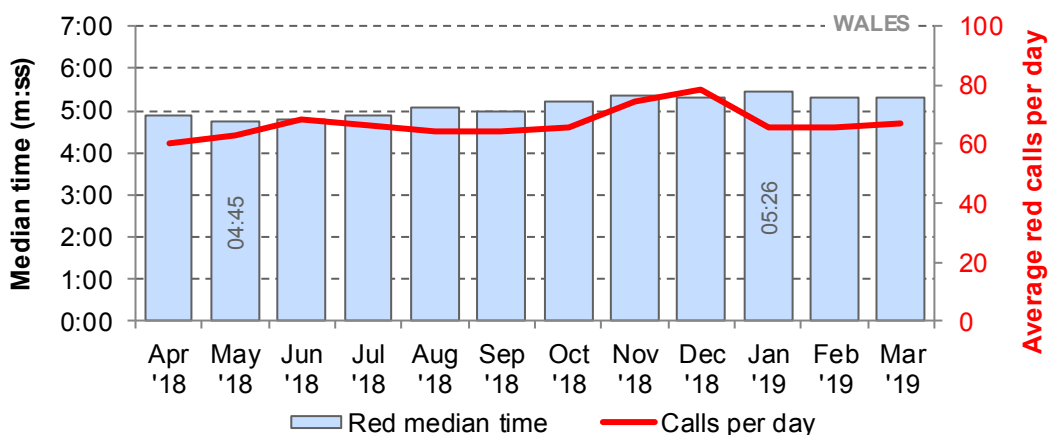


**Chart 3: % of red calls which received an emergency response at the scene within 8 minutes, 2018-19**



- 463,248 emergency calls were received during the year:
  - 24,438 (5.3%) were red, 6.8% more than the previous year.
  - 324,580 (70.1%) were amber, 1.0% more than the previous year.
  - 114,230 (24.7%) were green, 15.4% lower than the previous year.
- Across Wales, 73.8 % of red calls received a response within 8 minutes, above the 65% target.
- Performance in the LHB areas ranged from 65.6% in Hywel Dda to 81.3% in Cardiff & Vale.

**Chart 4: Median response times, and average red calls per day, Wales**



The median response time to red calls varied each month, ranging from 4 minutes and 45 seconds (May 2018) to 5 minutes and 26 seconds (January 2019).

## Calls

**Table 1: Calls by type, average calls per day and calls per 10,000 population**

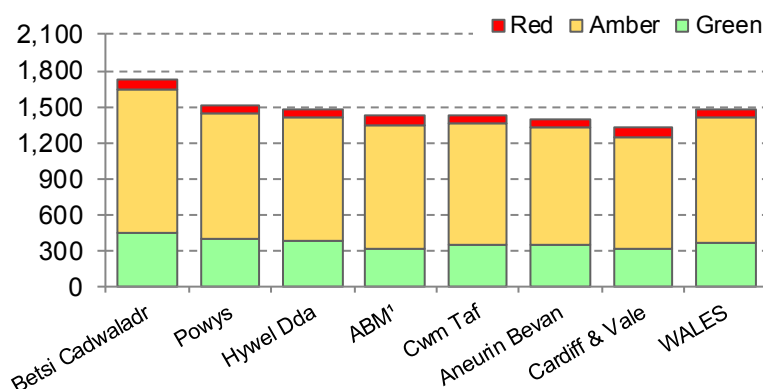
LHB	Number of calls				Average calls per day				Calls per 10,000 population <sup>1</sup>			
	Red	Amber	Green	TOTAL	Red	Amber	Green	Total	Red	Amber	Green	Total
Betsi Cadwaladr	5,038	83,562	31,091	119,691	14	229	85	328	72	1,200	447	1,719
Powys	965	13,749	5,323	20,037	3	38	15	55	73	1,038	402	1,512
Hywel Dda	2,823	39,496	14,637	56,956	8	108	40	156	73	1,028	381	1,482
ABM <sup>1</sup>	4,747	54,276	16,791	75,814	13	149	46	208	89	1,020	316	1,425
Cwm Taf	2,306	29,970	10,622	42,898	6	82	29	118	77	1,002	355	1,434
Aneurin Bevan	4,446	57,240	20,503	82,189	12	157	56	225	76	974	349	1,398
Cardiff & Vale	4,113	46,287	15,263	65,663	11	127	42	180	83	938	309	1,331
<b>WALES</b>	<b>24,438</b>	<b>324,580</b>	<b>114,230</b>	<b>463,248</b>	<b>67</b>	<b>889</b>	<b>313</b>	<b>1,269</b>	<b>78</b>	<b>1,039</b>	<b>366</b>	<b>1,482</b>

<sup>1</sup> Abertawe Bro Morgannwg

<sup>1</sup> 2017 mid year estimate of population (ONS)

- During 2018-19 there was an average of 1,269 calls per day, a 3.4% decrease from 2017-18 (1,314).
- On average (mean), there were 67 red calls each day, up from 63 (6.8%) in 2017-18.
- Over the year, daily amber calls increased from an average (mean) of 881 to 889 (up 1.0%), while green calls decreased from 370 to 313 (down 15.4%).

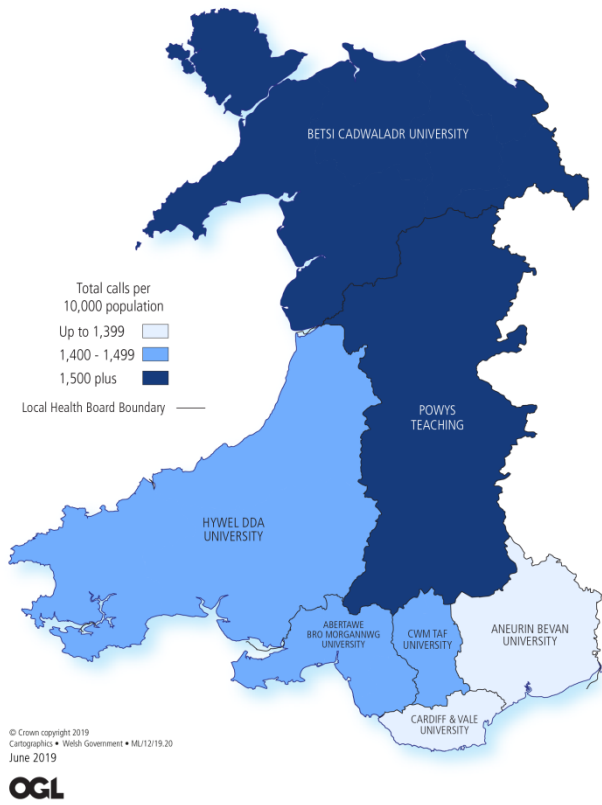
**Chart 5: Red, amber and green calls, per 10,000 population, 2018-19**



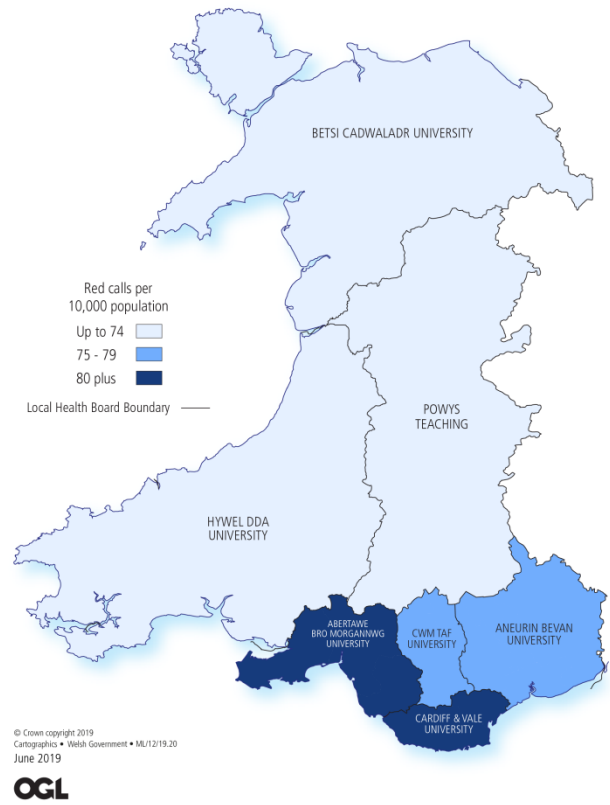
- There was an average of 78 red calls per 10,000 population during 2018-19, up from 73 (6.4%) in 2017-18; this varied across health boards from 72 per 10,000 population in Betsi Cadwaladr to 89 per 10,000 in Abertawe Bro Morgannwg
- Average daily amber calls per 10,000 population increased from 1,033 in 2017-18, to 1,039 in 2018-19 (up 10.2%); this varied across the health boards, from 938 in Cardiff & Vale to 1,200 in Betsi Cadwaladr.
- In contrast, green calls per 10,000 population decreased from an average of 434 a day in 2017-18 to 366 in 2018-19 (down 15.8%); this varied across the LHBs, from 309 in Cardiff & Vale to 447 in Betsi Cadwaladr.

Chart 5, and Maps 1 to 4, look at the calls made across the country, per 10,000 population. Note that this is the resident population of the LHB where the incident occurred. All areas include some calls to attend accidents or illnesses from non-Welsh residents.

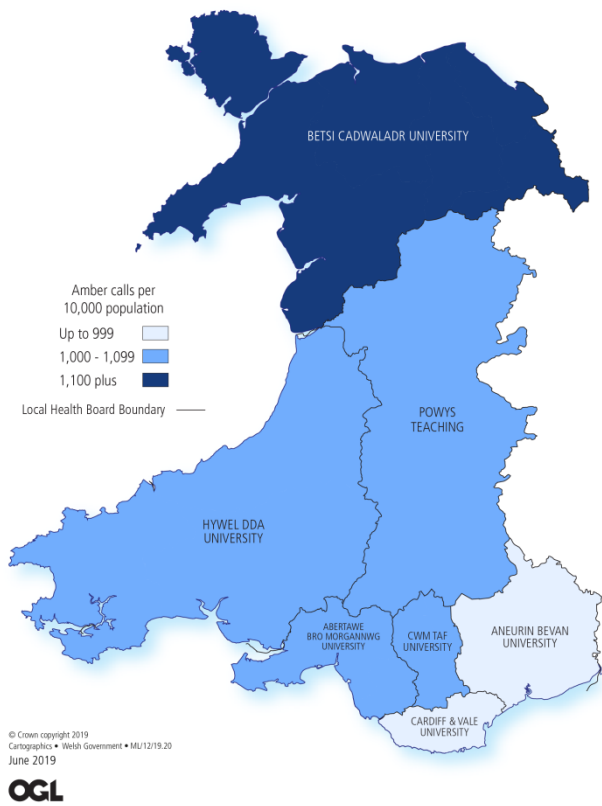
**Map 1: Total calls per 10,000 population**



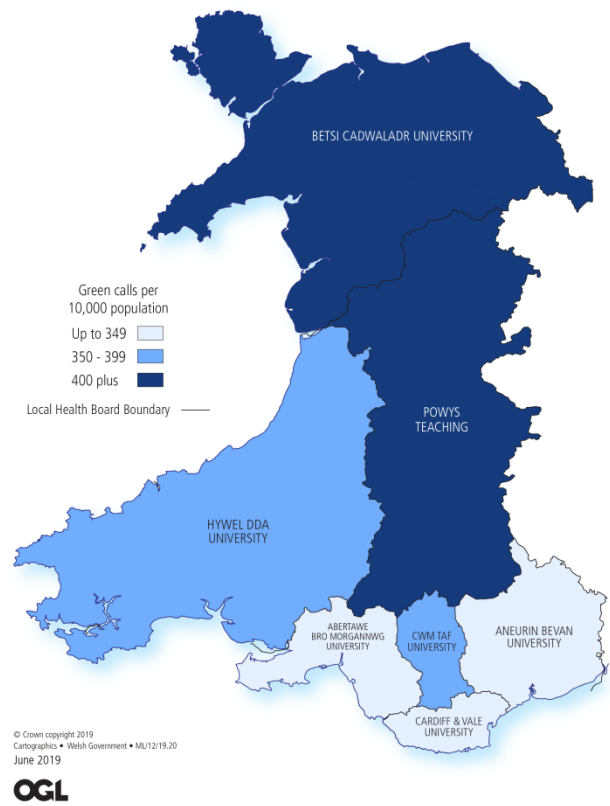
**Map 2: Red calls per 10,000 population**



**Map 3: Amber calls per 10,000 population**



**Map 4: Green calls per 10,000 population**



NOTE: because of the number of calls, the maps have different scales – see legend

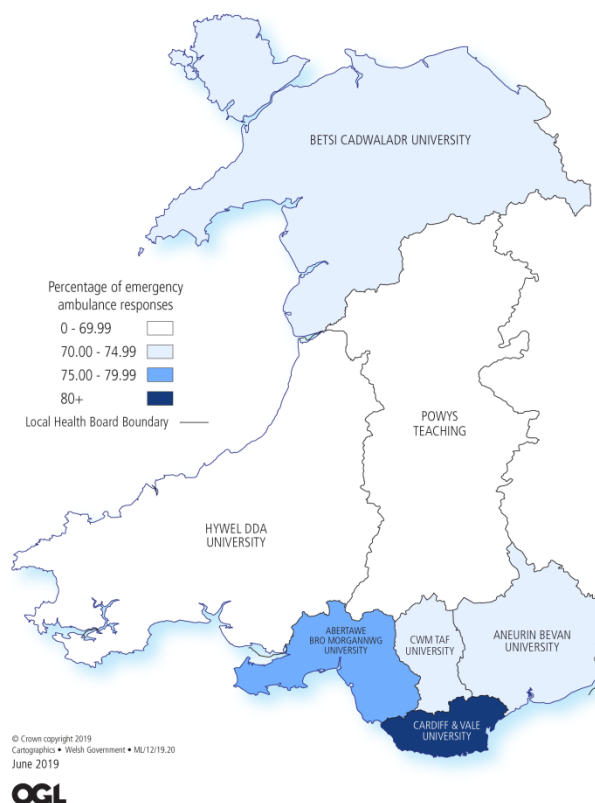
## Red calls, emergency responses and median response times

**Table 2: Red calls and emergency responses, 2018-19**

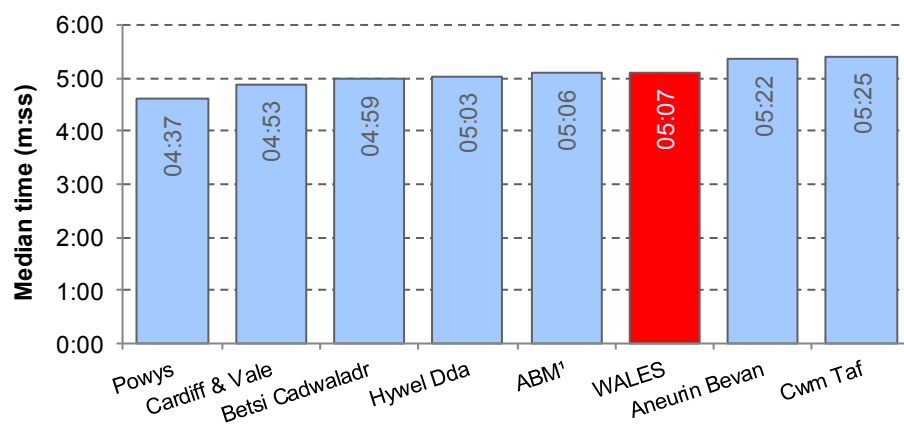
LHB	Red	ER at scene	ER at scene within 8 minutes	% within 8 mins
Betsi Cadwaladr	5,038	4,987	3,611	72.4%
Powys	965	961	633	65.9%
Hywel Dda	2,823	2,798	1,835	65.6%
ABM <sup>1</sup>	4,747	4,701	3,593	76.4%
Cwm Taf	2,306	2,285	1,658	72.6%
Aneurin Bevan	4,446	4,399	3,210	73.0%
Cardiff & Vale	4,113	4,063	3,304	81.3%
<b>WALES</b>	<b>24,438</b>	<b>24,194</b>	<b>17,844</b>	<b>73.8%</b>

Betsi Cadwaladr received the most red calls with just over 5,000 calls throughout the year (20.6% of the Wales total), while Powys received just under 1,000 calls (3.9% of the Wales total).

**Map 5: Emergency responses to red calls arriving within 8 minutes, 2018-19**



**Chart 6: Median response times – red calls, 2018-19**

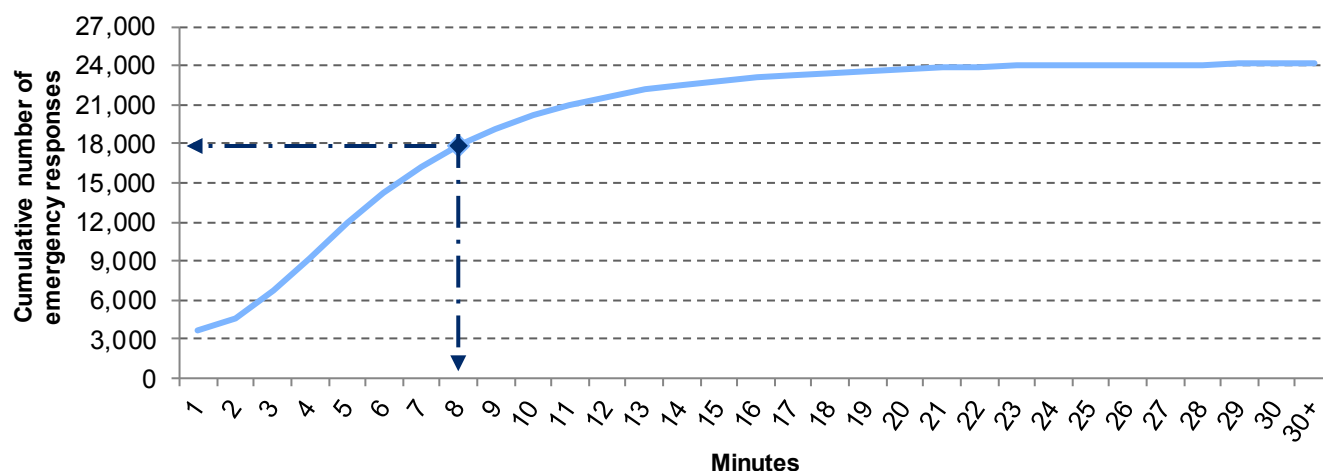


Across Wales, the median response time for red calls during the year was 5 minutes and 7 seconds, ranging from 4 minutes and 37 seconds in Powys, to 5 minutes and 25 seconds in Cwm Taf. This is similar to performance in 2017-18 when the median time across Wales was 4 minutes and 58 seconds.

**Table 3: Emergency responses to red calls, by time band, 2018-19**

Area	Number of responses at scene	Percentage of responses at the scene within											
		4 mins	5 mins	6 mins	7 mins	8 mins	9 mins	10 mins	11 mins	12 mins	15 mins	20 mins	30 mins
Betsi Cadwaladr	4,987	39.2	50.2	58.6	66.0	72.4	77.5	81.6	84.8	87.2	92.4	97.3	99.6
Powys	961	45.9	51.7	56.5	61.1	65.9	69.3	73.0	75.1	77.8	85.5	93.2	98.9
Hywel Dda	2,798	40.4	49.7	56.0	60.9	65.6	70.4	74.7	78.4	82.0	89.8	96.3	99.5
ABM <sup>1</sup>	4,701	37.3	49.0	60.5	69.8	76.4	82.1	86.1	90.0	92.7	96.7	99.4	100.0
Cwm Taf	2,285	34.0	45.7	55.7	65.2	72.6	78.7	84.0	87.8	90.8	95.9	98.9	99.9
Aneurin Bevan	4,399	35.1	45.9	56.8	65.7	73.0	78.8	83.5	87.0	89.7	95.1	98.5	99.9
Cardiff & Vale	4,063	38.5	51.5	63.5	73.2	81.3	87.0	91.2	93.7	95.5	98.0	99.4	99.9
<b>WALES</b>	<b>24,194</b>	<b>37.9</b>	<b>49.0</b>	<b>58.8</b>	<b>67.0</b>	<b>73.8</b>	<b>79.2</b>	<b>83.5</b>	<b>86.9</b>	<b>89.5</b>	<b>94.4</b>	<b>98.2</b>	<b>99.8</b>

**Chart 7: Cumulative number of emergency responses to red calls arriving at the scene, 2018-19**



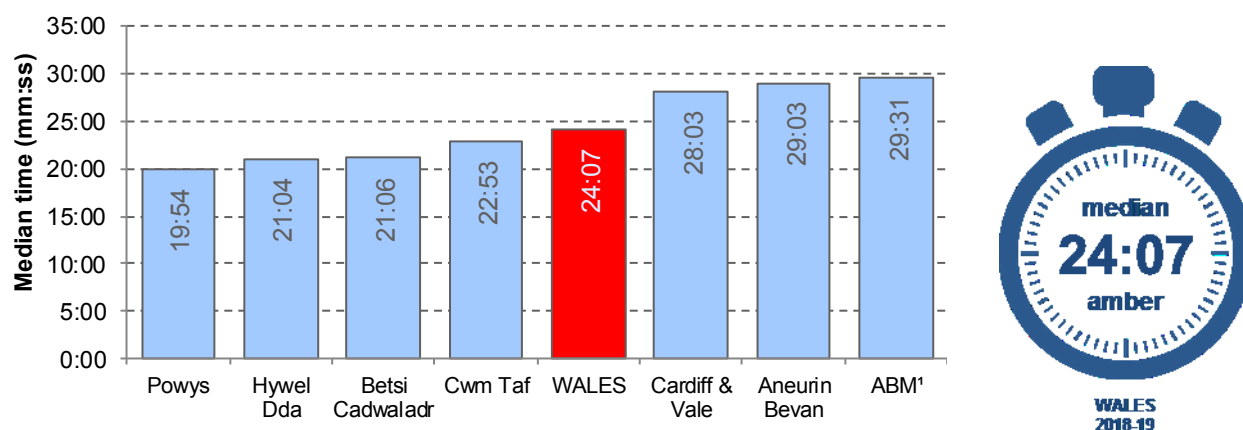
- Of the 24,438 red calls received, 24,194 resulted in an emergency vehicle arriving at the scene.
- 17,844 red calls (73.8%) received an emergency response within 8 minutes.
- Of the 24,194 red calls where an emergency response arrived at the scene, just under half (49.0%) arrived within 5 minutes, almost 84% within 10 minutes and 99.8% within 30 minutes.
- 57 red calls (0.2%) waited longer than 30 minutes for an emergency response
- Across the health boards, more than 70% of emergency responses arrived within 8 minutes in all areas except Hywel Dda (65.6%) and Powys (65.9%).
- The highest percentage of emergency responses in 8 minutes was in Cardiff & Vale, where 81.3% of red calls received an emergency response within 8 minutes.

## Amber calls, emergency responses and median response times

**Table 4: Emergency responses to amber calls, by time band, 2018-19**

Area	Number of responses at scene	Percentage of responses at the scene within						
		5 mins	10 mins	15 mins	20 mins	25 mins	30 mins	30+ mins
Betsi Cadwaladr	70,598	6.3	21.5	36.0	47.7	56.9	64.2	35.8
Powys	12,626	11.1	27.4	39.2	50.2	59.3	66.5	33.5
Hywel Dda	34,834	6.8	22.9	36.0	47.8	56.9	64.5	35.5
ABM <sup>1</sup>	42,000	4.1	15.5	27.7	37.2	44.7	50.5	49.5
Cwm Taf	25,267	5.6	20.4	33.8	44.5	53.5	60.5	39.5
Aneurin Bevan	46,142	5.0	18.0	29.3	37.9	45.1	51.1	48.9
Cardiff & Vale	34,771	5.4	18.2	30.6	39.3	46.3	52.0	48.0
<b>WALES</b>	<b>266,238</b>	<b>5.8</b>	<b>19.9</b>	<b>32.8</b>	<b>43.1</b>	<b>51.3</b>	<b>58.0</b>	<b>42.0</b>

**Chart 8: Median response time – amber calls, 2018-19**

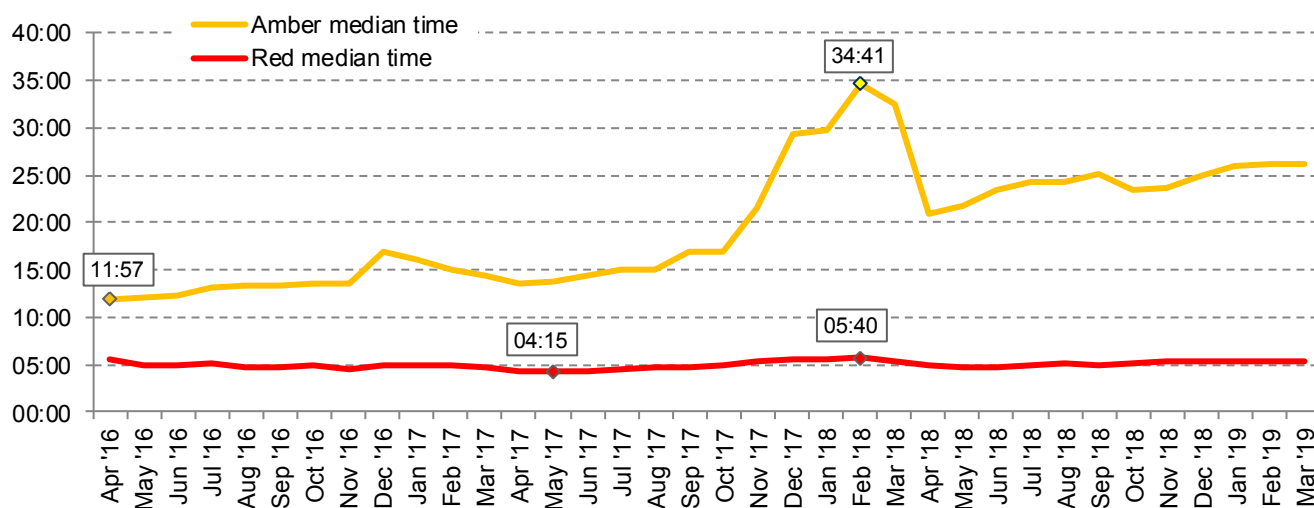


Of the 266,238 amber calls where an emergency response arrived at the scene, around a third (32.8%) arrived within 15 minutes, and 58.0% within half an hour.

The median response time for amber calls during the year was 24 minutes and 7 seconds, over 5 minutes longer than the previous year (19 minutes and 3 seconds).

Across health boards the response time varied from 19 minutes and 54 seconds in Powys to 29 minutes and 31 seconds in Abertawe Bro Morgannwg.

**Chart 9: Median response times, red and amber calls, by month from April 2016**



Over the course of the whole time series, the monthly median response time for red calls has largely been stable and only varied by 1 minute and 25 seconds (from 4 minutes and 15 seconds in May 2017 to 5 minutes and 40 seconds in February 2018).

There has been much more variation in the median response times for amber calls, and over the time series the median has generally been increasing. The median response time for amber calls has varied by more than 22 minutes, ranging from 11 minutes and 57 seconds in April 2016 to 34 minutes and 41 seconds in February 2018.



### Changes to the Ambulance Service from 1 October 2015

As announced in a [statement by the Deputy Minister for Health](#), a new clinical response model was implemented in Wales from 1 October 2015. The trial, initially scheduled for 12 months, was extended for a further 6 months, but, following receipt of the independent evaluation report commissioned by the Emergency Ambulance Services Committee (EASC), the clinical response model was implemented (February 2017).

This official statistics release covers call volumes for red, amber and green categories, response times against the red target, and median response times for both red and amber calls. Data is shown for Wales and at Local Health Board level. There is no time target for amber or green calls. Supporting information for amber responses is available on StatsWales, provides consistency (as far as possible) with the suite of information that was available under the previous model.

From 27 January 2016, more detailed, contextual information on red, amber and green calls is being published quarterly by the Emergency Ambulance Services Committee (EASC). EASC has developed a Quality and Delivery Framework for Emergency Ambulance Services and a five-step ambulance patient care pathway. It includes a range of Ambulance Quality Indicators (AQIs), targets and measures for each of the five steps – how it helps people to choose the right service for their needs; how their call is dealt with; how a response is provided; how treatment is delivered; and – if appropriate – how people are taken to hospital. Monthly data from April 2016 is now available on StatsWales.

### Call categories and comparability with previous data

The new model has three new categories of calls – Red, Amber and Green:

**Red:** Immediately life-threatening (someone is in imminent danger of death, such as a cardiac arrest). There is an all-Wales target for 65% of these calls to have a response within 8 minutes.

**Amber:** Serious, but not immediately life-threatening (patients who will often need treatment to be delivered on the scene, and may then need to be taken to hospital). There will be no time-based target for amber calls; instead a range of clinical outcome indicators will be introduced to measure the quality, safety and timeliness of care being delivered alongside patient experience information, which will be published every quarter.

**Green:** Non urgent (can often be managed by other health services and clinical telephone assessment). There is no official time based target for these calls.

Running calls (operational crews who arrive at the scene of an unrecorded incident without prior receipt of an emergency call) are counted as red calls, as are calls answered by either a Health Care Professional on Scene with a Defibrillator (MEDIC), or a Public Access Defibrillator (PAD).

Health Care Professionals<sup>1</sup> (HCP) Urgent & Planned Calls are identified as green; where an HCP call

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<sup>1</sup> Doctor, General Practitioner, Emergency Care Practitioner, Nurse, District Nurse, Midwife, Paramedic, Dentist, Approved Social Worker.

poses an immediate threat to life, these calls will be prioritised according to the final Medical Priority Dispatch System (MPDS) priority.

As a result of these changes, nearly all of the data from the trial is not comparable with data prior to October 2015. Some of the differences include:

- Call categories A & C have been removed and replaced by colour coding.
- Call handlers are allowed up to an additional two minutes to accurately identify both the severity and nature of a patient's condition (for those calls that are not immediately life threatening), and the clinical resource they require before dispatching an ambulance.
- A small proportion of calls that were classed as red 2 calls have been moved to the red category and a proportion of calls have been re-categorised from red 1. This means that comparisons cannot be made between performance against the old red1/2 categories and the current red category.
- The changes will result in a reduction in the number of calls received with a time target.
- An 8 minute response time target is only applied to red calls and therefore comparisons of the 8 minute target performance cannot be made before and after 1 October 2015 – but see also the following section on 'Changes during the trial'

The total number of calls received prior to 1 October 2015 can still be compared with total calls under the current model. This is done by adding in the GP urgent calls - which were classed as urgent not emergency - prior to December 2011.

Therefore only overall call volumes can be compared over time, whilst all other measures during the trial period can only be compared within the trial model.

### **Changes during the trial**

Following the first month of the trial, the Chief Ambulance Services Commissioner approved revised technical guidance with WAST. This guidance ensures that incidents, (where following a 999 call the patient deteriorates), are more accurately captured (and the call is upgraded to a red category). This reflects the requirement for WAST to urgently dispatch the most appropriate response to patients with the greatest clinical need.

These changes were implemented from 11 November 2015. Calls which were originally coded as amber or green, and the patient subsequently deteriorated, are re-coded through Professional Question & Answering or by the use of a manual dispatch code/override to red. For these calls, the clock start is registered as the time the call is re-coded to red. This change is consistent with the clinical response model and reflects the immediacy of response required for the patient.

Calls which were originally coded as red and during the initial call taking process the patient's condition improves are then re-coded through Professional Question & Answering or by the use of a manual dispatch code/override to amber or green depending on condition. For these calls, the clock start is re-registered as the time the call is re-coded to amber or green.

The overall impact of this meant that – from 11 to 30 November 2015 - an additional 37 calls arrived at the scene within the 8 minute target time, increasing the percentage arriving within the target time by 2.2 percentage points.

This means that performance data for December 2015 onwards cannot be compared with October and November 2015.

### **Bridgend local authority moving health board**

Health service provision for residents of Bridgend local authority has moved from Abertawe Bro Morgannwg to Cwm Taf on April 1<sup>st</sup> 2019. This [joint statement](#) provides further detail. [The health board names were confirmed in this statement](#) with Cwm Taf University Health Board becoming Cwm Taf Morgannwg University Health Board and Abertawe Bro Morgannwg University Health Board becoming Swansea Bay University Health Board.

As a result, next years annual release will have health board analysis for Cwm Taf Morgannwg and Swansea Bay, with time series for Cwm Taf and Abertawe Bro Morgannwg stopping.

Monthly data at health board level has already been published for the new areas on [StatsWales](#).

### **Local health board profiles**

Local health board profiles are published alongside this statistical report, in an interactive dashboard-style format.

### **Comparability with other countries**

England, Scotland, Wales and Northern Ireland publish statistics relating to ambulance performance. There are distinct differences in the way times are measured and how calls are categorised, meaning that direct comparisons are not possible.

Users should bear the differences in mind if making comparisons.

**England:** [Ambulance Quality Indicators](#)

**Scotland:** [Annual report](#)

**Northern Ireland:** [Annual statistics](#)

### **Quality report:**

We publish a detailed [quality report](#) on ambulance services statistics. The quality report includes information on definitions and coverage, and details of our users.

### **National Statistics status:**

The [United Kingdom Statistics Authority](#) has designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the [Code of Practice for Statistics](#).

National Statistics status means that official statistics meet the highest standards of trustworthiness, quality and public value, and it is our responsibility to maintain compliance with these standards.

The continued designation of these statistics as National Statistics was confirmed on 29 September 2011 following a [compliance check](#) by the Office for Statistics Regulation. These statistics last underwent a [full assessment](#) against the Code of Practice in 2011.

Since the latest review by the Office for Statistics Regulation, we have continued to comply with the Code of Practice for Statistics, and have made the following improvements:

- added more value by providing more detailed breakdowns, including maps and infographics
- enhanced trustworthiness by reducing pre-release access

All official statistics should comply with all aspects of the Code of Practice for Statistics. They are awarded National Statistics status following an assessment by the UK Statistics Authority's regulatory arm. The Authority considers whether the statistics meet the highest standards of Code compliance, including the value they add to public decisions and debate.

It is Welsh Government's responsibility to maintain compliance with the standards expected of National Statistics. If we become concerned about whether these statistics are still meeting the appropriate standards, we will discuss any concerns with the Authority promptly. National Statistics status can be removed at any point when the highest standards are not maintained, and reinstated when standards are restored.

### **Well-being of Future Generations Act (WFG)**

The Well-being of Future Generations Act 2015 is about improving the social, economic, environmental and cultural well-being of Wales. The Act puts in place seven well-being goals for Wales. These are for a more equal, prosperous, resilient, healthier and globally responsible Wales, with cohesive communities and a vibrant culture and thriving Welsh language. Under section (10)(1) of the Act, the Welsh Ministers must (a) publish indicators ("national indicators") that must be applied for the purpose of measuring progress towards the achievement of the Well-being goals, and (b) lay a copy of the national indicators before the National Assembly. The 46 national indicators were laid in March 2016.

Information on the indicators, along with narratives for each of the well-being goals and associated technical information is available in the [Well-being of Wales report](#).

Further information on the [Well-being of Future Generations \(Wales\) Act 2015](#).

The statistics included in this release could also provide supporting narrative to the national indicators and be used by public services boards in relation to their local well-being assessments and local well-being plans.

## Further details

This release is available at: <https://gov.wales/ambulance-services>

## Next update

The next annual release is planned for summer 2020.

In addition, from April 2017 we started to publish all of our monthly [NHS activity statistics](#) on a single day each month. All of the existing data - including ambulance data – is updated monthly through StatsWales, and an overarching commentary is published. To allow you to explore the data better and to see it in one place, an [online tool](#) is also available. More information is available in [Chief Statistician's update](#).

## We want your feedback

We welcome any feedback on any aspect of these statistics which can be provided by email to [stats.healthinfo@gov.wales](mailto:stats.healthinfo@gov.wales)

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