



Ministry of Defence

Ad Hoc Statistical Bulletin

Training and Exercise deaths in the UK Armed Forces, 1 January 2000 – 5 November 2016

Date 18 November 2016

Overview

This is an Ad Hoc Statistical Bulletin providing information on deaths among UK Regular Armed Forces personnel and 'on duty' Reservists which occurred whilst on training and exercise from 1 January 2000 to 5 November 2016. This bulletin has been updated since the last release on 2 March 2016 to include the latest information available.

On the 16 October 2015 the Sub-Committee of the House of Commons Defence Select Committee announced an inquiry into the duty of care of Service personnel during military training: [Beyond endurance? Military exercises and the duty of care inquiry](#). This bulletin has been developed in support of this inquiry and to provide Official Statistics to meet the continued public interest in the number of UK Armed Forces who die whilst on training and exercise. Publishing this information ensures the public has equal access to the information and supports the MOD's commitment to release information where possible.

The statistics provided are for all types of training and exercise and for all causes of death; Disease related conditions, injuries or where the cause was not yet known or unascertained.

Key Points

Since the previous release of this bulletin on 2 March 2016 there have been an additional four UK Armed Forces personnel who have died whilst on training or exercise. Three personnel were from the Army and one from the RAF.

Between 1 January 2000 and 5 November 2016, **139** UK Armed Forces personnel died whilst on training and exercise; **119** were Regular personnel and **20** were 'on duty' reserve personnel. This amounts to **5.7%** (n=2,455) of all deaths amongst the UK Regular Armed Forces and 'on duty' reserve personnel for the same period.

Of these 139 personnel;

- **Nine** were **Royal Navy**
- **15** were **Royal Marines**
- **92** were **Army**
- **23** were **Royal Air Force**

27 of the deaths were the result of disease related conditions, **103** occurred as a result of injuries and for **nine** deaths the cause is not yet known or has been unascertained where no definitive medical cause of death can be found following a coroner's inquest.

Of the 139 deaths that have occurred on training and exercise from 1 January 2000 to 5 November 2016, **126** were trained personnel and **13** were untrained (classed as personnel in Phase 1 or Phase 2 training). **Five** of those personnel untrained were under the age of 18 at the time of their death; **one** was a Royal Marine and **four** were Army personnel.

Issued by: Deputy Head of Defence Statistics (Health) | MoD | Abbey Wood | Oak 0 West | Bristol | BS34 8JH
Telephone: 030679 84467
Email: DefStrat-Stat-Health-DepHd@mod.uk
Press office: 020721 83267

Link to stats: <https://www.gov.uk/government/statistics/mod-national-and-official-statistics-by-topic>

Table 1 below presents the number of UK Armed Forces deaths on training and exercise by Service type and year.

Table 1: UK Armed Forces¹ deaths² on training³ and exercise by Service type and year, 1 January 2000 to 5 November 2016, numbers

Service	All	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016 ⁴
All	139	10	14	11	4	15	13	4	9	10	4	6	6	8	7	7	6	5
Naval Service⁵	24	1	1	5	0	2	2	1	0	4	0	2	1	2	1	0	1	1
Regular	23	1	1	5	0	2	2	1	0	3	0	2	1	2	1	0	1	1
Reserve	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Army	92	9	8	6	3	11	10	1	7	6	2	2	5	3	6	6	4	3
Regular	75	6	6	6	3	9	9	1	6	5	2	2	3	2	3	5	4	3
Reserve	17	3	2	0	0	2	1	0	1	1	0	0	2	1	3	1	0	0
RAF	23	0	5	0	1	2	1	2	2	0	2	2	0	3	0	1	1	1
Regular	21	0	5	0	1	2	1	1	2	0	2	2	0	3	0	1	0	1
Reserve	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0

Source: Defence Statistics (Health)

1. Figures are for regulars and reservist personnel 'on duty'.
2. Figures are for all causes of death and therefore include those deaths that occurred due to injury or natural causes whilst on training and exercise.
3. Figures are for all types of training and exercise.
4. Up to and including 5 November 2016.
5. Royal Navy and Royal Marines.

Table 2 below presents the number of UK Armed Forces deaths on training and exercise by unit.

Table 2: UK Armed Forces¹ deaths² on training³ and exercise by unit⁴, 1 January 2000 to 5 November 2016, numbers

Unit	Number of deaths	Regular	Reserve
All	139	119	20
Naval Service⁵	24	23	1
Royal Navy	9	8	1
Royal Marine	15	15	0
Army	92	75	17
The Royal Armoured Corps	6	3	3
Royal Regiment of Artillery	7	7	0
Corps of Royal Engineers	4	4	0
Royal Corps of Signals	7	5	2
Infantry	37	32	5
<i>Coldstream Guards</i>	1	1	0
<i>Scots Guards</i>	2	2	0
<i>The Royal Regiment of Scotland</i>	6	6	0
<i>The Duke of Lancaster's Regiment</i>	2	2	0
<i>The Royal Regiment of Fusiliers</i>	2	2	0
<i>The Royal Anglian Regiment</i>	3	2	1
<i>The Mercian Regiment</i>	1	1	0
<i>The Royal Welsh</i>	1	1	0
<i>The Royal Irish Regiment</i>	4	3	1
<i>The Parachute Regiment</i>	1	1	0
<i>The Royal Gurkha Rifles</i>	1	1	0
<i>The Rifles</i>	9	8	1
<i>The London Regiment</i>	1	0	1
<i>Not released</i>	3	2	1
Army Air Corps	7	7	0
The Royal Logistic Corps	11	10	1
Royal Army Medical Corps	1	1	0
Corps of Royal Electrical and Mechanical Engineers	3	2	1
Adjutant General's Corps	2	1	1
Royal Army Veterinary Corps	1	0	1
Intelligence Corps	1	0	1
University Officer Training Corps	1	0	1
Army Cadet Force	1	1	0
The Royal Gibraltar Regiment	1	0	1
Long Service List	2	2	0
RAF⁵	23	21	2

Source: Defence Statistic (Health)

1. Figures are for regulars and reservist personnel 'on duty'.
2. Figures are for all causes of death and therefore include those deaths that occurred due to injury or natural causes whilst on training and exercise.
3. Figures are for all types of training and exercise.
4. Deaths from Regiment's prior to the 2006 Army restructuring have been subsumed into the Regiment's as they are titled currently.
5. For further breakdown of Naval Service and RAF deaths, please refer to the MOD written evidence at the following link [Beyond endurance? Military exercises and the duty of care inquiry](#)

Table 3 below presents the number of UK Armed Forces deaths on training and exercise by medical cause of death as defined by the World Health Organisation (WHO) International Statistical Classification of Diseases and Related Health Problems 10th Revision (ICD-10).

Table 3: UK Armed Forces¹ deaths on training² and exercise by medical cause³ of death, 1 January 2000 to 5 November 2016, numbers

Cause	All	Regular	Reserve
All	139	119	20
Disease-related conditions	27	19	8
Diseases of Circulatory System (I00-I99)	23	16	7
Other diseases (A00-H95, J00-R94)	4	3	1
Injury, poisoning and certain other consequences of external causes	103	92	11
Injuries to the head (S00-S09)	20 ^p	17	3
Injuries to the neck (S10-S19)	3	3	0
Injuries to the thorax (S20-S29)	4	4	0
Injuries to abdomen, lower back, lumbar spine and pelvis (S30-S39)	1	1	0
Injuries involving multiple body regions (T00-T07)	45	43	2
Injuries to unspecified part of trunk, limb or body region (T08-T14)	9 ^p	7	2
Effects of foreign body entering through natural orifice (T15-T19)	1	1	0
Other and unspecified effects of external causes (T66-T78)	20	16	4
Cause not yet known or unascertained (R96-R99)	9^p	8	1
<i>of which confirmed at a coroner's inquest⁴</i>	6	5	1

Source: Defence Statistics (Health)

1. Figures are for regulars and reservist personnel 'on duty'.
 2. Figures are for all types of training and exercise.
 3. As coded to the World Health Organisation (WHO) International Statistical Classification of Diseases and Related Health Problems 10th Revision (ICD-10).
 4. Deaths which have been investigated by a coroner and for which no definitive medical cause of death can be found.
- ^p denotes provisional where some cause of death information has yet to be validated and may be subject to change.

Table 4 below presents the number of UK Armed Forces deaths on training and exercise by training type.

Table 4: UK Armed Forces¹ deaths on training² and exercise by training type and Service, 1 January 2000 to 5 November 2016, numbers

Training type	All	Naval Service ³	Army	RAF
All	139	24	92	23
Collective training ⁴	64	7	35	22
Individual training	67	17	49	1
Other ⁵	8	0	8	0

Source: Defence Statistics (Health)/Single Services

1. Figures are for regulars and reservist personnel 'on duty'.
2. Figures are for all types of training and exercise.
3. Royal Navy and Royal Marines.
4. In accordance with the Defence Collective Training Policy issued on 2 June 2015, Collective Training is defined as "training that is aimed at improving the ability of teams, units or formations to function as a cohesive entity and so enhance operational capability."
5. Includes five deaths which occurred whilst conducting training on operations and three deaths which occurred on selection training.

Table 5 below presents the number of UK Armed Forces deaths on training and exercise by activity type and Service.

Table 5: UK Armed Forces¹ deaths on training² and exercise by activity type and Service, 1 January 2000 to 5 November 2016, numbers

Activity	All	Naval Service ³	Army	RAF
All	139	24	92	23
Adventure training⁴	22	2	17	3
Diving/Snorkeling	1	1	0	0
Land Transport Accident	1	1	0	0
Parachuting	4	0	4	0
Paragliding/Hang Gliding	2	0	2	0
Rock Climbing/Caving/Mountaineering	5	0	5	0
Water transport ⁵	5	0	3	2
Other	1	0	0	1
Disease-related conditions	2 ^p	0	2	0
Cause not yet known or unascertained	1 ^p	0	1	0
<i>of which confirmed at a coroner's inquest⁶</i>	0	0	0	0
All other training	117	22	75	20
Aircraft Accident	29	4	13	12
Diving/Snorkeling	5	4	1	0
Drowning (not water transport related)	2	0	2	0
Heat injury	5	0	5	0
Land Transport Accident	18	3	14	1
Live fire	13	1	11	1
Parachuting	4	0	3	1
Rock Climbing/Caving/Mountaineering	4	2	1	1
Water transport ⁵	1	1	0	0
Other	3	1	1	1
Disease-related conditions	25 ^p	4	18	3
Cause not yet known or unascertained	8 ^p	2	6	0
<i>of which confirmed at a coroner's inquest⁶</i>	5	1	4	0

Source: Defence Statistics (Health)

1. Figures are for regulars and reservist personnel 'on duty'.
 2. Figures are for all types of training and exercise.
 3. Royal Navy and Royal Marines.
 4. Adventure training deaths have been identified on the basis of personnel participating in specifically regulated Adventure training courses. Some activities performed under Adventure training can also form part of an individual's specific job role (e.g. Parachuting) and therefore a death is not assumed to be on Adventure training unless stated as such.
 5. Includes Kayaking, Rafting, Canoeing, Yachting and all other water transport.
 6. Deaths which have been investigated by a coroner and for which no definitive medical cause of death can be found.
- ^p denotes provisional where some cause of death information has yet to be validated and may be subject to change.

Table 6 below presents the number of UK Armed Forces deaths on training and exercise by gender and Service.

Table 6: UK Armed Forces¹ deaths on training² and exercise by gender and Service, 1 January 2000 to 5 November 2016, numbers

Service	All	Male	Female
All	139	132	7
Naval Service ³	24	23	1
Army	92	87	5
RAF	23	22	1

Source: Defence Statistics (Health)/Single Services

1. Figures are for regulars and reservist personnel 'on duty'.
2. Figures are for all types of training and exercise.
3. Royal Navy and Royal Marines.

Details of all the personnel who died on training and exercise with the specific location and activity at time of death can be found in Annex A to this bulletin at the following link.

[Annex A - Training and Exercise deaths in the UK Armed Forces, 1 January 2000 – 5 November 2016](#)

Background notes

Defence Statistics (Health) compiles the Department's authoritative deaths database for all **UK Armed Forces personnel who died whilst in Service** going back to 1984. Information is compiled from several internal and external sources from which we release a number of internal analyses and external National Statistics Notices.

The ultimate aim of all training is the creation of resilient soldiers and commanders who can analyse, decide and manoeuvre to win in the complex battlespace of the 21st Century. Training provides the means to practice, develop, and validate, within constraints, the practical application of a common doctrine. It also provides the basis for the training of commanders and their staffs in the exercise of command and control respectively. Training should produce force elements at readiness to deploy and undertake specified tasks. Once committed to operations, training plays an important role in optimising the force to meet developing mission requirements.

Phase 1 training is all new entry training to provide basic military skills, Phase 2 training is initial individual specialisation and Phase 3 training is that undertaken throughout a career, often linked to progression in rank and which develops military knowledge, skills and attitude.

Adventure Training is defined as; Challenging outdoor training for Service personnel in specified adventurous activities that incorporates controlled exposure to risk, in order to develop: leadership; teamwork; physical fitness; moral and physical courage; as well as other personal attributes and skills that are vital to the delivery of Operational Capability.

Data sources

NOTICAS - Notification of Casualty (NOTICAS) is the name for the formalised system of reporting casualties within the UK Armed Forces. It sets in train the MOD's next of kin informing procedure. The MOD's Joint Casualty and Compassionate Policy and procedures set out the guidance under which a NOTICAS report is to be raised. NOTICAS takes precedence over all but the most urgent operational and security matters.

Joint Personnel Administration (JPA) system service requests - JPA is the system used by the Armed Forces to deal with matters of pay, leave and other personnel administrative tasks. JPA replaced a number of single-Service IT systems and was implemented in April 2006 for the RAF, November 2006 for the Naval Service and April 2007 for the Army. When an incident occurs a service request is raised for each casualty which holds brief information about each incident.

Armed Forces Memorial database (AFMDb) - The AFMDb is owned by the tri-Service Joint Casualty and Compassionate Centre. The AFMDb database was created in order to identify Service personnel whose names were to be, and continue to be engraved on the Armed Forces Memorial at the National Arboretum in Staffordshire. The AFMDb records the deaths of all personnel who have died in Service since 1st Jan 1948 and for those who were killed or who died in Palestine from 1st Aug 1945 to 31st Aug 1948. Please note, the AFMDb is not regarded as a validated source of historical fatality information, therefore, it cannot be guaranteed to be 100% complete or accurate due to it being populated manually from Service files.

Defence Inquests Unit (DIU) Post Inquest Report (PIR) - The Defence Inquests Unit (DIU) was established in 2008 at the direction of Ministers and the Permanent Under Secretary (PUS) to coordinate and manage all Defence related inquests into the deaths of Service and MOD personnel, who die on, or as a result of injuries sustained while on operations; and those who die as a result of training activity.

The DIU is also the Departmental focal point for any other inquests involving MOD personnel. Defence Statistics receive regular PIR's from the DIU at the conclusion of a coroner's inquest.

The PIR summarises the circumstances surrounding a death, the medical cause of death and the verdict reached by the coroner.

Death Certificates - At the end of each calendar year, Defence Statistics cross-reference the medical information it holds against publicly available death certificate information available from the Health and Social Care Information Centre.

Methodology

Defence Statistics receive weekly notifications of all regular Armed Forces and 'on duty' reservist deaths from the Joint Casualty and Compassionate Cell (formerly the single Service casualty cells).

Whilst Defence Statistics receive the duty status of all personnel who died in the UK Armed Forces via the NOTICAS reporting system, to identify those deaths that occurred on training or exercise a search of all free text information for mention of 'training' or 'exercise' and any associated abbreviations in the available data sources had to be completed. Therefore figures presented may be subject to change should further information become available.

To identify those deaths that were deemed 'Collective training' and those that were deemed 'Individual' training, the cohort of 135 deaths was sent to each individual Service Secretariat to categorise each death.

Adventure training deaths have been identified on the basis of personnel participating in specifically regulated Adventure training courses. Some activities performed under Adventure training can also form part of an individual's specific job role (e.g. Parachuting) and therefore a death is not assumed to be on Adventure training unless stated as such.

Personnel who died in hospital of injuries or illness sustained whilst on training and exercise have been included in the data presented.

Annex A to this bulletin provides both the incident location and the location of death. The incident location refers to where injuries or an illness were first sustained which directly lead to the death of an individual. The location of death is specifically where an individual died.

To record information on cause and circumstances of death, Defence Statistics uses the World Health Organisation's (WHO) International Statistical Classification of Diseases and Health-related Problems 10th revision (ICD-10). ICD-10 is the standard diagnostic tool for epidemiology, health management and clinical purposes.

Defence Statistics conduct a yearly validation exercise on cause of death information where it cross-references the medical information it holds against publicly available death certificate information available from the Health and Social Care Information Centre (HSCIC). This validated information is released yearly in the National Statistic publication: [Deaths in the UK Regular Armed Forces](#).

Defence Statistics also produce a background quality report for the yearly National Statistic on Deaths and this informs users of the statistics about the quality of the data used to produce the publication and any statistics derived from that data. This report can be found on the Gov.UK website: <https://www.gov.uk/government/statistics/military-deaths-in-service-statistics-background-quality-reports>

Further information

Contact us

Defence Statistics welcome feedback on our statistical products. If you have any comments or questions about this publication or about our statistics in general, you can contact us as follows:

Defence Statistics (Health)

Telephone: 030679 84423

Email: DefStrat-Stat-Health-PQ-FOI@mod.uk

If you require information which is not available within this or other available publications, you may wish to submit a Request for Information under the Freedom of Information Act 2000 to the Ministry of Defence. For more information, see:

<https://www.gov.uk/make-a-freedom-of-information-request/the-freedom-of-information-act>

Other contact points within Defence Statistics are:

Defence Expenditure Analysis	030 679 34531	DefStrat-Econ-ESES-DEA-Hd@mod.uk
Price Indices	030 679 32100	DefStrat-Econ-ESES-PI-Hd@mod.uk
Naval Service Manpower	023 9254 7426	DefStrat-Stat-Navy-Hd@mod.uk
Army Manpower	01264 886175	DefStrat-Stat-Army-Hd@mod.uk
RAF Manpower	01494 496822	DefStrat-Stat-Air-Hd@mod.uk
Tri-Service Manpower	020 7807 8896	DefStrat-Stat-Tri-Hd@mod.uk
Civilian Manpower	020 7218 1359	DefStrat-Stat-Civ-Hd@mod.uk
Health Information	030 6798 4423	DefStrat-Stat-Health-Hd@mod.uk

If you wish to correspond by mail, our postal address is:

Defence Statistics (Health)
Ministry of Defence
Abbey Wood North
Oak 0 West
#6028
Bristol
BS34 8JH

For general MOD enquiries, please call: 020 7218 9000