Background Quality Report

Biannual UK Armed Forces and UK Entitled Civilian Operational Casualty and Fatality Statistics

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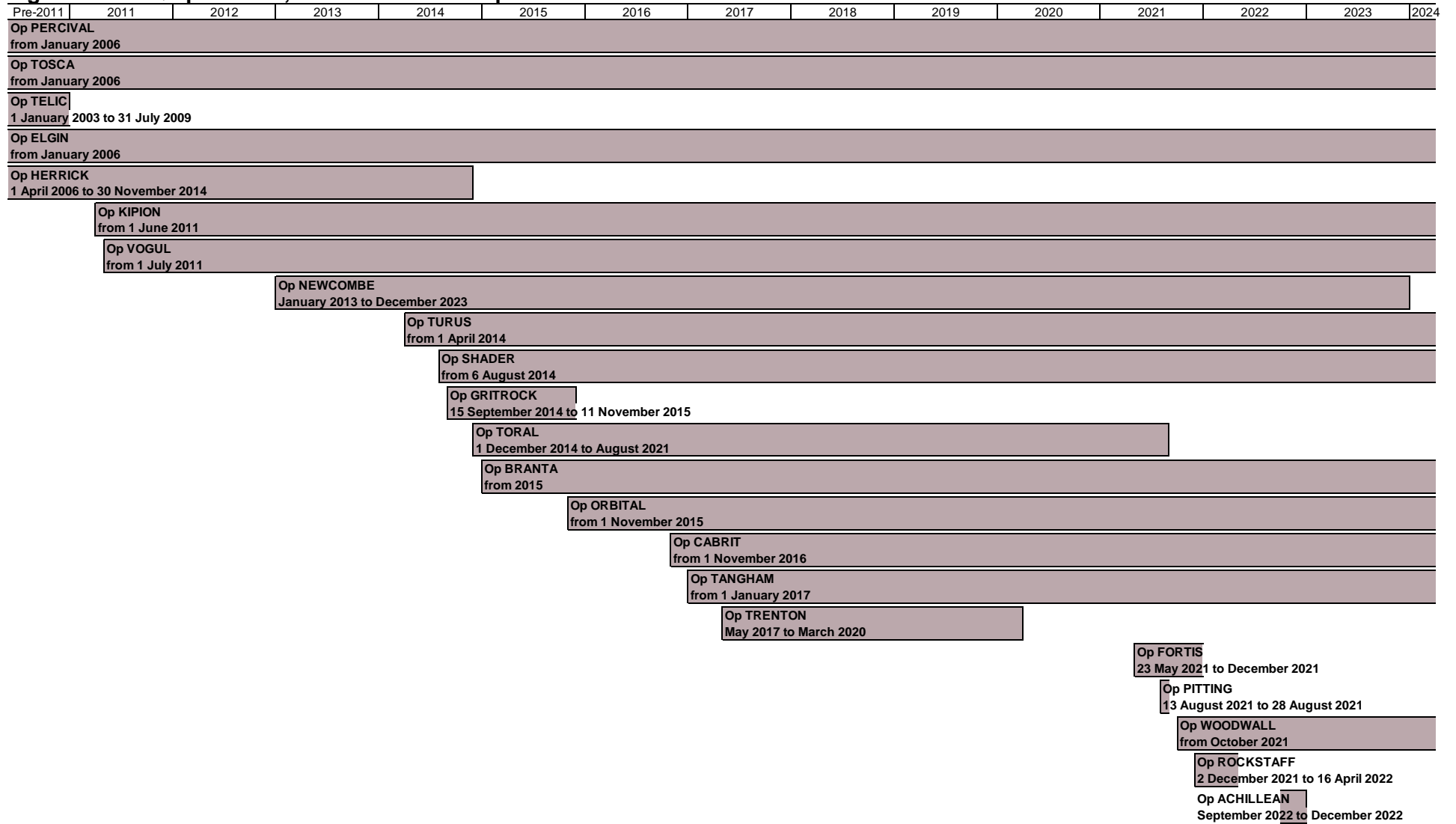Oak 0 West
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Introduction & Statistical Presentation
This biannual release provides statistical information on the number of UK armed forces personnel and UK entitled civilians who were injured, became ill or died on Permanent Joint Headquarters (PJHQ) led operations.

The biannual UK armed forces and UK entitled civilian operational casualty and fatality statistics was first published on 19 March 2015. Release of these statistics prior to 20 May 2021 covered personnel on Operations KIPION (Middle East), SHADER (Iraq and Syria), TORAL (Afghanistan) and GRITROCK (Ebola crisis in West Africa). Reports have been previously published for Op TELIC (Iraq) and Op HERRICK (Afghanistan). From 20 May 2021 the statistics have been expanded to include further operations led by Permanent Joint Headquarters (PJHQ) to improve the coverage and clarity of reporting.

The report covers the time period 1 January 2015 (marking the first full quarter of data following the end of combat operations on Op HERRICK in November 2014) to 31 March 2024 (the latest data available). Please note that although reporting of time series starts from 1 January 2015, the total number of casualties on each operation since 1 January 2006 is also reported in Table 1 of the bulletin and within the Excel supplementary tables. Data are held for each operation from the following dates:

Figure 1: PJHQ operations, time series of data presented[1,2]

Pre-2011	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024

Op PERCIVAL
from January 2006

Op TOSCA
from January 2006

Op TELIC
1 January 2003 to 31 July 2009

Op ELGIN
from January 2006

Op HERRICK
1 April 2006 to 30 November 2014

Op KIPION
from 1 June 2011

Op VOGUL
from 1 July 2011

Op NEWCOMBE
January 2013 to December 2023

Op TURUS
from 1 April 2014

Op SHADER
from 6 August 2014

Op GRITROCK
15 September 2014 to 11 November 2015

Op TORAL
1 December 2014 to August 2021

Op BRANTA
from 2015

Op ORBITAL
from 1 November 2015

Op CABRIT
from 1 November 2016

Op TANGHAM
from 1 January 2017

Op TRENTON
May 2017 to March 2020

Op FORTIS
23 May 2021 to December 2021

Op PITTING
13 August 2021 to 28 August 2021

Op WOODWALL
from October 2021

Op ROCKSTAFF
2 December 2021 to 16 April 2022

Op ACHILLEAN
September 2022 to December 2022

1 Data is only centrally compiled from 1 January 2006.
2 Due to changes to Op ORBITAL it is no longer possible to update the casualty numbers in line with previous releases; therefore this data will no longer be updated in the bulletin. Numbers presented for Op ORBITAL are as at 31 March 2023.

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Operations that have now ended (Op GRITROCK, which ended in November 2015, Op TRENTON, which ended in March 2020, Op TORAL, which ended in August 2021, Op FORTIS, which ended in December 2021, Op NEWCOMBE, which ended in December 2023, Op TELIC, which ended in July 2009 and Op HERRICK, which ended in November 2014) have been included in the overall numbers presented from 1 January 2006 onwards. Further breakdowns for casualties and fatalities on these operations can be found in the following historic publications:

Op TELIC casualty and fatality tables
Op HERRICK casualty and fatality tables
Biannual operational casualty report 31 March 2020 (Op GRITROCK Tables A1, A1a, A1b, A2)
Biannual operational casualty report 31 March 2021 (Op TRENTON Table 10)
Biannual operational casualty report 31 March 2022 (Op TORAL Table 7)
Biannual operational casualty report 30 September 2022 (Op FORTIS Table 10)
Biannual operational casualty report 30 September 2023 (Op NEWCOMBE Table 9)

Due to changes to Op ORBITAL it is no longer possible to update the casualty numbers in line with previous releases; therefore this data will no longer be updated in the bulletin. Numbers presented for Op ORBITAL are as at 31 March 2023. On 20 July 2023, the then-Secretary of State for Defence, the Rt Hon Ben Wallace MP, wrote the following in a written ministerial statement (HCWS987) to the House of Commons:

> *"We continue our longstanding Operation ORBITAL, which before Russia's invasion on the 24th February 2022 had delivered training to more than 22,000 Armed Forces of Ukraine Personnel in Ukraine. It now includes Defence Medical Personnel, who are delivering training and mentoring in Ukraine to the Armed Forces of Ukraine Medical Services."*

The full text of the statement can be read at the following link:
Written Ministerial Statement: Military Support to Ukraine, HCWS987

The official statistic provides the following summary information:
- Overall numbers of UK service personnel casualties and fatalities by operation. This is accompanied by a map to demonstrate where the casualties occurred.
- A breakdown of casualties and fatalities by financial year, quarter, and by injury classification.
- A breakdown of casualties by severity, and whether they were admitted to a field hospital and/or aeromedically evacuated.
- Additional breakdowns are provided by time period, classification, and severity and whether they were admitted to a field hospital and/or aeromedically evacuated for operations where more than 50 casualties have been reported in total.
- Additional information on aeromedical evacuations, showing the number of personnel who were aeromedically evacuated by operation and the total number of resulting flights.
- Numbers of UK entitled civilian casualties and fatalities by operation and financial year.

Statistical Processing

Source Data

Data on operational casualties are compiled by Defence Statistics from the following data sources:

- Initial Notification of Casualty (NOTICAS) from the Joint Casualty and Compassionate Centre (JCCC).
- Aeromedical Evacuations from the Aeromedical Evacuation Control Centre (AECC).
- Medical Audit Forms (MAF) for all patients treated at the Kerry Town Treatment Unit (KTTU) in Sierra Leone, and UK service personnel admitted to the UK led field hospital on Op TRENTON.
- Field hospital admissions
- The Defence Patient Tracking System (DPTS) was used for cross-referencing NOTICAS and Aeromed data.

NOTICAS

Notification of Casualty (or "NOTICAS") is the name for the formalised system of reporting casualties within the UK Armed Forces. NOTICAS information is available from the start of each operation. The NOTICAS reports raised for casualties contain information on how seriously medical staff on operations judge their condition to be. They are not strictly medical categories but are designed to give an indication of the severity of the injury or illness to inform what the individual's next of kin are told. The NOTICAS system medically categorises casualties as either:

(a.) Very Seriously Injured/Ill (VSI) – A patient is termed 'very seriously injured/ill' when his/her injury is of such severity that life is imminently endangered.

(b.) Seriously Injured/Ill (SI) – A patient is termed 'seriously injured/ill' when his/her injury is of such severity that there is cause for immediate concern but there is no imminent danger to life.

(c.) Incapacitating Injury/Illness (III). Any illness or injury (including battle casualties) which does not warrant classification of VSI or SI but renders them physically and/or mentally incapacitated[1].

(d.) Unlisted Casualties (UL). An individual whose illness or injury requires hospitalisation but whose condition does not warrant classification as VSI, SI or III. Casualties who have been unexpectedly admitted to hospital and medically categorised as UL in the following circumstances must have a NOTICAS raised:

    (i.) On duty away from their home base; on operations, overseas deployments and exercises.

    (ii.) On board HM ships at sea or away from home ports.

    (iii.) The casualty has been admitted to hospital for less than 72 hours, but their injuries were caused by circumstances that would be of public interest, i.e. personnel Wounded in Action (WIA).

    (iv.) When admissions exceed 72 hours they must be reported with effect from the date and time of admission

The NOTICAS system is initiated very early in the patient's admission, the classification of a casualty will change as time progresses. The initial signal listing may in some cases be followed by an updated less serious listing if the case appeared worse on admission than transpires. The

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[1] By its very nature, the injury will be sufficiently serious to preclude communication with NOK, therefore a III patient will not be able to SELFKINFORM.

listing provided in this publication is only the initial listing for each casualty and not any subsequent listing.

As the formalised system of reporting casualties within the UK armed forces the quality of NOTICAS data is good. Enough information is provided within the NOTICAS to inform the individual's next of kin. However, the remarks field, which indicates the nature of injury, is free text and on occasions, there is little, or no information provided. Therefore, the cause of injury can sometimes be recorded incorrectly. For example, a casualty may be recorded as natural causes but once the data is compared against other records such as aeromedical evacuation data, it may be identified as a non-battle injury.

Aeromedical Evacuation
Aeromedical Evacuation is the medically supervised movement of patients to and between medical facilities by air transportation. The RAF Aeromedical Evacuation Service provides the worldwide patient air movement capability for Defence 24 hours a day, 365 days a year. Patients are risk assessed prior to flight, and when necessary, trained medical teams are provided to deliver care in the air.

Defence Statistics receive aeromedical evacuation records fortnightly from the Aeromedical Evacuation Control Centre (AECC) at RAF Brize Norton for operations. The numbers presented in this section include the number of personnel aeromedically evacuated out of theatre and the number of aeromedical evacuations (which includes connecting flights and reverse aeromedical evacuations). If a casualty was aeromedically evacuated from theatre, returned to theatre at a later date and then have been aeromed again for the same original injury/illness, they will be counted twice.

Aeromed Priority: When patients require aeromedical evacuation, they will be given appropriate degrees of Priority so that if the aircraft space is limited the more urgent patients may be evacuated before those with conditions less serious. The Priorities are:
- Priority 1 – Urgent. Patients for whom speedy evacuation is necessary to save life, limb or eyesight, to prevent complication of serious illness, or to avoid serious permanent disability. Priority 1 patients will normally be returned to the UK within 24 hours.

- Priority 2 – Priority. Patients who require specialised treatment not available locally and who are liable to suffer unnecessary pain or disability unless evacuated with the least possible delay. Priority 2 patients will normally be returned to the UK within 48 hours.

- Priority 3 – Routine. Patients whose immediate treatment requirements are available locally but whose prognosis would benefit by air evacuation on routine scheduled flights. Priority 3 patients will normally be returned to the UK within 7 days.

Critical Care Air Support Team (CCAST)
Some patients who are aeromedically evacuated will require intensive support and monitoring in-flight, such as patients requiring ventilation, monitoring of central venous pressure or cardiac monitoring. In these instances, they may be evacuated by CCAST.

The Critical Care Air Support Team members consist of an anaesthetist, ITU Nurses, Medical Assistant and Medical and Dental Services Equipment Technician. They are all AE qualified and have expertise in the Aeromedical evacuation of critically ill patients.

The quality of aeromed data is reasonable; the data fields that are critical to ensure medically supervised movement of patients to and between medical facilities by air transportation are fully populated and accurate. However, there are some fields that are not critical for the movement of

the patient that occasionally require validation with other data sources to ensure higher data quality. For example:

- The operation name is not always provided, and it isn't until the record is compared with other casualty data that it can be determined as an operational record.

- The diagnosis code in the aeromed dataset is used to determine whether the casualty has a battle injury, non-battle injury or natural cause. There are some codes that can cover both injury and illness, making it hard to categorise the casualty. On these occasions cross-validation with other casualty data or from speaking to the AECC team would normally provide the correct categorisation.

Ongoing treatment in the UK/Home Country: Patients aeromedically evacuated from theatre will receive ongoing treatment in Primary or Secondary Care in their home country. In the UK, the principal location of secondary care is provided by the NHS, through the Royal Centre for Defence Medicine (RCDM) in Birmingham.

Defence Patient Tracking System (DPTS)

The DPTS commenced on 8 October 2007 to monitor the progress of armed forces patients undergoing specialist treatment in the UK to ensure that their care is delivered promptly and coherently, and to coordinate clinical, administrative and welfare aspects of their support. The DPTS was set up as previously this information was not stored centrally.

Kerry Town Treatment Unit (KTTU)

The Ebola crisis in West Africa was beyond the capacity of national authorities and non-governmental organisations (NGOs) alone. The Ministry of Defence was assisting the Department for International Development in providing a key component in the UK's response. 22 Fd Hospital deployed on the 16th October 2014 to support the international effort in the fight against the Ebola Virus by providing a high level of care to Foreign National Healthcare Workers. When capacity allowed it was also able to extend that to include Local National Healthcare Workers. The KTTU opened with 2 beds on 5 November 2014, rising to 12 beds a week later. The treatment unit expanded to 20 beds on 31 December 2014 and reduced to 12 beds again on 3 March 2015.

The KTTU provided a high level of diagnostic capability with biochemistry, haematology and microbiological testing enabling the management of the complications of Ebola as they would in the United Kingdom, with daily blood tests and intravenous fluids. Care may have been escalated to include central lines and blood transfusions when needed, as well as ultrasound assessment. Most doctors are consultants, with additional expertise in infectious and tropical diseases.

The MAF form was based on the World Health Organisation case record form. It was used to collect baseline presentation data (e.g. demographic and symptom details when they first arrived at the facility), daily data (e.g. laboratory and clinical data as it occurs) and outcome data (e.g. final diagnosis, discharge, death).

Field hospital admissions data – Op TRENTON

The Medical Audit Form (MAF) was also used on Op TRENTON to capture data on UK service personnel and UK entitled civilians who were admitted to the UK led field hospital. This data was incorporated for the first time into the May 2021 publication of these statistics.

Field hospital admissions data – Op TELIC and Op HERRICK
J97 returns

Defence Statistics received information on the patients who were admitted to the Role 3 medical facility at Shaibah, Iraq, and the patients who were admitted to or attended the UK field hospital at Camp Bastion, Afghanistan from the J97 returns. The J97 return also included those patients admitted to the following two locations in Afghanistan:

- The HQ of Multinational Brigade (South) in Kandahar maintained a field hospital which provided support for International Security Assistance Force (ISAF) and coalition personnel. This facility included additional capabilities to that of the Role 2 including specialist diagnostic resources and specialist surgical and medical capabilities. (Information on Role 1,2,3 or 4 medical support can be found here: http://www.nato.int/docu/logi-en/1997/lo-1610.htm)
- In Kabul, UK personnel were admitted to either the French or Greek Field Hospital. There was also a US facility which provides physiotherapy and dentistry.

Op TELIC data is available from 1 April 2006 to 31 July 2009. Op HERRICK data is available from 1 April 2006 to 22 September 2014 due to the closure Camp Bastion. From 23 September 2014 to 30 November 2014 field hospital data was sourced from coalition medical facilities only.

The data quality of J97 returns is reasonable. Service numbers and nationalities are sometimes entered incorrectly. The level of detail provided in the 'Nature of Injury' field, which is used to help determine whether a casualty is correctly recorded as Battle Injury, Non Battle Injury or Natural Cause, can be quite poor and hard to categorise, especially when there are no other casualty records to compare against.

Operational Emergency Department Attendance Register (OpEDAR)
Up until 31 December 2011, the OpEDAR database recorded all patients who had attended or been admitted through the A&E department of the UK operational field hospital. The data included all patients including UK service personnel, other NATO forces, civilians (both UK and nationals) and detainees. This register was replaced with a new IT system; Whole Hospital Information System (WHIS).

Whilst most of the data is captured via drop down menus, some fields, including 'Diagnosis' were free text and thus the quality of medical information captured is variable.

OpEDAR captures diagnosis at the initial assessment. It is possible for diagnosis to change over the course of treatment or for a patient to have multiple conditions, however, this information is not captured in this database.

Whole Hospital Information System (WHIS)
The WHIS was the patient administration system for the field hospital at Camp Bastion. It commenced 1 October 2010 and ceased on 22 September 2014 when the field hospital closed. The WHIS system was decommissioned and returned to the UK.

The data quality of WHIS is reasonable. The majority of service numbers could be validated but there are some records with blanks in this field so this data cannot be used. There is a Discharge Method column which determines whether the patient was admitted to the field hospital and a Patient Group field to determine whether a patient has a Battle Injury, Non-Battle Injury or Natural Causes (including Disease), these are fully populated.

Deployment data
Deployment data is derived from the Joint Personnel Administration (JPA) Move and Track system using the 'deployed country code', 'deployed operation name' and 'deployed unit location' fields. Due to ongoing validation of data from JPA some data may be provisional. JPA was rolled out in April 2007. Deployment data is used to verify the Operational theatre details if the location or name of Operation is not included from the source data.

Operational Fatality Data
To record information on cause and circumstances of death, Defence Statistics uses the World Health Organisation's International Statistical Classification of Diseases and Health-related Problems 10th revision (ICD-10) as recorded by the Office for National Statistics (ONS) on the death certificate. In addition, Defence Statistics record the casualty reporting categories used by the Joint Casualty and Compassionate Cell, used for reporting to the Chain of Command and for notifying the next of kin and use information recorded on the Joint Theatre Trauma Registry (JTTR) to validate data.

Defence Statistics regularly check all deaths for information on coroner's verdicts (England & Wales) and the results of investigations by the Procurator Fiscal for Scotland where possible. For Northern Ireland, Defence Statistics liaise with the Northern Ireland Statistics and Research Agency (NISRA) who handle the official information on behalf of the Northern Ireland Office. In this notice, all these sources of information are referred to as 'coroner's verdicts'. There is an obligation for all accidental deaths and those resulting from violent action to be referred to these officials. Inquests are usually held within a few months of the death, but occasionally a few years may elapse. Therefore, some recent deaths may not have clearly defined cause information.

When providing statistics on suicides, Defence Statistics rely exclusively on the information provided by coroners in England and Wales and in Northern Ireland, and the Procurator Fiscal in Scotland. This ensures the Department's objectivity, as all accidental deaths and those resulting from violent action must be referred to these officials for investigation. Statistics provided include both coroner-confirmed suicides and open verdict deaths, in line with the definition used by the Office for National Statistics (ONS), since research has shown that these deaths share many similarities with suicides except that in the case of open verdict deaths, the intention of the deceased to take their life has not been sufficiently proven to the satisfaction of the coroner. Any deaths where the cause is consistent with suicide are categorised as accidents until a coroner's inquest takes place and a verdict received.

The fatality data is compiled from; Notifications from Permanent Joint Headquarters (PJHQ) at the time of death for all operational deaths, weekly notifications of all regular Armed Forces deaths from the Joint Casualty and Compassionate Cell (formerly the single Service casualty cells) and additional information on cause of death from military medical sources in the single Services. These records are then validated against the UK's Joint Theatre Trauma Registry (JTTR), which contains information recorded by one of the UK's Trauma Nurses who attends the post-mortem.

Operational deaths are classified at the time of death by the Joint Casualty and Compassionate Cell as follows:

Hostile Action

- Killed in Action (KIA): A battle casualty who is killed outright or who dies as a result of wounds or other injuries before reaching a medical treatment facility.

- Died of Wounds (DOW): A battle casualty who dies of wounds or other injuries received in action, after having reached a medical treatment facility. This only includes those who have died of wounds whilst under the care of Defence Medical Services.

Non-Hostile Action

- Died on Operations (DOP): A casualty who died whilst deployed on, or as a result of operations but is not KIA or DOW. Includes operational accidents, road traffic accidents, assaults, suicides and deaths as a result of natural causes.

Methodology
The summary figures presented are based on casualties that meet the reporting criteria for this Official Statistic, i.e. casualties resulting in an initial NOTICAS being raised, admission to a UK led field hospital (where data are available) or an aeromedical evacuation. The report does not include information on numbers seen at primary healthcare or numbers referred to secondary healthcare in the UK.

The overall figures for the number of casualties and fatalities on operations are compiled from the multiple data sources used to report on operational deaths and casualties.

The injury, natural cause (including illness) or death is presented in the time period in which it occurred. If a UK service person or UK entitled civilian has more than one casualty incident reported, each will be presented in the time period in which it occurred.

A casualty or fatality will only be presented once per incident in the total number of casualties, even if they appear in multiple data sources (e.g. a casualty who has NOTICAS, field hospital and aeromed records for the same incident would be presented in each separate category but only once in the total).

A casualty will only be presented once per incident; either as a surviving casualty or an operational related death. If a casualty who was previously recorded as a surviving casualty subsequently dies from their wounds/injuries, they will only be presented in the fatalities section.

Injuries or Illness during R&R
All service personnel serving tours of six months or longer receive two weeks mid-tour leave. R&R gives troops the chance to recharge their batteries, improving morale and operational effectiveness.

Injuries and illness that occur whilst a service person is on Rest and Recuperation (R&R) have been excluded from this publication unless they returned to operations and subsequently required treatment or aeromedical evacuation back to the UK.

UK Entitled Civilians
The UK civilian casualties presented in this report include entitled civilians. Entitled civilians include patients eligible either without special financial authority or on a repayment basis for aeromedical evacuation. These patients include Royal Fleet Auxiliary (RFA) personnel, MOD United Kingdom Based Civilians (UKBC's), MOD Contractors, MOD Welfare Organisations and other Government Departments.
Non-entitled civilians are excluded from overall numbers and initial NOTICAS and aeromed tables.
Any UK entitled civilian deaths presented in this report include UK entitled civilians employed by the Ministry of Defence only e.g. a Civil Servant and does not include any other type of UK entitled civilian.

In 2009 the former Prime Minister, Gordon Brown, announced an Inquiry to identify the lessons that could be learnt from the Iraq conflict, chaired by Sir John Chilcot (known as the Chilcot Inquiry). Following the publication of the Chilcot report[2], the MOD committed to include in this bulletin reporting on all civilian casualties[3] who were admitted to UK led field hospitals on combat operations (to include local civilians). Since the commitment in 2017, the UK armed forces have not deployed to a combat zone with a UK field hospital. However, we will continue to monitor the status of overseas operations and expand the civilian casualty reporting to include these numbers when required.

Inclusion of Op TELIC and Op HERRICK figures to the publication
In the process of widening the reporting to further PJHQ led operations, the total numbers of casualties and fatalities on Op TELIC and Op HERRICK were included in the report to improve completeness and transparency. The numbers of casualties and fatalities on these operations were published historically in separate official statistics. In these historic publications, casualties were reported separately for each data source (NOTICAS, field hospital admissions and aeromedical evacuations). In this latest publication we have combined data sources to present a total number of casualties on Op TELIC and Op HERRICK.

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[2] https://webarchive.nationalarchives.gov.uk/20171123123237/http://www.iraqinquiry.org.uk/
[3] https://webarchive.nationalarchives.gov.uk/20171123123908/http://www.iraqinquiry.org.uk/media/246676/the-report-of-the-iraq-inquiry_section-170.pdf

In order to provide consistency with previously published figures for Op TELIC and Op HERRRICK, only NOTICAS data resulting in VSI and SI injuries has been included. III and UL NOTICAS are not included for Op TELIC and Op HERRICK but are included for other operations. This is due to the public interest in more serious injuries resulting from operations in Iraq and Afghanistan, and the frequency with which these figures were published (fortnightly) whilst operations were ongoing.

Frequency of data collection

Data is provided from the relevant suppliers on a weekly basis. It takes approximately two weeks to ensure all the data has been received, validated and the report produced. The bi-annual publications are released within two months of the data cut off point e.g. the report covering data up to 31 March 2021 was published on 20 May 2021.

Planned publication dates can be found in the Statistics section of the gov.uk website and on the UK National Statistics Publication Hub.

Data collection

NOTICAS
Data is extracted from NOTICAS within the Personnel Joint Administration (JPA), anonymised and stored in SQL (Defence Health Database).

Aeromed
The Aeromedical Evacuation Control Centre (AECC) provide a spreadsheet containing the personnel aeromedically evacuated via SharePoint. This data is anonymised and stored in SQL (Defence Health Database).

Field hospital data
A spreadsheet was provided on a weekly basis containing outpatients and admissions on a weekly basis. This data is anonymised and stored in SQL (Defence Health Database).

Medical Audit Forms
The forms are entered into the MAF database, the data is anonymised.

Data validation

Validation routines on each of the datasets are carried out to check on the names and service numbers of casualties, to ensure the accuracy in counting UK military casualties and to check whether they've previously been included in the statistics. Defence Statistics also then carry out additional validation of the casualty and fatality data by linking it with two other sources of data, namely the Defence Patient Tracking System (DPTS) and the Joint Theatre Trauma Registry (JTTR). This allows us to check on both the operational theatre and the classification of injury/illness/death. Any mismatches between the datasets are investigated and amendments are made to the raw data if necessary, before the report is processed, ensuring accuracy.

Use of deployment data
Since November 2021, casualty records occurring on a ship at sea are checked against the deployment data, detailed in the 'Source Data' section, to confirm whether personnel are deployed on a PJHQ-led operation at the time of their illness/injury. For consistency and to improve accuracy, historic casualty records that occurred at sea were also checked against the deployment data and this process is ongoing. From September 2022, validation code was updated and the time frame of deployment data which records were checked was expanded. All

incidents where a deployment record was present within 1 month either side of the incident were reviewed. This was done to account for discrepancies in deployment vs incidents i.e. a person can be aeromed the day after their deployment record officially ends.

Data for other operations has not been retrospectively cross-referenced with the deployment data, however, records are checked against the deployment data at the time they are received by Defence Statistics as part of routine validation procedures.

Quality Management

Quality Assurance

The MOD's quality management process for Official Statistics consists of three elements: (1) Regularly monitoring and assessing quality risk via an annual assessment; (2) Providing a mechanism for reporting and reviewing revisions/corrections to Official Statistics; (3) Ensuring BQRs are publishing alongside reports and are updated regularly.

Relevance

User Needs

This report has been published to support the MOD's commitment to release information on operational casualties wherever possible. The publication was initially published on a quarterly basis on the gov.uk website. This report became biannual following a consultation with internal and external stakeholders which ended on 24 August 2017.

The MOD are committed to making information on operational casualties public but must draw a line between how much information is provided regularly in the public domain and information which compromise operational security of UK armed forces personnel or which risks breaching an individual's right to medical confidentiality.

The release is used to answer parliamentary questions and Freedom of Information requests. The report is also useful for internal customers in PJHQ, the Ops Directorate and the single services.

This report is currently limited in terms of the amount of information it can include, specifically in relation to the type of casualties seen, as it can harm the operational security of service personnel that are still deployed on operations and due to the small numbers of casualties on current operations, it may affect the patient's rights to medical confidentiality.

Accuracy and Reliability

Overall Accuracy

Defence Statistics use three sources of data to collate the casualty statistics (initial Notification of Casualty (NOTICAS) signals, Aeromedical Evacuation Control Cell data and Medical Audit Forms (MAF) of patients treated at the Kerry Town Treatment Unit (KTTU) in Sierra Leone, and the UK led field hospital on Op TRENTON). Validation routines on each of the datasets are carried out to check on the names and service numbers of casualties, to ensure the accuracy in counting UK military casualties and to check whether they've previously been included in the statistics. Defence Statistics also then carry out additional validation of the casualty and fatality data by linking it with two other sources of data, namely the Defence Patient Tracking System (DPTS) and the Joint Theatre Trauma Registry (JTTR). This allows us to check on both the operational theatre and the classification of injury/illness/death. Any mismatches between the datasets are

investigated and amendments are made to the raw data if necessary, before the report is processed, ensuring accuracy.

Due to the lack of statistical analysis in this report, there are no estimates or potential for bias. The main sources of error within the report sit in the source data itself. It is possible for service numbers and nationalities to be recorded incorrectly. If that casualty does not appear in another dataset, Defence Statistics have no other sources to validate against and will assume they have been entered correctly at source. It is therefore possible to exclude a UK casualty if the nationality and service number have been recorded incorrectly.

Data Revisions

The casualty and fatality statistics are subject to revisions as the data is a live system continually updated when improved information is received. Any amendments made since the last release have been indicated by an 'r' in the statistical bulletin, and with annotations within the supplementary tables.

Data revisions are handled in accordance with the MOD's Official Statistics Revisions and Corrections Policy.

Timeliness and Punctuality

Timeliness

Data is provided from the relevant suppliers on a weekly basis. It takes approximately two weeks to ensure all the data has been received, validated and the report produced. The bi-annual publications are released within two months of the data cut off point e.g. the report covering data up to 30 September 2021 was published on 11 November 2021.

Punctuality

The release date of this report been announced on the Release Calendar in accordance with the guidelines set out in the Code of Practice for Official Statistics.
The publication date is pre-announced on the GOV.UK Official Statistics Release Calendar.

Coherence and Comparability

The Defence Statistics figures in the biannual UK Armed Forces and UK Entitled Civilian Operational Casualty and Fatality Statistics are the definitive statistics in the MOD. There are no other publicly available regular publications on the numbers of casualties with which to ensure coherence.

The information provided in this statistical bulletin is comparable with those presented in the Statistical releases for previous operational deployments including Iraq and Afghanistan. These statistical releases presented numbers of UK Service personnel and entitled civilians for deaths, very seriously injured and seriously injured hospital admissions and aero-medical evacuations.

This current statistical bulletin has expanded the definition of very seriously injured and seriously injured to include those who were very seriously ill or seriously ill.

Accessibility and Clarity

Accessibility

Operational casualties related statistics are published on the gov.uk website. The publications are available from 09:30 hours on the day of release.
24-hour pre-release access to the report is available to a limited distribution list within the MOD. The full list can be found in the pre-release access list available on the gov.uk website.

Clarity

Users with an interest in the key findings can read a short summary of main messages immediately on the front page.

Trade-offs between Output Quality Components

The main trade-off is between the level of information presented in the output, without breaching medical confidentiality or compromising operational security.

The MOD are committed to making information on operational casualties public but must draw a line between how much information is provided regularly in the public domain and information which compromise operational security of UK Armed Forces personnel or which risks breaching an individual's right to medical confidentiality.

Cost and Respondent Burden

To develop each report, it takes approximately 0.2 Full Time Equivalent (FTE) to perform the analysis and compile the report. The burden on the data providers is low as the upkeep of the databases forms part of their daily routines and they provide us with the latest data when it's available on a regular basis. Respondent burden is low as the data is obtained from administrative and clinical audit systems that are maintained by other teams within the MOD.

Confidentiality and Security

Confidentiality – Policy

Defence Statistics Health adhere to the principles and protocols laid out in the Code of Practice for Official Statistics and comply with pre-release access arrangements. The Defence Statistics pre-release access lists are available on the Gov.UK website:
https://www.gov.uk/government/statistics/defence-statistics-pre-release-access-list

Confidentiality – Data Treatment

Prior to analysis data sources have been linked using a pseudo-anonymisation process. The individual identifiers were stripped from datasets and replaced by a pseudo-anonymiser, generated, effectively, by an automated sequential numbering system. The key to the system is that it recognises previous occurrences of a given Service number and allocates the same pseudo-anonymiser on each occasion. This also enables the data to be linked with the other data sources, which have also already been pseudo-anonymised. The pseudo-anonymisation process can only be reversed in exceptional circumstances controlled by the Caldicott Guardian under strict protocols.

The tables in the report are scrutinised to ensure individual identities are not revealed inadvertently.

Death's data in England and Wales are supplied by and used with the permission of ONS. Deaths in Northern Ireland are supplied by and used with the permission of Northern Ireland Statistics and Research Agency (NISRA) and General Registry Office (GRO) supply deaths in Scotland.

Security

Data in service number format is stored in password secured files so that they are only accessible by those with permission.

The data is held on MOD servers in accordance with JSP 440, Defence Manual of Security and Resilience.