

Background Quality Report

UK Armed Forces Recovery Capability: Wounded, Injured and Sick in the recovery pathway: 1 October 2010 to 1 April 2016

The purpose of a background quality report is to inform users of the statistics about the quality of the data used to produce the publication, and any statistics derived from that data. Existing uses of the statistics and user requirements are also discussed.

This assessment relates to the biannual 'UK Armed Forces Recovery Capability' Official Statistics published by Defence Statistics (Health).

1. Introduction

1. This Statistical Bulletin is the second in a new biannual series to provide summary statistics on wounded, injured and sick (WIS) UK Armed Forces personnel receiving recovery support from the Defence Recovery Capability (DRC). The report presents the following summary statistics covering the period 1 October 2010 and 1 April 2016:
 - a. Numbers and percentages of WIS Regular UK Armed Forces personnel in recovery pathway, including breakdowns by gender, rank and age.
 - b. Numbers of Regular UK Armed Forces personnel that have entered and left the recovery pathway, including recovery outcomes (remained in Service, died, left Service) and further detail on those that left Service as a result of medical discharge.
 - c. Numbers attending the recovery courses.
2. These statistics are published as Official Statistics, adhering to the UK Statistics Authority (UKSA) protocols on [pre-release access](#)¹.
3. Ad-hoc interrogation of the data used to compile these statistics is regularly undertaken by Defence Statistics in order to answer internal queries from within the Ministry of Defence (MOD).
4. The sections below review this statistical release in line with the [Quality assurance Framework of the European Statistical System](#)², alongside other considerations which are relevant to measuring and reporting on quality.

Background

5. The Defence Recovery Capability (DRC) ensures that UK Armed Forces personnel with battle injuries (wounded), injuries or sickness have access to the services and resources they need to help them return to duty or make a smooth transition civilian life.
6. The DRC is a MOD-led initiative delivered in partnership with Help for Heroes and The Royal British Legion, alongside other Service charities and agencies. It represents a multi-million pound commitment by the MOD and the Service charities – the largest single

¹ UKSA Protocol on Pre-Release Access: <http://www.statisticsauthority.gov.uk/about-the-authority/uk-statistical-system/legislation/pre-release-access/index.html>

² Quality Assurance Framework of the European Statistical System: http://ec.europa.eu/eurostat/documents/64157/4392716/qaf_2012-en.pdf/8bcff303-68da-43d9-aa7d-325a5bf7fb42

charitable contribution to the Armed Forces in British history. It is designed to ensure wounded, injured and sick service personnel receive co-ordinated support.

7. The DRC is delivered through:

- An Individual Recovery Plan (IRP): All WIS personnel have an IRP. An IRP is designed to meet the specific recovery needs of the individual so they can either return to duty or make the best transition to civilian life. Individuals are encouraged to take ownership of their own IRPs.
- Recovery Units: WIS personnel with more complex recovery needs are assigned to recovery units which exist to ensure WIS personnel receive the support required. Within the Naval Service there is Hasler Naval Service Recovery Centre (NSRC) in HMS Drake, three Naval Base Personnel Support Groups, Naval Service Recovery Cells and four Commando Recovery Troops which provide this support. Within the Army there are 11 Personnel Recovery Units and within the RAF there is one Personnel Recovery Unit.
- Recovery Centres (RCs): Offer comprehensive recovery courses and programmes for all WIS personnel with modern, adapted residential accommodation. RCs are run either by the MOD or by key partners Help for Heroes and The Royal British Legion and have been designed to offer a conducive military environment for recovery activities including welfare, educational and resettlement courses. The centres are not hospitals, rehabilitation or physiotherapy centres. They are open to serving WIS personnel, as well as veterans on a case by case basis. There are five RCs located in: Edinburgh, Catterick, Tidworth, Colchester and Sennelager (Germany).
- Battle Back: An Adaptive Sport and Adventurous Training programme for WIS personnel designed to accelerate recovery while building confidence and independence. The Battle Back Centre in Lilleshall, established and operated by The Royal British Legion, provides residential accommodation enabling WIS personnel to take part in sporting activities including: indoor climbing, watersports, indoor caving, wheelchair basketball, archery and wheelchair badminton. Activities are selected which are relevant to the individual's recovery plan. In addition WIS personnel can take part in Battle Back activities at the Defence Medical Rehabilitation Centre (DMRC) Headley Court and the RCs at Tidworth, Catterick and Colchester with adaptive sport and adventurous training activities offered at the Edinburgh and Sennelager RCs.
- Recovery Courses: Recovery courses are offered to aid WIS personnel in their recovery. Recovery courses are ran at Recovery Centres (RC) and the Battle Back Centre which have been built for the Armed Forces by Help for Heroes and The Royal British Legion. There are five courses offered. The Induction and Core Recovery Events (CRE) one to three are run at the RCs, whilst the Multi Activity Course (MAC) is run at the Battle Back Centre. The courses aim to build confidence and engage the individual in their own recovery and focus on their potential outcome through adaptive sports and adventure training as well as classroom-based training in finances, work placements and CV writing. The courses are available for all WIS personnel in recovery, however they are mandatory for Army personnel and optional for Naval Service and RAF personnel.
- CTP-Assist (formerly Recovery Career Services): Delivers individual careers service to WIS personnel leaving the Armed Forces to help them find a fulfilling and long-term second career. The service is available for WIS personnel being medically discharged with the greatest barriers to employment as a consequence of their medical condition(s). All other WIS personnel receive employment support through the CTP.

8. The Defence Recovery Capability came into existence at different times for each of the three services:
 - The Naval Service Recovery Pathway (NSRP) began in September 2010.
 - The Army Recovery Capability (ARC) began in October 2010.
 - The RAF Recovery Capability began in January 2011.
9. Within DRC each of the three Services have separate criteria's which are not comparable. The Army and the RAF provide recovery support to WIS personnel who are sick absent from the workplace due to being unable to undertake their normal duties for medical reasons. In addition the Naval Service provide recovery support to WIS personnel who have less severe injuries and illness and can be employed for limited duties ashore outside of their trade or skill.
10. In addition the groups of individuals entitled to DRC support differs across the three Services:
 - a. Naval Service: UK trained regular personnel and mobilised reserve personnel
 - b. Army: UK trained regular personnel, trained Gurkha personnel, Full Time Reserve Service Full Commitment (FTRS (FC)) and mobilised reserve personnel. Other reservist categories, trainees and Military Provost Guard Staff (MPGS) where appropriate and where there is capacity can take part in Recovery activity at a Personnel Recovery Centre as part of their Individual Recovery Plan (from January 2016).
 - c. RAF: UK trained regular personnel, Full Time Reserve Service, mobilised reserve personnel and Additional Duties Commitment (ADC). Untrained personnel in Phase 2 of training are entitled to recovery.
11. Further information on the DRC can be found on the [Gov.uk website](https://www.gov.uk)³.

Methodology

Data Sources and Processes

12. The Joint Personnel Administration (JPA) system
 - a. JPA is the system used by the Armed Forces to deal with matters of pay, leave, demographic information and other personnel administrative tasks.
 - b. Defence Statistics receive a monthly extract containing a subset of fields from JPA.
 - c. Naval Personnel are identified as being in recovery if they are have been assigned to the Medical Margin (MA7A), or whose medical downgrading results in a Joint Medical Employment Standard (JMES) of M4 or M5 for Royal Navy personnel or L4 or L5 for Royal Marine personnel for 12 weeks or more.
 - i) JMES express an individual's ability to perform their branch/trade duties in the form of numerical degrees in four functional areas, indicated by the letters A, L, M and E. These reflect medical fitness for duties in the **A**ir, **L**and and **M**aritime environments and any requirement for Medical and **E**nvironmental Support.
 - ii) M4: Fit for limited duties ashore only, may not necessarily be in own trade or skill, with caveats to be stated. M5: Unfit for service in the maritime environment. L4: Fit for specific limited duties within branch/trade. L5: Unfit for service in the land environment.
 - d. Eligible personnel (trained regular and mobilised reserve) were identified using JPA and Defence Statistics Reserve database.

³ Defence and Armed Forces Guidance – Defence recovery and recovery centres:
<https://www.gov.uk/guidance/defence-recovery-and-personnel-recovery-centres>

13. Naval Service Recovery Pathway data:

- a. Aggregated counts on numbers receiving enhanced support by being assigned to Hasler, a Personnel Support Group, a Recovery Cell or a Recovery Troop were provided by the Navy.

14. Wounded Injured Sick Management Information System (WISMIS)

- a. WISMIS is the Army's database management system for recording all wounded, injured and sick soldiers who have been sick absent from the workplace for 14 days or more (Prior to January 2016 those sick absent from the workplace for seven days or more recorded) to monitor their progress. WISMIS is not a medical record and does not contain details of medication, treatment or medical in confidence information. It is designed as a logging system to track each soldier's progress and account for the wellbeing, location and status of every wounded, injured and sick soldier.
- b. Army Personnel are counted as part of recovery if they have been sick absent from the workplace for 56 days or more or been classified as Temporary Non Effective (TNE).
- c. Cases in WISMIS were matched to JPA and Defence Statistics Reserve database to identify those who are eligible (trained regular personnel, mobilised reserves and FTRS(FC))
- d. Individuals receiving enhanced support by being assigned to a Personnel Recovery Unit are identified in WISMIS.
- e. The Wounded, Injured and Sick classification for personnel in recovery was identified using WISMIS. Records were matched to the Defence Patient Tracking System (DPTS) to try and classify those with an unknown WIS marker
 - i) The DPTS was set up 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.

15. Defence Medical Information Capability Programme (DMICP)

- a. DMICP commenced during 2007 and comprises an integrated primary Health Record (iHR) for clinical use, and a pseudo-anonymised central data warehouse. It is the source of electronic, integrated healthcare records for primary healthcare and some MOD specialist care providers. Prior to this data warehouse, medical records were kept locally, at each individual medical centre. By 2010, DMICP was in place for the UK and the majority of Germany. Rollout to other overseas locations commenced in November 2011 and is ongoing.
- b. RAF personnel are identified as being part of recovery if they have a P-grade of P0 or P8 in their electronic primary care record.
 - i) P-grade refers to the medical grading of Physical Capacity in the PULHHEEMS system. A P-grade is an overall measure of functional capacity.
 - ii) P8: Medically fit for service.
 - iii) P0: Medically unfit for duty and under medical care.
- c. Individuals identified as P0 or P8 were matched to JPA and Defence Statistics Reserve database to identify those who are eligible ((trained regular personnel, mobilised reserves, FTRS(FC), mobilised reserves and ADC)

16. RAF recovery data:

- a. Personnel receiving enhanced support by being assigned to a PRU or receiving Unit Assist were provided by the RAF.

17. CTP-A monthly snapshots:

- a. Monthly aggregated counts on the numbers in receipt of CTP-Assist.

- b. Data provided by Right Management LTD (providers of CTP-A). 1 October 2015 and earlier data provided by Recovery Career Services (formerly providers of CTP-A).

18. Personnel Recovery Delivery Team (PRDT) booking cell data

- a. Includes the individuals attending the Induction, CREs and MAC

19. Recovery Centre and Battle Back Data

- a. Aggregated counts on number nights residential beds have been occupied at the Recovery Centres and Battle Back centre per week.
- b. The residential capacity of the centres is calculated for Monday to Friday (a 4-night week). Bank holidays have been excluded; similarly, periods over Christmas have been excluded because of the shutdown of certain RCs
- c. The percentage of occupancy has been based on MOD's stated bed capacity of: Catterick 30; Colchester 16; Edinburgh 12; Tidworth 30 and Germany 9
- d. To calculate the residential occupancy percentage, the total number of days in each bi-annual period is multiplied by the number of beds available in each location to give the total planned residential capacity. The total occupancy numbers is then divided by the total planned residential capacity to provide the residential occupancy of RCs.

20. Medical Discharges:

- a. Medical discharges are the result of a number of specialists (medical, occupational, psychological, personnel, etc.) coming to the conclusion that an individual is suffering from a medical condition that pre-empts their continued service in the Armed Forces. Statistics based on these discharges do not represent measures of true morbidity or pathology. At best they indicate a minimum burden of ill-health in the Armed Forces. Furthermore, the number and diversity of processes involved with administering a medical discharge introduce a series of time lags, as well as impact on the quality of data recorded.
- b. Although Medical Boards recommend medical discharges they do not attribute the principal disability leading to the board to Service. A Medical Board could take place many months or even years after an event or injury and it is not clinically possible in some cases to link an earlier injury to a later problem which may lead to a discharge. Decisions on attributability to Service are made by Vets UK (formerly the Service Personnel and Veterans' Agency).
- c. As part of the medical discharge process outlined, Defence Statistics received copies of all FMED23 forms completed by Naval Service, Army and RAF medical boards, as long as the personnel involved has not refused consent. These forms were entered into our database and any principal or contributory medical conditions associated with the discharge were coded utilising ICD-10 codes. The primary purpose of these medical documents is to ensure the appropriate administration of each individual patient's discharge. Statistical analysis and reporting is a secondary function.
- d. These records were then matched to outflow records obtained from the Department's JPA system, which is used for the administration of all Regular Forces. Any records included in the JPA extract for which Defence Statistics had not received a FMED23 form were then queried with Single Service representatives. Where paper versions of the FMed 23 form have not been made available to Defence Statistics, the electronic version as recorded on the Defence Medical Information Capability Programme (DMICP) has been utilised.
- e. The number of UK Service personnel medically discharged from the Armed Forces by financial year is released annually on Gov.uk.
- f. Individuals identified as leaving recovery were matched to the medical discharges up to the latest publication date

Statistical Methods

21. This Statistics Bulletin mainly presents counts of WIS UK trained regular Armed forces personnel that are in recovery as at 1 October and 1 April between 1 October 2010 and 1 April 2016. Information presented includes breakdowns of personnel in recovery by Service and demographic groups. Counts of personnel that have entered or left recovery between 1 October 2010 and 1 April 2016 are also presented.
22. Percentages enable comparisons between groups and over time, taking account of the number of personnel in a group at a particular point in time. The number of events (i.e. UK trained regular personnel in recovery) is then divided by the number of personnel at risk (i.e. UK trained regular Armed Forces personnel strength) and multiplied by 100 to calculate the percentage.
23. In order to understand if a difference between percentages is statistically significant, 95% confidence intervals are used. Statistical significance indicates that a finding is not due to chance. The 95% confidence interval for a percentage provides the range of values within which we expect to find the real value of the indicator under study, with a probability of 95%. If a 95% confidence interval around a percentage excludes the comparison value, then a statistical test for the difference between the two values would be significant at the 0.05 level. If two confidence intervals do not overlap, a comparable statistical test would always indicate a statistically significant difference. The percentages and confidence intervals presented have been rounded to 1 decimal place and therefore when small numbers are presented the rate may lie towards one end of the confidence interval instead of more centrally between the lower and upper confidence interval.

2. Relevance

Coverage

24. These statistics include data on all UK trained regular Armed Forces personnel, including Gurkhas that have been wounded, injured or sick and who have been in recovery between 1 October 2010 and 1 April 2016. Eligible WIS Reserve personnel that passed through the DRC for each Service are also included (see paragraph 10b). Due to the small number of Reservists in recovery these statistics focus on trained regular UK Armed Forces personnel.

User Needs

25. This bulletin has been produced in response to the increasing requests for information from the public and charities on wounded, injured and sick personnel in recovery.
26. This bulletin provides the third sector with an understanding on the numbers of WIS personnel who are going through recovery and in particular who are leaving the Services, and may go on to require the support provided by the third sector.
27. The key external users include the general public, the media and the charitable sector e.g. Royal British Legion and Help for Heroes.

3. Accuracy

28. 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.
29. A number of the data sources are counts which are not possible to verify. Consistency checks were performed to ensure the numbers were in the regions expected.
30. The remaining datasets are management information systems which have not been developed for statistical purposes. Specific issues are commented under each data source.
31. There are currently several groups of eligible personnel who are not captured within this bulletin due to the issues with identifying them within the sources: Phase 2 Trainees in the RAF, and FTRS (FC) in the Army. Both groups are believed to have very few personnel in recovery.

32. WISMIS

- a. Late reporting: It is known that not all WIS personnel who are sick absent from the workplace are being recorded on WISMIS by day 14 of sickness. The Army are pro-actively ensuring all personnel with a p-grade of P0 or P8 are captured. The data is extracted from WISMIS 3 months after the situation date and therefore late reporting is believed to have minimal impact. Currently previously published figures are not re-extracted however Defence Statistics will continue to monitor late reporting.
- b. Closing of records: WIS records should only be closed when an individual returns to duty or leaves the Services. However, 4% of records for those leaving the Services are being closed up to four months prior to the individual leaving. This is due to the individual partaking in resettlement activities. Therefore the date some individuals are reported against as having left recovery to leave the services (or medically discharge) is not necessarily the date they left. The numbers of those who left recovery to leave the Services on a medical discharge in 2015/16 are provisional as some individuals may not medically discharge until 2016/17. These numbers will be updated in the release which follows the Medical Discharge Official Statistic released in July 2017.
- c. Wounded, injured or sick classification is not known for approximately 50% of Army personnel in recovery. This is despite matching to the DPTS.
 - i) In addition WIS classification is not known at all for the Naval Service and RAF. Due to the way in which personnel in recovery for these two Services are identified, it is not possible to match to the DPTS (or any other data source) without disproportionate costs.

33. Medical Discharges

- a. Data on the cause of Army medical discharges for 2013/14, 2014/15 and 2015/16 are provisional. Naval Service and RAF cause code data for 2015/16 are also provisional. This is a result of Defence Statistics (Health) not receiving all trained Army discharge paperwork which confirms the cause information for the discharge. In 2015/16, this issue was extended to include both Naval Service and RAF data.
- b. Please see the Annual Medical Discharges in the UK Regular Armed Forces Background Quality Report which is available on the Gov.uk website for further information.

July 2016 revisions following methodological errors

34. Statistics presented within the first Statistical Bulletin (published 31 March 2016) were compiled from manually processed data that were stored within Microsoft Excel spreadsheets. The process was laboured and subject to human error. Prior to the release of this Statistical Bulletin the methodology was improved and data processing was automated in a MYSQL database. Consequently some minor errors were identified within the previous methodology. These errors have been rectified within the automated process and any historic numbers that have been revised have been marked with an 'r' within the Statistical Bulletin and accompanying Excel Tables. The revisions made are considered minor since only minor changes to numbers were made and percentages changed by a maximum of 0.1%. The errors did not impact on the overall trends reported within the March publication.

4. Timeliness and Punctuality

35. This release of the report (presenting data at as 1 April 2016) was published on 14 July 2016, a quarter in arrears. Future reports are set to be published a quarter in arrears.

36. This Statistical Bulletin was published on time to meet the pre-announced release date, in line with the Official Statistics' code of Practice. A one year release schedule outlining the following financial year's publication date is published on the [Gov.UK website](#) at least one month in advance.

5. Accessibility and Clarity

37. This Statistical Bulletin is published on the Gov.uk website and is made available to public from 0930 hours on the day of release:

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

38. 24 hour pre-release access to the report is available to a limited distribution list within MOD. The full list can be found in the pre-release access list available on the Gov.UK website:

<https://www.gov.uk/government/statistics/defence-statistics-pre-release-access-list>.

39. All tables and figures include full footnotes to ensure any conditions or caveats are made clear. Tables and figures from each statistic are separately available in MS Excel format for users to download. This allows for use in individual research and reports.

40. Key findings have been presented on the first page so that users can quickly focus on the important results, with more detailed commentary presented within the Statistical Bulletin.

6. Coherence and Comparability

41. The Defence Statistics figures on numbers in DRC are the definitive statistics in the MOD. There are no other publically available regular publications on recovery with which to ensure coherence.

42. The statistics for each of the three Services including snap shot data over time. This gives the user the opportunity to assess trends over time for UK trained regular Armed Forces personnel in recovery. However, due to the different criteria in terms of who is eligible to access the recovery support services, it is not possible for comparisons to be made between the three Services.

7. Trade-off between output quality components.

43. Where possible Defence Statistics minimise the cost to Government of producing these statistics through using data already collated for operational delivery purposes, for example the WISMIS and JPA system. Data already collated are predominantly held in administrative systems and therefore data quality across fields is of varying quality and completeness and this can limit the information available in real time.
44. The main trade-off is between timeliness and quality. To ensure statistics are timely the editing and validation process is restricted and a significant amount of automatic editing is utilised. Spending more time investigating every suspect individual personnel record could marginally improve quality but is unlikely to impact the aggregated statistics published.
45. It is known there is an issue with late reporting in WISMIS. Therefore the timeliness of the release has been assessed against the number of additional records if the publication was released a quarter in arrears and six month in arrears. It is not felt that the late reporting impact on the key messages if the bulletin is released a quarter in arrears.

8. Assessment of User Needs and Perceptions

46. Defence Statistics has consulted with the Defence Recovery Working Group (DRWG) to ensure that these statistics meet user need. Attendance at regular DRWG and the Defence Recovery Board meetings means Defence Statistics is well placed to understand the policy needs within the department and to either provide bespoke information or, where appropriate, reassess what is released in external publications.
47. Defence Statistics also maintains a log of all internal and external information requests pertaining to recovery (i.e. all PQs, internal ad hocs and FOI requests). This log is kept under constant review to identify possible changes to:
 - i) the format of publications
 - ii) the level of detail included that would help meet user needs.
48. Defence Statistics invite feedback on all external releases, with contact details provided on the first page of each publication.

9. Performance cost and respondent burden

49. Biannual updates of each publication takes twenty-five man days of effort to prepare, including data preparation, validation and report writing. Further analysis and development work will require additional resource.
50. The outputs are produced from the administrative data and other data sources already collated within the MOD. The benefit of the MOD publishing these statistics is that these data are placed in the public domain, and as Official Statistics, in a way that ensures their independence from political interfere and adherence to quality standards. The small burden that this places on the data suppliers is considered to be worthwhile to achieve this and the consequent public accountability provided by their publication.

10. Confidentiality, Transparency and Security.

51. These statistics do not contain any identifiable personal data. The information presented in this publication has been structured in such a way to release sensitive information into the public domain in a way that contributes to the MOD's accountability to the British public but which doesn't compromise the data protection of those in recovery.
52. In line with the directives of the JSP 200, disclosure control is conducted on the medical discharge statistical information provided by the MOD to safeguard the confidentiality of individuals. Within these statistics a risk of disclosure has been considered to be high

53. .where numbers presented are fewer than five. In cases where a risk of disclosure exists, the following disclosure control method has been applied:
 - a. Figures have been suppressed: Numbers fewer than five have been suppressed and marked as '~'. Where there is only one cell in a row or column that is fewer than five, secondary suppression has been applied where the next smallest number has also been suppressed so that numbers cannot simply be derived from totals.
54. The UK Armed Forces Recovery Capability report provides commentary on the key features of the outputs and identifies any issues or caveats to the data. This quality report provides further information on the method, production process and quality of the output.
55. All Defence Statistics staff involved in the production have signed a declaration that they have completed the government wide Protecting Information Level 1 training and they understand their responsibilities under the Data Protection Act and the Official Statistics Code of Practice. All staff involved in the production process have signed the Data Protection Act, and all MOD, Civil Service and data protection regulations are adhered to. All data are stored, accessed and analysed using the MOD's restricted network and IT systems.
56. Defence Statistics 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