

Hampshire Fire and Rescue Authority

Human Resources Committee Report

Item: 9

Update on Changes to Firefighter Fitness Requirements

1 July 2015

Report of the Chief Officer

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1 Summary

1.1 Changes have been made to the service order related to fitness to implement amendments issued by the Department for Communities and Local Government effective from 1 April 2015. The report gives members a detailed overview of the fitness requirements and provides an update on current fitness data.

1.2 Key amendments include the following:

- Move to 6 monthly testing where a measurable (Chester Treadmill Test or Bleep Test) and functional test (Output test) are to be completed within a 12 month period
- removal of the Chester Step Test (due to inaccuracy)
- Aerobic fitness (VO₂) level is increased from 35ml/kg/min to 42ml/kg/min. Operational personnel will need to achieve this higher level in one of their two tests during the year or will be removed from operational duty until they reach the required level.
- waist to hip ratio assessment, augmenting the waist measurement.

1.3 The Health and Safety Committee have provided the governance for the introduction of these changes and are monitoring progress.

2 Recommendation

2.1 That the HR Committee note the changes to the firefighter fitness requirements.

3 Introduction and background

3.1 The overarching approach to firefighter fitness in terms of process and support has been in place since 2002. A full time fitness role has been employed in HFRS from that point, although the position has completely changed through this time. FTI

posts have been in place since 1986-87 and fitness training equipment has been on station since the 1970's.

- 3.2 Fitness requirements have been updated in line with national guidance recommended by the Fire Fit steering group and CFOA. The current Service order (SO) SO/8/7/1 - Service fitness, adheres to the amended requirements mapped out in the national framework on Firefighter fitness. The current version of the SO attached at Appendix A has been in place since April 2015. For the sake of brevity not all appendices to the Service Order have been included with this report.

Composition and Frequency of Fitness Assessments

- 3.3 HFRS have put 6 monthly fitness assessments in place, these fitness assessments cover both Aerobic (VO₂) and Functional testing for all operational personnel via the Chester Treadmill test, Multi Stage Fitness test (Bleep test) and the Output Test. Operational personnel are also subject to Body composition and Blood pressure assessment within each 6 month period, this will cover Body Mass Index, body composition, blood pressure, resting heart rate and waist to hip ratio (BMI, BC, BP, RH and W/H).

Support Services to Support Achievement of Fitness Standards

- 3.4 A wide range of support is provided to support staff to achieve the fitness standards which includes the following:
- provision of fitness testing and fitness training equipment to all RDS and WDS stations.
 - a fitness training instructor on each watch and each station
 - clear assessment and referral process in place; a failure initiates a support process both internally through an 8 week monitored progressive training program and 4-8 weekly assessment until the fire fighter (FF) is back in line with Service order standards
 - Occupational Health & Wellbeing (OH&W) are informed of any fitness assessment failure via a generated email from Business Intelligence. All assessments are recorded and stored permanently.
 - FF fitness failures from VO₂, BMI, BF, BP, RH and W/H generate an automated email directly to the wellbeing fitness advisers and senior wellbeing adviser.
 - If the FF does not achieve the required standards within this 8 week period (VO₂) / 26 weeks for BC, formal capability support is then engaged and external support (OH&W) is provided to assist in return to operational duties.
 - VO₂ results are underpinned using gas analysis provided through COVOX at OH&W.
- 3.5 No individual will automatically face dismissal if they fall below required standards and cannot be deployed operationally.
- 3.6 Operational personnel are given support through a number of internal policies.

Time allocation for FF is managed directly via the line manager whilst on operational duty. All operational employees have a personal responsibility to be fit for their role within HFRS. It is the responsibility of the watch / station FTI and employee's management team to support them in this as required." However the Fitness training equipment, training and standardisation are provided to assist operational personnel to maintain appropriate fitness standards for their career as outlined in the SO.

- 3.7 External support is also offered in the way of lifestyle workshops, stress, health and resilience workshops and FTI instructor courses. Workshops cover all aspects (movement, health, nutrition, stress and lifestyle) needed for FF to maintain operational fitness throughout their career.

Removal from Operational Deployment and Re-tests

- 3.8 Operational personnel are taken off the operational deployment at the following levels;
- VO₂ – 42ml/kg/min (presently taken off operational duties at 35ml/kg/min). BC – 30% body fat (male) 42% female, removed from operational duties at 40% male / 50% female. BP referral rate is based at 140/90, FF are removed from operational duties at 180/110.
 - VO₂ results are underpinned if no improvement in 4 weeks or VO₂ – 42ml/kg/min using gas analysis provided through COVOX at OH&W.
- 3.9 These thresholds are enforced as a duty of care to the individual related to risk. Retests from referrals are completed every 4 weeks to monitor progressive improvement.
- 3.10 The current SO gives 1 year to achieve the fitness requirements but after the amnesty period FF will be given 8 weeks to achieve 42 ml/kg/min – VO₂ and 26 weeks to adhere to BC requirements (40% Male, 50% female)
- 3.11 Referral to OH&W can be completed via a management referral or self referral (Mental Health only). From this referral system the operational personnel can be placed on temporary work practices and/or a phased return. A functional assessment can be completed to assess what level of restriction should be in place. The support given directly through OH, wellbeing or Physiotherapy services procured will be directly through the OH Case worker.
- 3.12 Reasonable adjustments to the individual's role and/or temporary redeployments to alternative roles will be explored if necessary. In rare cases where individuals are unable to meet the required fitness standards on a more permanent basis, the Service will seek redeployment opportunities and/or make permanent reasonable adjustments to their role to support continued employment. Individuals may qualify for Ill Health Retirement, in which case this will also be explored.

Fitness Data

3.13 The table below shows the data on fitness testing over the last two financial years.

	2013/14	2014/15
Total number of FF's	N/A	1492 (740 WDS,752 RDS)
Total number of FF's that have had a fitness test	931(62%)	839(56%)
Total number not fitness tested	N/A	653 *
Total number of failures	108	179
Total number of BP failures	21	20
Total number of Body Fat failures	54	62
Total number of Waist measurement failures	85	118
Total number of fitness failures below 42 VO2	11	4
Total number of fitness failures below 35 VO2	63	33

*this number has changed since May 2015 as FTIs have completed more tests before the June cut off point.

- 3.14 Data is being developed to show interventions being made in this area.
- 3.15 During January to May 2015 a total of 87 staff have attended stress and resilience workshops. A total of 5 further workshops are planned for 2015 with 20 spaces available on each.
- 3.16 A total of 16 Kit inductions have been completed for RDS and WDS with a further 5 planned.
- 3.17 During this year to date 18 Lifestyle talks have been delivered.

Future Review

- 3.18 The Service Order will be reviewed every 2 years or earlier if national guidance is amended.

4 Consultation

- 4.1 The changes to the HFRS service order have been the subject of consultation with trade unions.

5 European Convention on Human Rights and the Human Rights Act 1998

- 5.1 The proposals within this report are compatible with the provisions of the European Convention on Human Rights and the Human Rights Act 1998 and considered in the light of the Race Relations (Amendment) Act 2000.

6 Background Papers

- 6.1 The following documents disclose the facts or matters on which this report, or an important part of it, is based and has been relied upon to a material extent in the preparation of the report.

None

Note: The list excludes:

- (1) Published works
- (2) Documents that disclose exempt or confidential information as defined in the Act

Appendix A

1 Fitness Service Order

SO/8/7/1 - Service fitness

Target Audience: All employees

Owner: Service Wellbeing and Fitness Advisers

Author: SFA's

Review date: 05/2015

Next review due: 05/2017

1 Introduction

HFRS recognise that physical fitness of firefighters is an essential element of operational effectiveness. An optimum level of physical fitness and body composition plays an important role in reducing ill health, injuries and accidents for all HFRS staff. This assists in maintaining the health and wellbeing of the workforce.

It is also recognised that the operational role of a firefighter is a safety critical one and that the level of fitness and body composition that is discussed in this Policy relates to recommendations of the minimum level to assure the safety of operational employees.

The safety of our employees is paramount and the aim of this policy is to provide the Duty of Care which the Service is legally bound to do under the Health and Safety at Work Act 1974, Section 2.

2 Purpose

To ensure that all operational employees have the required level of strength, muscular endurance, aerobic fitness and body composition to effectively and safely perform their roles. Also to provide advice, support and guidance to all HFRS employees when they request or require it.

3 Policy

All operational employees are required to maintain a minimum level of fitness to ensure they are capable of meeting the physically demanding requirements of their role. This is an essential element of operational effectiveness. Individuals are personally responsible under the Health and Safety at Work Act 1974, Section 8, for maintaining the appropriate fitness level. HFRS will assist them by providing Physical Training (PT) equipment, appropriate training, advice and support. This meets the requirements of the Management of Health and Safety regulations (1999), Section 5.

The Service will take the following measures to assist all employees in achieving, maintaining and improving their level of physical fitness:

3.1 A safe environment for training in compliance with the Workplace (Health, Safety and Welfare) Regulations 1992.

3.2 Purchase and provide PT equipment for employees in accordance with the Provision and Use of Work Equipment Regulations (1998).

3.3 Provision of Service Wellbeing and Fitness Advisers (SFA's) who will be responsible for co-ordinating the monitoring arrangements and managing the assessment programme. Also to provide advice and guidance on any health, fitness and lifestyle issues required, and appropriate to the role.

3.4 Provision of appropriately trained Fitness Training Instructors (FTI's) to supervise operational employees in group and individual exercise and advise operational and non-operational employees on fitness training issues as directed by the SFA's

3.5 The operational effectiveness of HFRS is one of our key organisational objectives. Maintaining the appropriate level of fitness for all personnel is vital to support this. In view of this there shall be a need to facilitate appropriate, occupationally relevant functional fitness training for operational employees.

However, it must be remembered, that all operational employees have a personal responsibility to be fit for their role within HFRS. It is the responsibility of the watch / station FTI and employee's management team to support them in this as required.

3.6 Compulsory six monthly fitness assessments for all operational employees and voluntary assessment for non-operational employees and control staff.

3.7 All operational employees must complete two 6 monthly assessments by 31st March each year, one test must achieve at least a measured level of 42 ml/O₂/kg/min VO₂ max. The other must be the Output test to display occupationally relevant fitness but is not a measure of level of aerobic fitness. Both assessments will include all the static tests.

3.8 Provide advice on all aspects of lifestyle, health and fitness in conjunction with the SFA's, especially where rehabilitation is required following illness or injury.

Whilst this policy details at length the procedures for fitness testing of operational employees and the duties of SFA's, it is emphasised that the use of Service gym facilities, the availability of health and lifestyle advice and voluntary fitness assessments through the SFA's apply equally to all employees.

4 Process

Monitoring and Assessments

4.1 FTI's will continuously monitor employees aligned to them at a local level, prepare employees for the periodic tests and assess them as required. Non station based operational employees must align themselves with the SFA's or a conveniently based FTI of their choosing.

4.2 The 6 monthly fitness assessments will be carried out for all operational employees (Grey book) with the exception of those whilst on OH restrictions and Control staff.

4.3 The assessment requirements provide a personal consultation that will include appropriate guidance and advice about health, fitness and lifestyle.

4.4 Static fitness tests are taken to ensure the individual is safe to participate in the aerobic fitness and occupationally relevant tests and to measure body composition to ensure the individual is below obesity thresholds as outlined in the CFOA Medical Guidelines 2012 (explained in detail within Appendix A). Employees who are referred will participate in a plan to

reach the required body composition agreed by the individual, manager and FTI. The individual will be re-assessed after a maximum of 4 weeks and the results forwarded to the SFA's.

4.5 The default aerobic tests are the Chester Treadmill Walk Test (CTWT) and the Output test (Explained in detail within Appendix A)

Each of these tests is to be completed every 12 Months. The multi stage shuttle run test (bleep test) can be used as alternative to the CTWT if requested by an individual.

4.6 Gas Analysis. This is a comprehensive method of measuring aerobic capacity and will be used to underpin the aerobic fitness result if below VO₂ level of 42mlsO₂/kg/min. The assessment test results will be discussed with the individual at the time and relevant advice will be given where appropriate. The exercise is carried out in a controlled manner and can only be administered by the SFA's. (Details are included in Appendix A).

4.7 Routine aerobic fitness assessments will be underpinned by use of expired gas analysis where necessary. Gas analysis will be used in cases where the result obtained from either the CTWT or MSSRT) is <42mlO₂/kg/min and no improvement in 4 weeks or 42mls/02/kg/min not achieved in 8 weeks. The equipment used for this supplementary assessment is not mobile and therefore is situated within OH, the Annexe, Eastleigh. The test requires maximal exertion for accurate results and is administered by SFA's only.

4.8 Individuals who have been absent from work for 12+ weeks or on Temporary Work Practices must have a fitness assessment before returning to full operational duties. This return to work test will be the Output test. The assessment is to be carried out in a controlled manner and can only be administered by an SFA or FTI. This occupationally relevant test assesses aerobic fitness, muscular endurance and strength in a functional manner.

4.9 Test Results

4.9.1 In relation to aerobic capacity, all operational employees are required to maintain a minimum VO₂ level of 42mlsO₂/kg/min. An individual's aerobic fitness level will determine the frequency of subsequent tests.

- 42 +mlO₂/kg/min (12 mins CTWT/8.8 bleep) requires annual retest
- Output test (<13 minutes) requires annual retest

Note: Both tests to be completed annually at 6 monthly intervals.

- <42mls/02/kg/min will require a 4 weekly retest

4.9.2 In the case of a test result < 42mlsO₂/kg/min, the individual has failed the fitness assessment. The assessor is to:

- Inform the Station Manager or appropriate line manager.
- For RDS employees must inform the Group Manager.
- Complete and submit a Management Referral to OH on form FM1/2/8/1/3.

It will be deemed that they are of a standard too low to remain operational, and placed on an appropriate category of temporary work practices. They will be provided with advice and support

from the SFA and OHA to reach the required standard. Action will be considered within the Service's Capability Support procedure.

4.9.3 They will be re assessed at 4 weekly intervals (section 4.9.1) until they reach VO₂ level of 42mlsO₂/kg/min. Further action will be considered within the Service's Capability Support procedure if there is no improvement in 4 weeks and VO₂ level of 42mlsO₂/kg/min within 8 weeks.

4.9.4 Once the minimum standard of VO₂ level of 42mlsO₂/kg/min is achieved and the output test (4.5.2) passed, the individual can return to full operational duties.

4.9.5 In relation to body composition all operational employees are required to remain below 30 BMI, (can be higher if other indicators are below risk thresholds). Waist circumference <102cm (male) and <88cm (female). Waist to hip ratio <0.9 (male) and <0.85 (female). Body fat estimation <30% (males) and <42% (females). Employees who are above these thresholds will be issued a health awareness/alert form (FM 8-7-1-6 & 7), a copy of which will be held on the individuals OH record. They will also be expected to participate in a weight management fitness plan to reach the required body composition agreed by the individual and FTI. They should be re-assessed at 4 week intervals until below the risk thresholds and the results forwarded to the SFA's. Action will be considered within the Service's Capability Support procedure if there is no improvement in 4 weeks and >30% body fat (male) and 42% (female) after 26 weeks.

4.9.6 If a test result is >40 BMI and/or >40% fat (Male) >52% (Female) (morbidly obese), the assessor is to:

- Inform the Station Manager or appropriate line manager.
- For RDS employees must inform the Group Manager.
- Complete and submit a Management Referral to OH on form FM1/2/8/1/3.

It will be deemed that they are of a body composition too high to remain operational and placed on an appropriate category of temporary work practices. They will be provided with advice and support from the SFA and OHA to reach the required standard. They should be re-assessed at 4 weekly intervals and be below the risk threshold within 26 weeks. Action will be considered within the Service's Capability Support procedure if not achieved. The individual will also be given the output test (4.5.2) to complete before returning to operational duties. This test will assess their fitness whilst carrying out basic fire fighting tasks.

4.9.7 Following an assessment an individual will be recorded as "Successful" in FireWatch only if they achieve a clear pass (Output test < 13 minutes or VO₂ level of 42+mlsO₂/kg/min, BP <140/90 and body composition within guidelines outlined in 4.9.5. This "Successful" recording will then mean that they only need to be assessed again in 6 months.

Anyone else will be marked as "Unsuccessful". This will then mean their WA 2.1.1 matrix will continue to count down and turn red which is a reminder to managers that the individual is not up to fitness standard and needs to be monitored within the guidance of SO 8/7/1 until assessed and "Successful". Employees who are 'Unsuccessful' will be expected to participate in a plan to reach the required fitness level agreed by the individual, manager and FTI.

4.9.8 Following a fitness assessment, where an individual is deferred on either their aerobic fitness rating (below VO₂ level of 42mlsO₂/kg/min) or their Body Mass Index (above 40 BMI –

morbidly obese) then they will be referred to the SFA's for a re-assessment at the earliest opportunity to confirm the final assessment results.

4.9.9 Should an individual be deferred, they will not be permitted to return to full operational duties until they have achieved the minimum standard. If the individual does not achieve the standard purely for fitness reasons they will be allowed to return to a Temporary Work Practices category 3 to improve their fitness. They will be retested every 4 weeks until they achieve the required standard. This will be reviewed by the SFA's if not achieved within 8 weeks. If an individual fails to achieve the required standard due to an existing injury, they will be kept on the necessary category of Temporary Work Practices and given support from the OHA and SFA's to rehabilitate the injury.

5 Duties and responsibilities

Included within Appendix A

6 Training

Included within Appendix A

7 Equipment

Included within Appendix A

8 Administration

Included within Appendix A

9 Conditions of Service

Inherent in text.

10 References

Home Office Thematic Review 'Fit for duty' (2/2000)
'Fitness for fire and rescue standards, protocols and policy' – Firefit Steering Group (2007)
Health and Safety at Work etc Act 1974
Management of Health and Safety Regulations (1999)
The Workplace (Health, Safety and Welfare) Regulations (1992)
Provision and use of Work Equipment Regulations (1998)
Data Protection Act (1998)
CFOA Medical Guidelines 2012

11 Appendices

[Appendix A](#) - Assessment Requirements and Health Issues

[Appendix B](#) - Overview of operational employees required fitness levels