

41 Heat illness prevention

This chapter is split into two parts:

- **Part 1: Directive.** This part sets out instructions that **must** be followed by law, or in line with Defence policy or Government policy.
- **Part 2: Guidance.** This part provides the guidance and best practice that **should** be followed and will help you to keep to this policy.

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The following annexes are available as separate documents on the Chapter 41 page:

Annex A – Commanders’ guide to preventing heat illness

Annex B – Individual’s guide to heat illness

Annex C – Work / rest tables

Annex D – Procurement, maintenance and training in the use of QT34 wet bulb globe temperature (WBGT) monitor

Annex E – Heat acclimatisation for deployment to hot climates

Annex F – Hydration guidance

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41 Heat illness prevention

Part 1: Directive

This part sets out instructions that **must** be followed by law, or in line with Defence policy or Government policy.

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Introduction

'Heat illness' refers to a range of conditions including heat exhaustion and heat stroke. It is difficult to distinguish between the conditions and they may exist at the same time. In this chapter, the term heat illness refers to a person becoming ill as a result of a rise in their core body temperature.

1. Heat illness is a serious, potentially **life-threatening condition**. It can affect members of the armed forces and civilians performing physical activity (operational, training and day-to-day tasks), both at home and overseas. So it is essential that all personnel understand the causes and effects of heat illness. Commanders, line managers and those planning activities must assess the risks of heat illness and take action to reduce and prepare for those risks.
2. The purpose of this chapter is to improve awareness and management of risk, with the aim of eliminating deaths from heat illness. It provides policy and guidance on preventing heat illness. In the military, **exertion is the leading cause of heat illness that could lead to death**. The guidance in this chapter relates to assessing and managing the risk of heat illness as part of the MOD standard risk-assessment process. If an individual single-service or top-level budget (TLB) chooses to introduce stricter guidance, that guidance **must** be followed within that single-service or TLB.
3. This chapter replaces the previous guidance in JSP 539 on preventing heat illness. The guidance from JSP 539 on preventing cold injury has been transferred to Chapter 42 in JSP 375. Guidance for the medical community on treating heat illness and cold injury will transfer to JSP 950 (Medical policy) in due course.
4. JSP 539 will be withdrawn from the JSP index when all the guidance on treating heat illness and cold injury has been transferred to JSP 950.
5. **Review and amendments.** This chapter has been reviewed by the Heat Illness Prevention Working Group and approved by the Defence Safety and Environment Committee. HS&EP will review it at least once a year. Any suggestions for amendments should be sent to HSEP-GroupMailbox@mod.gov.uk.

6. **What is in this chapter.** Part 1 contains the following:
 - a. A list of the heat illness prevention policy statements (paragraph 13).
 - b. Full details of the policy statements (paragraphs 14 to 42).
7. Part 2 contains guidance which **should** be followed to keep to this Heat illness prevention policy:
 - a. Annex A (Commanders' guide to preventing heat illness) gives general guidance for those planning and supervising activities. It is written for military personnel but the principles also apply to civilians in the MOD.
 - b. Annex B (Individual's guide to heat illness) contains guidance for everyone in the MOD who may be at risk of heat illness.
 - c. Annex C (Work / rest tables) contains tables which can be used to calculate the safe duration of activities and the balance of work and rest, based on specific factors.
 - d. Annex D (Procurement, maintenance and training in using the QT34 wet bulb globe temperature (WBGT) monitor) contains guidance on the QT34 wet bulb globe temperature (WBGT) monitor that is used in connection with the work / rest tables.
 - e. Annex E (Heat acclimatisation for deployment to hot climates) contains guidance on acclimatising to hotter environments.
 - f. Annex F (Hydration guidance) contains detailed guidance on hydration requirements.
 - g. Annex G (Examples of policy compliance) contains examples of how to keep to heat illness policy in various circumstances.
8. **Assurance.** The application of this policy **must** be assured (that is, its use must be guaranteed) at different levels.
 - a. First-party assurance **must** be provided by those responsible for delivering the activity (normally at ship, unit or station level) to reinforce the policy and make sure it is followed during the activity.
 - b. Second-party assurance **must** be provided by the chain of command, separate from the assurance given by those responsible for delivering the activity and in line with formal single-service or TLB-level assurance mechanisms.
 - c. Third-party assurance **must** be provided at MOD level by, for example, Defence Internal Audit (DIA), Defence Safety Authority (DSA) and the Health, Safety & Environmental Protection (HS&EP) Directorate.

Scope

9. This policy applies to all personnel in the MOD or under the supervision of MOD personnel, both regular and reserve, military and civilian, at home and overseas. The policy applies to **all MOD activity**, at all times of the year and in any location, including the following:

- a. All forms of exercises, fitness tests, training and organised sport.
- b. Selection events for those already in the armed forces who are aiming to progress in their career.
- c. Preparing for and taking part in all operations (including combat, humanitarian aid, defence activities, training foreign forces and providing military aid to civilian authorities).
- d. Activity onboard and within all MOD vessels, aircraft and vehicles.
- e. Ceremonial duties, practice and events.
- f. Recruitment and engagement activities involving civilians under the supervision of MOD personnel.
- g. Routine business (including in office environments) where factors increase the risk of heat illness.

10. **Alternative acceptable means of compliance.** Keeping to this policy is mandatory across the MOD. However, it is recognised that a small number of military units may be permanently unable to comply with (keep to) parts of the policy. In such circumstances, the head of the relevant single-service or TLB **must** send a detailed request to apply an 'alternative acceptable means of compliance' for specific parts of the policy, giving the reasons for the request, to Director HS&EP.

Terms and definitions

11. The following table sets out definitions of some of the key terms used in this chapter.

Acclimatised	When personnel in hot environments have undergone a graded supervised programme of increasing exercise to adapt to the conditions. All personnel in the UK and Northern Europe, and those in hot environments who have not undergone a graded supervised programme of increasing exercise to adapt to the environment, are to be considered to be not acclimatised.
Alternative acceptable means of compliance	An alternative way of meeting a requirement of this policy, approved by the HS&EP Director.
Assurance	Assurance is an assessment of whether the requirements set out in this chapter have been complied with. That assessment is based on evidence.
As low as reasonably practicable (ALARP)	When risk has been reduced to a level where applying further controls would be extremely disproportionate to the benefit that would be gained.

Commander	In this chapter, 'commander' refers to any military personnel responsible for planning activities, supervising activities and making sure personnel are safe.
Controls	Measures that can be taken to reduce the possibility of risk arising or reduce the effect of any risk that arises.
Dynamic risk assessment	A risk assessment carried out while an activity is underway.
Line manager	In this chapter, 'line manager' refers to civilian personnel responsible for planning activities, supervising activities and making sure personnel are safe. In parts of MOD this means the 'delivery manager'.
Risk assessment	A process of evaluating the potential risks that may be involved in an activity. Risk assessments must be carried out and reviewed by competent personnel.
Top Level Budget (TLB)	The Royal Navy, Army, Royal Air Force, Strategic Command, and enabling organisations such as Defence Equipment Support and Defence Infrastructure Organisation.
Wet Bulb Globe Temperature (WBGT)	A combined estimate of the effect of temperature, humidity, wind speed (wind chill), and visible and infrared radiation (usually sunlight) on humans. A WBGT can be provided as a forecast or a current reading from a QT34 monitor. See Annex D for detailed guidance on QT34 monitors.
Work / rest table	A table giving maximum durations of continuous exercise and alternative work / rest schedules for a four-hour period. The figures are based on work rate, dress and WBGT reading. Different tables are used for acclimatised personnel and personnel who are not acclimatised.

Should and must

12. Where this chapter says 'must', this means that the action is a compulsory requirement. Where this chapter says 'should', this means that the action is not a compulsory requirement but is considered best practice to comply with the policy.

Heat illness prevention policy statements

13. The MOD has established the following policy statements, which **must** be followed.

- a. **Policy Statement 1 (page 7)**. A commander or line manager **must** be nominated to command or supervise any activity where the risk of heat illness exists. Those taking part in an activity **must** know who the commander or line manager is.
- b. **Policy Statement 2 (page 8)**. The risk of heat illness **must** be considered in the risk assessment for all MOD activities. The risk assessment **must** as a minimum consider the following risk factors:
 - (1) Acclimatisation.
 - (2) Clothing and equipment.

- (3) Expected work rate.
- (4) Environment.
- (5) Individual risk factors.
- (6) Education and training.
- (7) Medical plan.
- (8) Fluid requirements.

c. **Policy Statement 3 (page 12)**. In the case of physically demanding selection events and fitness tests, as well as considering the factors at Policy statement 2:

- (1) when planning an activity, a WBGT forecast and the work / rest tables **must** be used to inform the risk assessment; and
- (2) when delivering the activity, a QT34 dynamic reading that is representative of the location of the activity **must** be used.

For all other MOD activities, as well as considering the factors at Policy statement 2:

- (1) when planning an activity, a WBGT forecast and the work / rest tables **should** be used to inform the risk assessment; and
- (2) when delivering the activity, a QT34 dynamic reading that is representative of the location of the activity **should** be used.

d. **Policy Statement 4 (page 14)**. The controls in the risk assessment **must** be complied with. If the controls in the risk assessment or any other aspect of this Heat illness prevention policy cannot be complied with but the activity must still proceed, the risk **must** be elevated.

e. **Policy Statement 5 (page 15)**. All activity **must** be dynamically risk managed. If heat illness symptoms are observed:

- (1) The activity **must** be paused, **must** be dynamically risk assessed and further mitigations **must** be applied.
- (2) The activity **must** only be restarted once further mitigations have been applied and with the approval of the commander or line manager at Policy statement 1.
- (3) All suspected and confirmed heat illness casualties **must** be reported and investigated in accordance with TLB Policy.

f. **Policy Statement 6 (page 17)**. Those involved in planning or undertaking activities which involve risk of heat illness **must** receive suitable training.

Policy Statement 1

A commander or line manager **must** be nominated to command or supervise any activity where the risk of heat illness exists. Those taking part in an activity **must** know who the commander or line manager is.

14. A named commander or line manager must be nominated. Everyone taking part in an activity must know who that commander or line manager is. That commander or line manager must make sure that:

- a. heat illness is considered when any activity is being planned;
- b. risk assessments are carried out and are approved before they are relied upon;
- c. controls to lower the risk are identified, communicated to relevant personnel and complied with; and
- d. when an activity has been paused because symptoms of heat illness have been observed, a dynamic risk assessment is carried out and the activity does not start again until further controls have been put in place.

Policy Statement 2

The risk of heat illness **must** be considered in the risk assessment for all MOD activities. The risk assessment **must** as a minimum consider the following risk factors:

- a. acclimatisation;
- b. clothing and equipment;
- c. expected work rate;
- d. environment;
- e. individual risk factors;
- f. education and training;
- g. medical plan; and
- h. fluid requirements.

15. Commanders and line managers are responsible for making sure that risk assessments are carried out and that the controls identified in the risk assessment are communicated to the personnel taking part in the activity.

16. Heat illness is a significant hazard and must be considered during the planning phase before an activity starts. Risk assessments should be carried out by competent personnel. Medical staff and training staff can help with risk assessments by providing specialist medical and training advice and guidance. Any advice they give must be considered, including if they recommend pausing an activity.

17. MOD Form 5010 should be used to record risk assessments, but substitutes specified by single-service or TLB Safety and Environmental Management Systems (SEMS) may be used. Risk assessments must be kept for audit and investigation purposes.

18. The heat illness risk assessment should be incorporated into the wider risk assessment for the activity. All exercises and deployments need to consider the risk associated with heat illness. If a risk of heat illness has been identified, operation orders, exercise instructions and other instructions relating to the activity must make clear the control measures identified by the risk assessment and the need for dynamic risk assessments and controls during the activity.

19. This chapter provides guidance for heat illness risk assessments and follows the five-step process, as set out in chapter 8 of JSP 375 Volume 1.

- a. **Step 1 - Identify the hazard.** The hazard is heat and exertion leading to an uncontrolled rise in core body temperature. This is usually related to the work rate of the activity, so the hazard is present throughout the year and in all environments.
- b. **Step 2 - Decide who might be harmed and how.** The intensity of the activity and the rate of work causes an increase in body temperature, and the external

temperature and humidity, along with clothing and equipment, affects the rate at which the body can cool itself. When the rate of heating is higher than the rate of cooling, body temperature will increase, sometimes to dangerous levels. All personnel involved in the activity are at risk. Some are more at risk than others, depending on individual risk factors (for example, physical fitness) so medical advice may be needed.

c. **Step 3 - Evaluate the risks and identify suitable and sufficient control measures.** The commanders' guide in Annex A provides guidance on identifying risk factors, evaluating the risks and identifying suitable and sufficient controls. In order to decide which controls should be put in place, the risk assessment needs to consider the realistic likelihood and severity of the risk. If a risk is still assessed as 'high' after controls are put in place, consideration **must** be given to introducing measures to further reduce the risk. Commanders and line managers should get medical advice at this point to start putting together a medical plan in the event of casualties.

d. **Step 4 - Record and implement findings.** Once the planning has been completed it is time to act. The risk-assessment form should be used to record the whole risk assessment for the activity, including the assessed risk of heat illness. The controls identified during the risk assessment **must** be included in the instructions for the activity. Where relevant, before starting any activity personnel **must** be briefed on the controls they should be aware of (for example, what action to take if a case of heat illness is identified). If the risk that remains after applying controls is higher than the level of acceptable risk delegated to the commander or line manager, then the risk **must** be elevated through the single-service or TLB elevation process.

e. **Step 5 - Review the risk assessment and update as necessary.** The risk assessment **must** be reviewed before an activity starts to make sure it is still valid and that all the controls are still in place. Once an activity has started, commanders and line managers **must** 'dynamically' risk manage it. This means that further risk assessments (dynamic risk assessments) need to be carried out while the activity is underway to consider whether the risk assessment and controls need to be changed. If something has changed (for example, the WBGT or the duration of the activity has increased), changes to controls **must** be considered. The dynamic risk assessment should be recorded so that there is evidence that it took place. This record can be as simple as a note in a commander's notebook or a logged message over the radio network. Reviews of risk assessments may be triggered by a specific event or circumstance (for example, a high drop-out rate) or can be scheduled (for example, taking a reading from a QT34 monitor every 30 minutes during the day). Further guidance is included in the heat illness risk planning tool in the commanders' guide in Annex A.

20. The commander or line manager is responsible for reviewing and approving the risk assessment for the activity and **must** consider any additional controls that are needed before they approve the risk assessment.

21. The heat illness risk planning tool and its associated tables in Annex A illustrate how to consider heat illness in the five-step risk assessment process. The following factors **must** be considered as part of that process.

a. **Acclimatisation.** The risk of heat illness in hot climates (dry or humid) can be reduced, but not eliminated, by acclimatisation. All personnel performing an activity in the UK or Northern Europe **must** be considered as not acclimatised because the climate is temperate with only occasional heatwaves. Acclimatisation may not be possible for tasks carried out at short notice or for limited periods (for example, for air travel from a temperate to a hot climate) or if long periods are spent in air-conditioned buildings. Guidance on acclimatisation is given in Annex E.

b. **Clothing and equipment.** Clothing affects a person's ability to shed excess heat and, along with carrying equipment, may put extra strain on the body. Particular attention is needed when an activity requires the use of specialist clothing or equipment (for example, waterproofs, body armour, ceremonial dress, firefighting equipment, Explosive Ordnance Disposal (EOD) suits or Chemical, Biological, Radiological and Nuclear (CBRN) suits). Clothing **must** be carefully considered to make sure that it is appropriate for the activity and can be adjusted as required (for example, by removing layers of clothing).

c. **Expected work rate.** The rate the human body generates heat is determined by the work rate. In the UK, the primary cause of heat casualties from exertion has been endurance activities (for example, loaded marches, log runs, stretcher races and fitness tests). It is **critical** to assess the work rate so the potential risk can be reduced by applying controls. The 'rate of perceived exertion' (RPE) scale assesses individual work rates based on physical effort. During group activities, the work rate of the activity should be determined by the highest individual RPE maintained for more than three minutes.

d. **Environment.** The main way that the body loses heat is through sweat evaporating. The environmental factors that affect the efficiency of sweating are temperature, humidity and wind speed. Body temperature can also increase due to heat radiating from hot surfaces (for example, tarmac and vehicles). Physical exertion is affected by the nature of the activity, the environment and the terrain, particularly changes in level and the steepness of climbs.

e. **Individual risk factors.** People's responses to heat vary greatly. Risk factors to consider are as follows:

(1) Lifestyle factors – individual drive and determination, being overweight or obese, low or reduced physical fitness, smoking, alcohol within the past 48 hours, use of illicit drugs and use of sports supplements.

(2) Health factors – previous heat illness, recent or current mild illness (for example, a cold, fever or diarrhoea), medication (prescription or over the counter), recent vaccinations, dehydration.

(3) Work factors – inexperienced personnel, poor nutrition or diet, or a missed meal in the previous 24 hours, lack of sleep, air travel within the past 24 hours and lack of acclimatisation.

(4) Age and young people – a child's ability to thermoregulate (control their core body temperature) is not the same as, or as effective as, an adult's. So cadets and other young people may be at increased risk of heat illness and extra precautions **must** be considered in the risk assessment.

(5) Sunburn – sunburn increases the risk of heat illness. Minor sunburn causes reduced performance, while severe sunburn may require personnel to be hospitalised. You will need to consider restricting the duties of personnel who are sunburned. Sunburn can be prevented by:

- (a) wearing appropriate clothing and headwear;
- (b) working in the shade; and
- (c) applying water-resistant sunscreen.

f. **Education and training.** Inexperienced personnel are typically more vulnerable to heat illness as a result of them:

- (1) being less aware of the causes, signs and risks of heat illness;
- (2) having less experience of the conditions which may give rise to heat illness; and
- (3) less physical conditioning (for example, nutrition, training, mental and physical resilience).

g. **Medical plan.** As part of the overall risk assessment, commanders and line managers **must** develop a medical plan to identify an appropriate response to any casualties or medical incidents. When developing the plan they **should**:

- (1) involve medical staff;
- (2) consider the level of medical cover (staffing) needed for the activity;
- (3) consider the type and amounts of medical equipment needed for the activity; and
- (4) consider how any heat illness casualties will be evacuated, and where they will be evacuated to.

See chapter 5 (first aid at work) of JSP 375 Volume 1 and single-service or TLB policy for medical guidance.

h. **Fluid requirements.** Adequate hydration is essential to maximise heat loss through sweating. Commanders and line managers **must** make sure that personnel taking part in an activity drink an adequate amount of water before, during and after the activity. The water **should** be cool (if possible) and from a guaranteed safe source. Care **should** be taken to avoid overhydration and to maintain salt levels. There is more detailed hydration guidance in Annex F.

Policy Statement 3

In the case of physically demanding selection events and fitness tests, as well as considering the factors at Policy statement 2:

- a. when planning an activity, a WBGT forecast and the work / rest tables **must** be used to inform the risk assessment; and
- b. when delivering the activity, a QT34 dynamic reading that is representative of the location of the activity **must** be used.

For all other MOD activities, as well as considering the factors at Policy statement 2:

- a. when planning an activity, a WBGT forecast and the work / rest tables **should** be used to inform the risk assessment; and
- b. when delivering the activity, a QT34 dynamic reading that is representative of the location of the activity **should** be used.

22. In the recent past, the more serious cases of heat illness have been caused during physically demanding selection events and fitness tests. The risk assessment carried out at the planning stage of such activities **must** take account of a WBGT forecast. Dynamic risk assessments **must** take account of QT34 readings that represent the conditions in the area where the activity takes place. These forecasts and readings should be kept with the risk assessments.

23. For all other MOD activities, risk assessments carried out at the planning stage **should** include a WBGT forecast and dynamic risk assessments **should** include QT34 readings. These activities include operations, routine business, ceremonial events, organised sport and adventurous training. Organised sport and adventurous training **should** be in line with any national governing body guidelines. If those guidelines do not specifically deal with heat illness, this policy **must** be followed.

24. **Wet Bulb Globe Temperature (WBGT)**. A WBGT reading is the best way of factoring environmental conditions into a risk assessment, as it takes account of temperature, humidity, wind speed and sunlight. The WBGT is a combined measure of the dry-bulb temperature (the air temperature), wet-bulb temperature (the temperature the air can be cooled to through the effect of evaporation) and globe temperature (a temperature reading that takes account of the effect of sunlight, air temperature and wind speed). It is measured in degrees Celsius. You can use the QT34 monitor to check the difference between the dry-bulb temperature and the wet-bulb temperature. When the two numbers are close, the humidity is high and the risk of heat illness is increased. This is because the higher humidity prevents sweat from evaporating. The WBGT reading **must** be taken locally in order to represent the environmental conditions where the activity is taking place. The QT34 monitor is the only MOD-approved equipment for taking WBGT readings.

25. **Work / rest tables**. Annex C contains guidance on the safe continuous duration activity, and the appropriate periods of rest, depending on acclimatisation, state of dress, work rate and WBGT. If the activity takes place at **lower** WBGT levels (below 20°C) than those shown in the work / rest tables in Annex C, the risk assessment should focus on

other controls using the work / rest tables as guidance. When an activity exceeds any of the figures in the work / rest tables (work rate, WBGT forecast or duration) the responsible commander should assess the risk. They should then either:

- a. accept the risk;
- b. add further control measures; or
- c. elevate the risk through the chain of command, in line with single-service or TLB policy.

26. **Young people.** A child's ability to thermoregulate (control core body temperature) is not the same as, or as effective as, an adults. So cadets and other young people may be at increased risk of heat illness. The work / rest tables in Annex C apply only to risk assessments for people aged 18 and over. A risk assessment **must** still be carried out to assess and control the risk of heat illness in any activity involving cadets and other people under 18, and that assessment should focus on the other heat illness risk factors. Further guidance on health and safety considerations when working with young people is given in chapter 19 (Young Persons) of JSP 375, volume 1.

Policy Statement 4

The controls in the risk assessment **must** be complied with. If the controls in the risk assessment or any other aspect of this policy cannot be complied with but the activity must still proceed, the risk **must** be elevated.

27. The commander or line manager is responsible for reviewing and approving the risk assessment for the activity and **must** consider any extra control measures before approving the risk assessment.
28. Once the risk assessment has been approved by the commander or line manager, it **must** be followed.
29. If at any stage of the activity, including before it starts, the guidance in this policy cannot be followed or the controls in the risk assessment cannot be met, the responsible commander should assess the risk. They should then either:
- a. accept the risk;
 - b. add further control measures; or
 - c. elevate the risk through the chain of command, in line with single-service or TLB policy.
30. A very limited number of activities may need to continue without pausing when a person shows symptoms of heat illness. Examples include combat operations and other instances where pausing would cause a greater **risk to life** than continuing. The risk assessment for these activities **must** indicate that a greater level of risk is required for the task to be achieved. When this is the case, the level of risk **must** be elevated and approved through the chain of command before the activity starts.

Policy Statement 5

All activity **must** be dynamically risk managed. If heat illness symptoms are observed:

- a. the activity **must** be paused, **must** be dynamically risk assessed and further mitigations **must** be applied;
- b. the activity **must** only be restarted once further mitigations have been applied and with the approval of the commander or line manager at Policy statement 1; and
- c. all suspected and confirmed heat illness casualties **must** be reported and investigated in accordance with TLB Policy.

31. Commanders **should** monitor the activity, liaise with junior commanders, safety staff and medical providers, and make sure that effective treatment is delivered to any suspected heat illness casualties. When heat illness is suspected, the activity **must** be **paused**. The commander or line manager **must** carry out a dynamic risk assessment and **should** put further controls in place to prevent other cases of heat illness.
32. The activity can only start again once the actions from the dynamic risk assessment have been applied and the commander or line manager gives the approval for the activity to continue.
33. A rapid, local, easy-to-use alert mechanism, to make all local units performing similar activities aware of all incidents of heat illness as they arise, should be part of the dynamic risk assessment process. Unit medical centres **must** be told about all reported cases of heat illness, through the chain of command, to make sure appropriate medical follow-up and recording takes place.
34. All suspected and confirmed heat illness cases **must** be reported in line with single-service or TLB incident-reporting procedures and the responsibility for doing so rests with the chain of command. Cases should be reported and recorded as suspected until formally diagnosed as heat illness by a doctor. As a minimum, reports **should** specify the time, location, WBGT reading, weather forecast (if available) and type of activity being undertaken. Personal details of the casualty should include their name, rank, service or staff number and a description of the illness or injury.
35. The chain of command **must** report all suspected or confirmed heat illness cases to Defence Accident Investigation Branch (DAIB) and, where appropriate, a preliminary investigation must be carried out. Cases can be reported to DAIB on their Land Duty phone line (030 679 86587 or 9679 86587) or their Air and Maritime Duty phone line (030 679 88276 or 9679 88276).
36. Suspected heat illness cases **must** be investigated locally to identify lessons that can be learnt. Confirmed cases of heat illness **must** be investigated in line with paragraphs 38 and 39.
37. There are three categories of heat illness.
 - a. **Mild heat illness** – heat illness with no other illness (for example, gastroenteritis), and the casualty does not need to go to hospital or is discharged from the Emergency Department.

- b. **Moderate heat illness** – heat illness which requires the casualty to go to hospital and be admitted from the Emergency Department. Examples include a change of consciousness for more than 15 minutes, seizure, or evidence of organ damage or rhabdomyolysis.
- c. **Severe heat illness** – heat illness requiring the casualty to be admitted to intensive care.

For details of reporting requirements refer to JSP 375 Volume 1 Chapter 16.

38. For cases of mild heat illness (where there is not cause for immediate concern):

- a. A Unit Investigation **must** be carried out.
- b. The Unit Investigation **should** use an appropriate investigation method to identify causal and contributory factors (the factors that contributed to the case and the action needed to avoid those factors in the future).
- c. The actions **should** be tracked until the investigation has been completed.

39. For cases of heat illness that are classified above mild:

- a. A single-service or TLB non-statutory enquiry (NSI) **must** start, in line with TLB investigation procedures.
- b. The single-service or TLB NSI **should** use an appropriate investigation method to identify casual and contributory factors (the factors that contributed to the case and the action needed to avoid those factors in the future).
- c. The actions **should** be tracked until the investigation has been completed.

Policy Statement 6

Those involved in planning or undertaking activities which involve risk of heat illness **must** receive suitable training.

40. All single services are responsible for making sure that commanders and line managers can manage the risks associated with heat illness and react in line with this policy.

41. **Defence leaders.** All commanders and line managers have a duty of care, meaning that they are legally responsible for the health and safety of others and **must** be appropriately trained so that they have the necessary knowledge, skills and attitudes to consider heat illness as part of any MOD activity. They **must** have a sound understanding of this policy. Commanders and line managers **must** be able to continuously manage the risk of heat illness and make sound judgments and decisions in all eventualities.

42. **Individuals.** All MOD personnel **should** have a basic level of knowledge relating to heat illness and this policy. The minimum requirement is for personnel to understand what causes heat illness, what the signs and symptoms are, and what they can do as an individual to help reduce the risk.

41 Heat illness prevention

Part 2: Guidance

This part provides the guidance and best practice that **should** be followed and will help you to keep to this policy.

Contents

The following annexes are available as separate documents on the Chapter 41 page:

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