

FIRE SERVICES EXAMINATIONS BOARD
STUDY NOTE

EXAMINATION	SUB-OFFICER EXAMINATION
PAPER	HUMAN RESOURCE MANAGEMENT
SUBJECT	HEALTH, SAFETY AND WELFARE
ITEM	ACCIDENT REPORTING AND INVESTIGATION
STUDY NOTE No.	2307

INTRODUCTION TO THE STUDY NOTE

This study note has been prepared as the basis of study in connection with the qualifying examinations for promotion.

Candidates will be expected to demonstrate knowledge of the information contained in the study note and understand how it should be applied:

The 'References' made at the end of the Study Note are included for information only and candidates will not be expected to study these as part of the bibliography.

ACCIDENT REPORTING AND INVESTIGATION

1. Introduction

Measurement is essential to maintain and improve health and safety performance. In this regard there are two ways to generate information on performance.

- (a) Active systems which monitor the achievement of plans and the extent of compliance with standards; and
- (b) Reactive systems which monitor accidents, ill health and incidents.

This study note relates to reactive systems of accident and incident reporting and investigation that may involve a Sub-Officer at watch level.

2. Definitions

Accident

Includes any undesired circumstances which may or may not give rise to ill health or injury, damage to property, plant, products or the environment, production losses or increased liabilities.

Incident

Includes any undesired circumstances and 'near misses', which could cause accidents. These may involve premises, equipment, vehicles or persons. Even when no injury occurs, it is important to report such incidents as dealing with them may prevent an injury in the future.

3. Reporting of Accidents and Incidents

Reactive systems by definition are triggered after an event and include identifying and reporting:

- (a) injuries and cases of ill health;
- (b) other losses and damage to property;
- (c) incidents with the potential to cause injury, ill health or loss;
- (d) hazards; and
- (e) weakness or omissions in performance standards.

Each of the above provides opportunities for an organisation to check performance, learn from mistakes and improve the health and safety management system and risk control.

4. The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR)

In certain cases, the brigade may have to send a report of an accident or incident to the Health and Safety Executive, in compliance with the above regulations. The HSE are the enforcing authority for health and safety in the case of Fire Service activities.

The purpose of the Regulations - commonly referred to as RIDDOR - is to provide the HSE with the information it needs to improve health and safety conditions at work using the appropriate 'notification form'.

Although a Sub-Officer would not normally report to HSE directly, the Sub-Officer has to be aware of the regulations and an outline of the information that the reporting officer may require.

Briefly, the requirements of RIDDOR are as follows:

The Regulations require responsible persons to notify the local area office of the HSE of the following circumstances.

(a) Death or Major Injury

HSE to be notified by the quickest practicable means, eg by telephone and followed up with a completed 'notification' form within 10 days if there is an accident connected with work and:

- (i) an employee, or a self-employed person working on the premises, is killed or suffers a major injury (including an injury resulting from physical violence); or
- (ii) a member of the public is killed or taken to hospital.

Examples of major injuries are:

- 6 Any fracture, other than fingers, thumbs or toes.
- 6 Any amputation.
- 6 Dislocation.
- 6 Loss of sight.
- 6 Injury requiring hospital admittance for more than 24 hrs, etc.

(b) *Vehicles Moving on Public Roads*

Accidents involving vehicles moving on public roads are not reportable unless they involve or are connected with:

- (i) Exposure to any substances being conveyed by road.
- (ii) Vehicle loading and unloading activities.

- (iii) Activities concerned with the construction repair and maintenance of roads, roadside hedges and fences, or structures and buildings adjacent to roads.
- (iv) An accident involving a train where a person is killed or injured.

(c) *Over 3-day Injury*

A completed 'notification' form must be sent to HSE within 10 days if there is an accident connected with work (including an act of physical violence) and an employee, or a self-employed person working on brigade premises, suffers an over 3-day injury.

An over 3-day injury is one which is not major but results in the injured person being away from work or unable to do their normal work for more than 3 days (including non-work days but discounting the day of the accident).

(d) *Dangerous Occurrences*

The Brigade Health and Safety Advisor should be consulted if it is considered that a dangerous occurrence may have happened (on the station or at the incident ground). This is because the HSE has to be notified without delay and followed up with a completed accident report within 10 days, if such an event has occurred.

Some examples of dangerous occurrences:

- 6 Collapse, overturning or failure of load-bearing parts of lifts and lifting equipment.
- 6 Explosion, collapse or bursting of any closed vessel or associated pipework.
- 6 Plant or equipment coming into contact with overhead power lines.
- 6 Malfunction of breathing apparatus whilst in use or during testing immediately before use.

5. Brigade Reporting Responsibilities

(a) Fire Brigade Premises

When a reportable death, injury or dangerous occurrence happens in premises owned or occupied by a fire brigade, it is the brigade's responsibility to notify the HSE. This is the case whether the injured person is a brigade employee, a trainee, a visitor, or a self-employed contractor.

In the case of employees and contractors working on brigade premises such as service engineers or building workers, it is the worker's employer who must inform the HSE.

The injured person's employer must therefore be contacted by telephone as soon as possible to enable them to meet their statutory obligation of reporting to the HSE.

(b) Operational Incidents

If a reportable injury is suffered by a person who is not a brigade employee or a dangerous occurrence happens during an operational incident, it will be the brigade's responsibility to notify the HSE, provided that:

- (i) the event happened whilst the premises were under the control of the brigade; and
- (ii) it occurred in connection with fire brigade operations, eg a serious injury to a member of the public following equipment failure; or
- (iii) the release of chemicals from a pressurised cylinder by firefighters.

The HSE does not consider brigades to be responsible for reporting injuries to persons, other than brigade employees, if these injuries arise directly from the incident itself, eg fatalities at a fire in a workplace, or an injury to a workman due to the collapse of a trench.

(c) Disease

If a doctor notifies the brigade that an employee suffers from a reportable work-related disease, the Brigade Health and Safety Advisor should be contacted for advice on procedures as special report forms have to be completed and sent to the HSE area office.

Examples of reportable disease:

- 6 Inflammation, ulceration or malignant disease of the skin due to ionising radiation;
- 6 Cramp of the hand or forearm due to repetitive movements;
- 6 Anthrax;
- 6 Brucellosis;
- 6 Hepatitis;
- 6 Leptospirosis.

6. Accident and Incident Investigation

All accidents and incidents have to be investigated but not necessarily to the same extent.

In many cases an officer or an appointed specialist will carry out the investigation.

Irrespective of this, Sub-Officers will in many cases be the first line managers to encounter a problem and have to establish the facts as part of the initial investigation.

In minor cases the investigation may be completed by the Sub-Officer and countersigned by the Station Commander.

7. The Form of the Investigation

The initial investigation should be prompt and thorough. If it is not done as soon as practicable after the event, conditions and peoples memories can fade. If a station safety representative is available, then including the person in the investigation is good practice if the person is not directly involved.

There are four parts to an investigation:

- (a) Part 1 - Collect Evidence.
- (b) Part 2 - Assemble, and Consider the Evidence.
- (c) Part 3 - Compare the Findings with Brigade Standards.
- (d) Part 4 - Recommend Action for Implementation.

(a) Part 1 - Collect Evidence

In conducting investigations the key sources of evidence will normally be gathered:

- (i) At the scene:
 - ◆ from any person or persons involved;
 - ◆ from any witnesses whether at the scene or not; and
 - ◆ from any expert witnesses the brigade may need to consult.

The scene of the accident should be left undisturbed as far as possible, until any investigation has been completed. Any item of material evidence involved at the scene should be examined carefully, photographed where possible and should subsequently be retained until it is no longer required.

(ii) Persons involved

The person or persons involved in the accident or dangerous occurrences are the primary witnesses, but it should be borne in mind that:

1. They may not have been in the best position to see what actually happened.
2. If they did see what happened, they may not be able to describe it because of trauma, or because there has been too long a delay between the accident and the investigation.
3. The person or persons may be able but unwilling to describe accurately what happened because they fear disciplinary action.

4. In some cases, although the apparent cause may be the behaviour of one person, others remote from the scene may have caused that behaviour by giving inadequate training, incorrect instruction, or failing to ensure that someone is competent to carry out their duties.

(iii) *Witnesses*

Evidence from witnesses may be inadequate because:

1. They saw the outcome of the accident and subsequently made inferences as to its cause.
2. They may be unwilling to give an accurate description because of fears of being blamed in some way, or because they feel that to do so would be disloyal to colleagues.

(b) Part 2 - Assemble, and Consider the Evidence

Good investigations identify both the immediate and underlying causes and include the human factors.

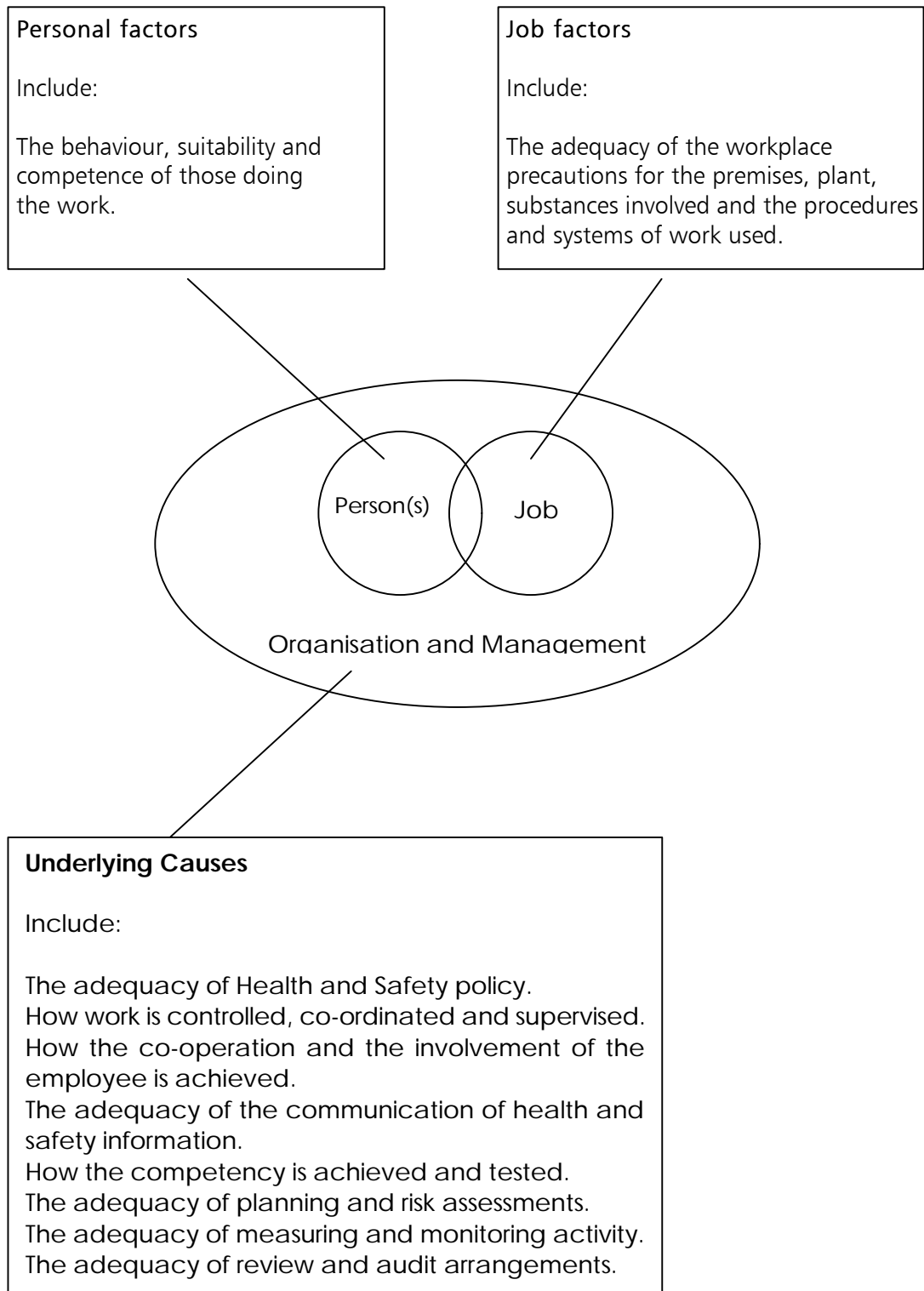
(i) Immediate Causes:

include the job being done and the people involved.

(ii) Underlying Causes:

are the management and organisational factors, which explain why the event occurred.

The diagram below shows the inter-relationship.



It can be seen from the above that a full and proper investigation for other than a minor or uncomplicated one is probably outside the scope of a Sub-Officer at watch level. The Sub-Officer should, however, be aware of the fundamentals of the likely immediate causes in order to commence the initial investigation and report.

(c) Part 3 - Compare the Findings with Brigade Standards

The investigation should include an initial comparison with brigade standards to establish the "what and how procedures have been done". This can help to reduce the subjective nature of the investigation and establish any likely legal implications. Where likely legal implications are evident, they should be reported immediately to the Station Commander or the Health and Safety Advisor.

(d) Part 4 - Recommend Action for Implementation

The final part of the initial investigation should be to complete a report of the findings to date, together with recommendations and prioritised action to be taken.

Key data to be covered in an accident, ill health and incident report should include the following:

(i) The event

1. Details of any injured person, including age, sex, experience, training, etc.

2. A description of the circumstances, including the place, time of day and conditions.

3. Details of the event:

actions which led directly to the event;
the direct causes of any injuries, ill health or other loss;
the immediate causes of the event; and
the underlying causes, failures in workplace precautions, risk control systems or management arrangements.

4. Details of the outcomes, including in particular.

5. The nature of the outcome - for example, injuries or ill health to employees or members of the public; damage to property; process disruptions; emissions to the environment; creation of hazards.

6. The severity of the harm caused, including injuries, ill health and losses.

7. The immediate management response to the situation and its adequacy:

was it dealt with promptly?
were continuing risks dealt with promptly and adequately?
was the first-aid response adequate?
were emergency procedures followed?
was the event preventable and, if so, how.

- (ii) The potential consequences
 - 1. What was the worst that could have happened?
 - 2. What prevented the worst from happening?
 - 3. How often could such an event occur?
 - 4. What was the worst injury or damage that could have resulted?
 - 5. How many people could the event have affected?
- (iii) Recommendations
 - Prioritised actions and targets for completion.

References

Successful Health and Safety Management, HSG65, issued by the Health & Safety Executive.

A Guide for Managers - Fire Service Health and Safety Guide Volume 2, issued by HM Inspectorate, publications section.