

4 SAFETY AUDIT

- The remaining topic in the safety management model is the safety audit, which is an essential tool to maintain the performance of the safety management system. It constitutes the "feedback loop" which enables the association to reinforce, maintain and develop its ability to reduce risks to the fullest extent and to ensure the continued effectiveness of the safety management system. Association should carry out a safety audit of their existing arrangements for the safety management system.
- 4.1.1 What is a "safety audit"?

 In this Guide, "safety audit" means an arrangement for
 - (a) collecting, assessing and verifying information on the efficiency, effectiveness and reliability of a safety management system; and
 - (b) considering improvements to the system.
- 4.1.2 A safety audit is a systematic examination to provide an independent assessment of the validity and reliability of the management planning and control systems. Auditing supports monitoring by providing management committee with information on the implementation and effectiveness of plans and performance standards. It also provides a check on the reliability, efficiency and effectiveness of the arrangements for policy making, organizing, planning, implementing, measuring and reviewing performance. Auditing needs to be comprehensive and examine over time all the components of the safety management systems outlined in earlier chapters.





4.1.3 Safety audit involves a series of examination, assessment and verification processes to determine whether activities and related results conform to planned arrangements and whether these arrangements are implemented effectively and are suitable to achieve the association's safety policy and objectives. In order to maximize the benefits of a safety audit, suitable arrangements for the auditing processes of (1) collection of information, (2) assessment and verification of information and (3) consideration of improvements should be made.

4.1.4 Arrangement for collecting information

(a) Interviewing individuals

Individuals should be interviewed to gain information about the operation of the safety management system and the perceptions, knowledge, understanding, management practices, skill and competence of staff, coaches and participants at various levels in the association.

In general, key personnel in the association to be audited, as well as those coaches, athletes and participants including part part-time, free-lance and sports service providers connected with the operation of the safety management system in that system in that association, should be required to provide relevant information to the safety auditor. It may be necessary to utilize pro-forma questionnaires to ensure that interviews are carried out in a structured manner and that all the information required is obtained efficiently and with the minimum of inconvenience to the parties involved. Key personnel usually include the management committee members and persons with specific responsibilities for safety such as the safety officer/safety advisors etc. Information gathered through interviews should be verified by supporting information from independent sources, such as that acquired by carrying out visual observation of activities / processes and physical conditions of activity site and examination of records



concerning the operation of the safety management system in place. Non-verifiable statements from interviews should be identified as such.

(b) **Examining documents**

Examining documents and assessing records on risk control performance standards, procedures instructions for completeness, accuracy and reliability together with the implications for competence and understanding should be carried out.

In practice, these may need to be reviewed when preparing the safety audit to identify issues to follow up and people to interview. Documentation appropriate for examination and assessment should indicate the evidence of the implementation and maintenance of the key elements of the safety management system and should include:

- the safety policy and the statement of supporting safety organization and arrangements;
- risk assessments:
- previous safety audit records;
- safety manuals and emergency procedures;
- safety risk control arrangements;
- safety committee/safety group or unit meeting minutes:
- safety inspections, accident, incident and ill-health reports and statistics;
- reports by the enforcing authorities;
- safety training records;
- in-house safety rules and regulations and records of their compliance;
- the agreements with sports service providers (if applicable);
- records of safety promotion programmes;
- statutory registers, forms and certificates; and
- safety and health suggestions.



(c) Visual observations

The aim of visual observations of physical conditions and activities within a safety audit is to examine compliance with legal requirements, verify the implementation and effectiveness of safety precautions and risk control systems, and confirm the information gathered during interviews and examination of documentation.

Observations should include simple visual observations of activity and behavior and visual checking of premises, equipment and should either involve a total examination of a particular operation or activity or be undertaken on the basis of a limited sample.

Collection of information about the safety management system requires decisions on the level and detail of an audit. All audits involve sampling and a key question is always: "How much sampling needs to be done to make a reliable assessment?" The nature and complexity of an audit should therefore vary according to its objectives and scope; the size, sophistication and complexity of the association; and the maturity of the existing safety management system.

The information so collected in a safety audit should be able to provide a check on the adequacy and effectiveness of the safety management system in place. Therefore, information concerned with answering the following questions should be collected:

- (i) Is the safety management system adequate, working well and without waste of resources? (i.e. is it doing the right things?)
- (ii) Is the safety management system working as intended and to the desired effect? (i.e. is it doing thing right?)
- (iii) Does the safety management system fit to be trusted upon? (i.e. can it ensure that all requirements regarding safety are complied with consistently and can it secure continued effective operation?)



4.1.5 Arrangements for assessing and verifying information

- (a) The adequacy of a safety management system is judged by making a comparison between what is found against a relevant "standard" or benchmark (i.e. the audit criteria). Legal standards, codes of practice/guidance notes, applicable standards and international standards should be used to make audit judgments.
- (b) Sufficient evidence should be collected to determine whether the association's safety management system conforms to audit criteria. The evidence obtained should form the basis of objective findings about the audit rather than subjective judgments about performance. Evidence is typically based on interviews, examination of documents, visual observation of activities and conditions, existing results of measurements and tests, or other means within the scope of the audit.

Indications of non-conformity to the audit criteria for the safety management system should be recorded.

- (c) Evidence should generally take the form of both qualitative and quantitative data. The use of correctly designed audit aids such as checklists and interview questions, etc. should simplify the analysis of the data. In some cases, it would be helpful to score audit findings so that changes in performance can be measured from one audit to the next. Where such an approach is adopted, it should be based on auditing methods that ensure consistency in scoring.
- (d) The value of a safety audit is dependent upon the experience and knowledge of the safety auditor, his ability to interpret





and use the audit findings, and the implementation of the recommendations of the safety audit report. It is also dependent upon the integrity of all the parties involved. Therefore, checks should be built into the system to help to avoid the misrepresentation or misapplication of safety audit results.

(e) The safety auditor should review all of his audit evidence to determine where the safety management system does not conform to the safety management system audit criteria. He should then ensure that audit findings of non-conformity are documented in a clear, concise manner and supported by audit evidence.

In this Guide, "audit finding" means results of the evaluation of the collected audit evidence compared with the agreed audit criteria.

Lastly, audit findings should be reviewed with the management committee with a view to obtaining acknowledgement of the factual basis of all findings of non-conformity. If contention is raised by the responsible personnel, it should be clarified before the audit findings are brought to the association.

4.1.6 Arrangements for consideration of improvements

(a) Based on the audit findings and with reference to supporting evidence, the overall performance of the safety management system should be assessed. If there are inadequacies/non-conformities identified about the existing safety management system of the association, recommendations on action for improvement to the system should be made. The audit findings should also identify the observed strengths and suggest how they can be built on.





A plan based on the audit findings for improvements to the (b) safety management system should be developed and drawn up. This plan should consist of necessary remedial measures/actions to rectify the inadequacies/nonconformities and should be drawn up together with responsibilities, completion dates and reporting requirements. Follow-up monitoring arrangements should be established to ensure satisfactory implementation of the plan for improvements.

4.2 The appointment of a safety auditor

- (a) The Sporting Association should appoint a safety auditor to conduct the safety audit. The safety auditor should be independent of the activity that is to be audited. This may involve one person, a team or external consultants. Factors that should be considered by the association should include the availability of the auditor for the length of time necessary to undertake the audit; the availability of an auditor with the necessary skills; the level of audit experience required; the requirement for specialist knowledge or technical expertise; the danger of an internal auditor being over-familiar or satisfied with the association's arrangements, compared with the benefits of the fresh eyes and a possibly more questioning approach of an external auditor; and the danger of unfamiliarity or lack of understanding, particularly where complex issues or processes are involved. The association should consider the following basic criteria when appointing a safety auditor:
 - The auditor should understand his task and be competent to carry it out.
 - The auditor should be familiar with the sports and the processes being carried out in the association.
 - The auditor should have a good knowledge of safety management practices for the sports.



- The auditor needs to have the status, experience and knowledge of the relevant standards/systems he is auditing against to enable him to evaluate performance and to identify deficiencies.
- (b) The appointment of a safety auditor should preferably be done in writing by the association so that there is documentation to show the appointment.
- 4.3 What should the association do to facilitate the safety audit?
- 4.3.1 Auditing is an essential element of a safety management system, not a substitute for it. For safety auditing to be of value, management committee should be fully committed to the concept of auditing and to its effective implementation within the association. It should also be noted that safety auditing cannot be a success without the full support of committee members, staff, coaches, athletes and participants including part-time, free-lance coaches and sports service providers. The management committee of an association should therefore provide all necessary assistance, facilities and information to enhance the progress of the safety audit.
- 4.3.2 What "assistance" shall be provided?
 - (a) Full co-operation with the safety auditor
 The association should ensure that all committee members, staff, coaches, athletes and participants including part-time, free-lance coaches are made aware of the objectives of conducting safety audit and its benefits so that they would not see the audit as a threat. All should be required to be open and to co-operate wholeheartedly with the safety auditor, and to respond to any questions and request for information/data frankly and efficiently during the audit.





(b) Determination of the scope of the safety audit

The scope of the audit should be determined by the association in consultation with the safety auditor prior to the audit. The scope of the safety audit should describe the extent and boundaries of the audit in terms of factors such as physical location and activities as well as the manner of reporting. All committee members, staff, coaches, athletes and participants including part-time, free-lance coaches and sports service providers should be informed about the audit scope by the association, who should ensure that the resources committed to the audit should be sufficient to

(c) Assisting in the establishment of the audit criteria and audit plan

meet its intended scope.

The association should participate fully in the making up of the safety audit criteria with the safety auditor. The safety audit criteria should include policies, practices, procedures or requirements against which the safety auditor compares collected audit evidence about the standards of the elements of the safety management system and their associated activities. Requirements should include but not be limited to standards, codes of practice/guidance notes, guidelines, specified requirements and legislative requirements.

In addition, the association should take part in the making up of the safety audit plan to be prepared by the safety auditor. The association should fully understand the audit plan that should be communicated to committee members, staff, coaches, athletes and participants including part-time, free-lance coaches and sports service providers who will be affected by the audit. The association should also take part in the review of the plan carried out by the safety auditor during the audit process. The plan should in particular include:

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- (i) the safety audit objectives and scope;
- (ii) the safety audit criteria;
- (iii) identification of the activities and processes to be audited;
- (iv) identification of the functions and/or individuals within the association having significant direct responsibilities regarding the safety management system;
- (v) the procedures for conducting safety audit to the elements of the safety management system as appropriate for the enterprise;
- (vi) the working and reporting languages of the safety audit;
- (vii) identification of reference documents;
- (viii) the expected time and duration for major safety audit activities;
- (ix) the dates and places where the safety audit is to be conducted;
- (x) the schedule of meetings to be held with the management committee of the association;
- (xi) the confidentiality requirements;
- (xii) the contents and format of the safety audit report, the expected date of issue and distribution of the report; and
- (xiii) document retention requirements.

Besides, the association should make agreements with the safety auditor about the suitable commencement and completion dates for the safety audit, and the date by which the audit report is to be completed by the safety auditor.

(d) Provision of appropriate authority and resources:

Appropriate authority such as the power of accessibility into the association and access to confidential information and the inspection of reports, records or statutory forms relating



to safety, etc. should be provided to the safety auditor during the audit. In addition, adequate resources in terms of financial and human resources should be provided to the safety auditor to ensure that the safety audit can be carried out in an effective and efficient way.

(e) Appointment of management committee member to accompany the safety audit:

Responsible and competent management committee member should be appointed to accompany the safety auditor and to act as guides to the association and the processes and to ensure the auditor is fully aware of safety and other appropriate requirements implemented in the association.

4.3.3 What "facilities" shall be provided?

Provision of on-site facilities

association should provide the auditor adequate interview/meeting place (such as interview room) to conduct interviews with relevant personnel on site, as well as a desk and chair. The association should also provide suitable PPE for the use of the auditor during the audit process. The association should also provide adequate technical and secretarial support (such as photocopying and e-mail services; the use of video recorder/camera, personal computer and communication equipment, etc.) for the auditor when conducting the safety audit. In addition, appropriate testing and measuring equipment should be made readily available during the audit. Transportation for the auditor to go from one site to another site should also be provided by the association. Lastly, welfare facilities such as toilet and drinking water should be made available in the facilities where the audit is to be carried out.





4.3.4 What "information" shall be provided?

Tendering all documentation relating to safety matters for safety audit The association of the enterprise should fully co-operate with the safety auditor and tender all the necessary documentation for inspection and checking by the safety auditor. Document should include organizational chart, safety committee/safety working group meeting minutes, investigation reports of accidents and incidents, flow charts, work specifications and procedures, equipment safety, statutory forms/certificates, safety manuals, risk assessment reports, method statements, previous safety audit reports and records/document required to confirm that the activities meet the safety standards.

- 4.4 What should the association do after receiving the audit report?
- 4.4.1 Upon receiving the safety audit report submitted by the safety auditor after the completion of the safety audit, the association shall as soon as practicable (i.e. within one to two working days in general) thoroughly read the report with a view to understanding its major contents. He should countersign the report and record the date of his countersignature.
- 4.4.2 Before countersigning the safety audit report, however, the audit findings/conclusions and the recommendations for improvements to the safety management system should be seriously considered by the association and also by the management committee (including those affected by the findings of the report). The association should also communicate the substance of the audit report and the recommendations for improvements to the safety management system, if any, to appropriate personnel (such as committee members, staff, coaches, athletes and participants including part-time, free-lance coaches and sports service providers, if applicable) who would be affected by or involved in the recommendations for improvements.



4.4.3 If the safety audit report contains recommendations for improvements to the safety management system, the association shall draw up a plan, preferably in written form and with remedial measures, responsibilities, completion dates and reporting requirements, etc, for the implementation of the improvements as soon as possible. In general, a plan for improvements should include the following essential components:

(a) Present situation

The present situation about the effectiveness, efficiency and reliability of the safety management system in operation in the association should be defined as specifically as possible in order to compare it with the desired situation. This should be based on the audit findings of the existing safety management system revealed in the safety audit report submitted to the association.

(b) <u>Desired situation</u>

The desired situation regarding the effectiveness, efficiency and reliability of the safety management system of the enterprise should be defined as specifically as possible in order to measure accomplishment. This should be based on the recommendations for improvements to the existing safety management system of the enterprise.

(c) Needs for change

The needs for change should define exactly what should be accomplished in order to move from the present situation to the desired situation. It should include remedial measures to improve the overall effectiveness, efficiency and reliability of the safety management system in the association.





(d) Action plan

- The action plan should be the "how-to" with specific steps, time-lines and accountabilities/responsibilities. It should be specific enough to be measurable and should lead logically towards the desired situation regarding the effectiveness, efficiency and reliability of the safety management system.
- In general, the action plan should answer the questions of "what", "who" and "when to do" for improvements to the safety management system. Monitoring arrangements should be laid down in the plan to ensure its effective and efficient implementation.
- The association shall as soon as is practicable implement the plan drawn up to rectify the shortcomings that exist in the safety management system. For simple and straightforward remedial measures such as slight modifications of in-house safety rules, the plan should be implemented within a week's time after it is drawn up. However, for more complex issues such as re-designing of the programme for accident control or the elimination of hazards for high risk processes, implementing should begin in 2 to 4 weeks' time after the plan is drawn up. The completion date for the implementation of the plan should be affixed closely to the date proposed in the plan as far as possible.
- The association shall also keep a copy of the report and the plan, if any, in a register for future reference.
 Follow-up monitoring arrangements should be established by the proprietor or contractor to ensure satisfactory implementation of the plan for the improvements to the efficiency, effectiveness and reliability of the safety management system.





5 REFERENCES

- 5.1 Reference has been made to the following materials during the preparation of this Guide:
 - (a) Successful Implementation of Works Bureau and Housing Authority Health and Safety Management Systems, 1998, Occupational Safety and Health Council, Hong Kong
 - (b) Course materials for safety auditor course, 1997, YHL International, Singapore
 - (c) Guidelines for the Establishment of Safety Management System at Construction Worksites, 1995, Singapore Contractors Association Ltd., Singapore
 - (d) Risk assessment- A Practical Guide, 1993, Institution of Occupational Safety and Health, United Kingdom
 - (e) Successful health and safety management, 1997 Second Edition, Health and Safety Executive, United Kingdom
 - (f) Health risk management: a practical guide for managers in small and medium-sized enterprises, 1995 Edition, Health and Safety Executive, United Kingdom
 - (g) Safety representatives and safety committees, Third Edition, 1996, Health and Safety Executive, United Kingdom
 - (h) AS/NZS4360:1995 Australian/New Zealand Standard on Risk Management, 1995, Australia
 - (i) Safety Auditing A Management Tool, Donald W. Kase/Kay J. Wiese, 1990, Van Nostrand Reinhold
 - (j) Safety Management Systems, Alan Waring, 1996, Chapman & Hall





6 **ANNEXES**

Sports Safety Framework 6.1

Evaluation, Follow-up

Surveillance,

Event Medical Coverage

Training Facilities

Exercise &

Training &

Pre-participation

Screening

Education

NSA SPORTS SAFETY FRAMEWORK

Recommended by Sports Safety Committee

GOVERNANC

For NSAS ORGANISATIONS & OFFICIALS

For NSAs ORGANISATIONS & OFFICIALS

(FROM OFFICIALS TO FOR EVERYONE

PUBLIC)

(FROM OFFICIALS TO PUBLIC)

FOR EVERYONE

FOR CARDED ATHLETES

SUPPORT TO

(1) Cardlovascular

(1) Education on Sports

Compulsory Annual Screening

(1) Collaboration with ITE

(2) Enforcement of

Screening

Screening

Questionnaire

- Risk Assessment Course for NSAs

Management

(i) Key Performance Indicators

- NSAs Funding Component

- Yearly Reviews - Enforcement

- Awards & Rewards

- Posters, Sports Safe U Guide

(2) Advisory - PAR-Q

NSAs Sports Safety

FOR ORGANISERS & OFFICIALS

FOR ORGANISERS & OFFICIALS

- S.A.F.E Champion

- Committee

(2) Audits

involving SMD & SSY

(4) Sport Specific Medical Committee

- Checklists

(5) Conduct Debriefs and After Action Reviews

(f) Refuse Entry for individuals who did not comply with medical recommendations

(1) Certification on First Aid, CPR & AED

(2) Regular Practice &

Emergency Drills

(3) Emergency, Plans Reviews and Drills

NSA Safety Management System

(4) Sports Safety Managerment

AEDs at Facilities

(2) Staffing & Equipment

Safety Excellence

(4) Personnel & Requirement

NSA Safety Management System

System

(3) Water Lifesaving Skills. Proper Search & Rescue (5) Review of Screening (4) Clinical Practice (3) Screening for Hypertension Programmes Guidelines

(2) Health Screening for Diabetes Mellitus & High Cholesterol

Sports Sarety Clinics

uestionnaire

PAR-Q

- Specific

(3) SEP Funding

Equipment

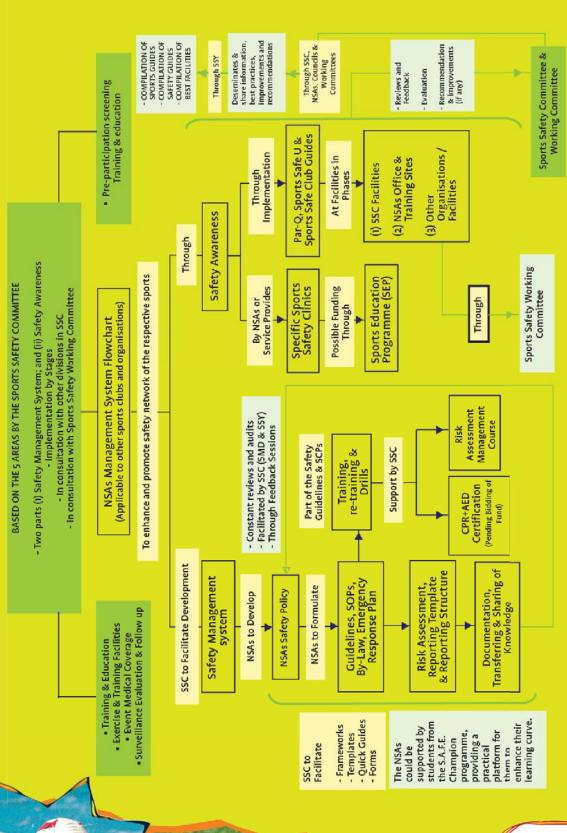
- AEDs

(2) Loan of Safety Attachment Champ - Industrial - S.A.F.E

FOR NON-CARDED
ATHELLES SCHOOLS
& CLUBS

(3) Near Future; (4) Further discussion LEGEND

6.2 <u>National Sporting Association Safety Management System</u> Framework





6.3

		ŏ	Consequence	90	
	Insignificant	Minor	Moderate	Major	Catastrophic
Likelihood					
Almost Certain	Significant	Significant	High	High	High
Likely	Moderate	Significant	Significant	High	High
Moderate	Low	Moderate	Significant	High	High
Unlikely	Low	Low	Moderate	Significant	High
Rare	Low	Low	Moderate	Significant	Significant





Risk Assessment Record

Hazard ID Number		Activity Area
Hazard Desription		
Causes & Backgroun	d	
Likelihood	Consequence	Risk
Mitigation Measures	5	
Risk Assessment	Risk Assessment Team I	members
Date		





	Closed Yes/No								
	Further Action Actually Carried Out Yes/No								
	Further Action Required Yes/No								
	Any Decisions								
	Reported To Council Yes/No								
	Passed To Date								
MITIGATION	Passed To Body Responsible								
	Risk Asmt Completed Date								
	Risk Asmt Schd for Date								
	Date Identified								
HAZARD	Description								
									4

