

Building sound foundations

Guidance on managing safety rules and procedures

Report submitted to the IOSH Research Committee

Published in 2012



University of Ballarat
Learn to succeed



IOSH, the Chartered body for health and safety professionals, is committed to supporting health and safety research that has a practical application in the workplace. We're pleased, therefore, to have worked with HASTAM and the University of Ballarat to publish this guide on managing safety rules and procedures.

Forming part of our research and development portfolio, this document joins our range of authoritative, free guidance available at iosh.com/research

Building sound foundations

This document is aimed at senior safety professionals in organisations whose job it is to develop and improve safety rules and procedures.

The guide contains practical advice to help businesses make their safety rules more effective and efficient, and includes:

- a nine-step rule management process
- examples of what good practice looks like
- an intervention plan that all organisations can use to reduce the number and complexity of rules while still controlling risks effectively.

November 2012

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1 Introduction

This report is based on *Management of safety rules and procedures: a review of the literature*,* as well as on workshops with safety professionals from a variety of organisations.

The report provides practical guidance on rule management, in contrast to the more scientific treatment found in the literature review.

The literature review found that studies of rules fell into two contrasting paradigms. The review also proposed a model of procedure management that attempts to draw lessons from both paradigms and combine their strong points.

The model outlined in the literature review forms the basis of this document.

We start with a summary of what we take from the two paradigms described in the review and how we try to combine the strengths from each approach.

We then provide a list of definitions and 15 principles which underpin a set of nine steps of good rule management. Each of the nine steps is examined in turn, including a discussion on good practice to achieve each of those steps.

We conclude with a summary intervention plan that organisations can use to review and revise their approach to managing safety rules.

* Hale A, Borys D and Else D. *Management of safety rules and procedures: a review of the literature*. IOSH Research Report 12.3. Wigston: IOSH, 2012. www.iosh.co.uk/rulesandprocedures.

2 Notes of guidance on managing safety rules and procedures

Introduction

The review on which this document is based found two opposing models or ways of thinking about rules that have an effect on safety.

Model 1 is a top-down view of a static set of rules, where the focus is on making sure rules are followed and not broken. Model 2 is a bottom-up view of rule making as relatively dynamic, locally situated and socially constructed, embodying workers' tacit knowledge from their experience of diverse reality. Under model 1, for supervisors and managers who are at a distance from performing the work, making sure workers don't break the rules is central. For those actually performing the work and thinking in terms of model 2, rule violations are typically regarded as skilled adaptations.

Both models have their strengths and weaknesses, and the potential gap between rules and reality is likely to be frustrating for workers, supervisors and managers alike. Therefore, it's important to understand and monitor the gap between rules and reality, not only to reduce frustration, but also to understand why it exists. This requires an understanding of the strengths and weaknesses of model 1 and model 2 so that organisations can draw on the strengths of both models and limit their weaknesses. To help organisations achieve this, the process of rule management outlined below brings together the best aspects of both models and provides organisations with a new framework for thinking about and managing their rules.

From model 1 we take the idea that the process of making and modifying rules must be transparent to supervisors and auditors, so that it can be managed. Rules need to take into account knowledge from safety and subject experts, as well as that of operators at the sharp end, and be well-formulated, understandable and appropriate to the competence of the rule user. Above all, the goal should be to reduce the number and complexity of rules and the associated bureaucratic paperwork, without compromising risk. To achieve this, safety rules should be integrated with all other rules governing the quality, efficiency, productivity, and so on, of a particular activity.

From model 2 we take the idea that, as far as possible, rules should be made by those who will use them, with support from supervisors and safety experts.

Rule sets should be seen as dynamic – never complete and always work in progress. The central principle of the rule management process is reducing the number and complexity of rules.

Written rules promoting safe behaviour in hazardous situations shouldn't be seen as the first step in risk control. Reducing danger by design and layout take priority, as do training and social control to place the rules in the heads of those using them, without the need for having them written, except as a reference and training manual.

The guidance is based on a process of rule management, representing a series of steps following the logic of a 'plan-do-check-adjust' (PDCA) cycle, although we change the order to CAPD to emphasise the dynamics of the process and the central role of monitoring, adaptation and learning. At each step, we provide guidance about what that step entails and what can be considered good practice in carrying it out. The 'Notes of guidance' are followed by a set of principles or issues, distilled from the literature and from good practice, which should be taken into account when interpreting the steps of the rule management process. The rule management process is supported by an intervention plan that outlines the steps your organisation could take to review and revise its safety rules.

Giving guidance about this area is complicated by the range of organisations and activities it potentially needs to cover. At one end of the range is simple routine work by relatively unmotivated labour, in small or medium-sized organisations with relatively low risk in a relatively static and predictable environment. At the other end is complex and unpredictable work, performed by highly specialised, highly motivated professionals, carrying a high risk and conducted in large, complex organisations such as hospitals, as well as those in the aviation and process industries. When using this guidance, therefore, you should tailor it to your own circumstances, particularly in considering how formal or informal the conduct of each step needs to be. We believe that the functions set out in the rule management process can be applied in all organisations, although putting them into practice will differ depending on the size and complexity of the organisation or activity, the risk levels of the activities and the competence of the people carrying out those activities.

Definitions

A number of different terms are used in this area, often with overlapping meaning. We use the following definitions:

- Rule: a generic term for any specification of the way in which an activity should, or shouldn't, be carried out, or the goal that should be achieved by the behaviour.
- Goal: a specification of the objective to be achieved by an activity, without specifying how that should be achieved.
- Process rule: a specification of the steps a person should take to work out how a goal should be achieved.
- Action rule: a specification in a series of 'If... then' steps, indicating exactly how a task should be carried out.
- Policy: a high-level specification of goals and the broad process rules by which they will be achieved.
- Procedure: a specified way to carry out an activity or a process. Procedures can be documented or not. This can be a combination of process and action rules.
- Work instruction: a detailed description of how to perform and record a task. Work instructions may or may not be documented. A work instruction is an action rule.

Rules may be written, but don't have to be if they're present in the heads of the individuals and groups who need to follow them.

Principles

- 1 Rules, documented or not, are necessary and inevitable where behaviour has to be controlled, but they're not the only, and not always the preferred, solution to that control; design, competence and social control are alternatives that should be considered.
- 2 Rules influencing safety are only one form of relevant rule for an activity. There may be others for quality, productivity, sustainability and so on. If all the rules are combined into an integrated set governing all objectives of each activity, the size and complexity of the rule book will be reduced.
- 3 Rules on paper don't determine behaviour; only if they're known, understood and followed do they have an influence. Therefore, managers are encouraged to monitor the gap between work as prescribed in the rules and work as actually performed, to make sure that the rules keep pace with the reality of task demands.
- 4 There are two opposing views of rule making and rule use. One emphasises the central design of rules by managers and experts, resulting in the top-down teaching of the rules to operators, with compliance achieved through supervision and discipline. The other emphasises the bottom-up development of routines by frontline personnel, capturing their competence and ability to adapt to the diversity of real life. These are two extremes of a continuum. Good rule management combines elements of both to suit the circumstances.
- 5 The participation of competent and motivated rule users in making and improving rules is essential. Experienced operators are *the* experts in rule use in real-life situations.

- 6 We consider goals, process rules and action rules as a hierarchy of rules representing consecutive restrictions of the freedom of choice and action of the rule user.

Goals specify only the outcomes and leave it open how best to achieve them; process rules specify how to translate the goals into a process to arrive at the best or the acceptable behaviour; action rules specify exact behaviour and give the rule user no freedom of choice.

Goals, process rules or action rules can be produced by the regulator or by an organisation in its management hierarchy above the rule user, or by the rule users themselves, depending on how much autonomy and responsibility the regulator or managers decide to leave to the employees at the sharp end. If the rules are made in the hierarchy in the form of goals or process rules, the rule user has to translate them into specific actions or behaviour at a specific time and in a specific situation. The more the rules of an organisation are specified at an action rule level, the more exceptions there are likely to be to them in different situations, and the more necessary it is to have effective ways of adapting them to those circumstances. The more the rules are specified at a goal or process rule level, the more trust is placed in the rule users to translate them effectively and safely to each situation as it arises. Rule making is a balance between these two concerns.

A useful starting point is to assume that the operator is capable of making their own action rules, unless there is evidence to the contrary. This favours bottom-up rule making.

- 7 In most situations there is more than one way to carry out a task safely. What matters is keeping within a 'safe envelope' of behaviour. For competent rule users, rules can be phrased as guidance to be used, unless the person knows a way of behaving that is at least as safe and achieves the same result. This can reduce the number of rules which must be followed exactly (golden rules).
- 8 Rules that limit people to a set of behaviours significantly smaller than the safe envelope of behaviour will likely be broken. Rules (and training) need to provide guidance on how to recognise the boundaries of that envelope as they shift and change, and how to navigate safely within them.
- 9 If people have experience of using their own judgment to decide the correct behaviour in their normal work, so that they can operate within a safe envelope, they're likely to be better able to work out what to do when faced with unexpected and unpredicted situations.
- 10 Rule violation is a signal that all is not well with the rule system. It shouldn't trigger a knee-jerk reaction of imposing punishment and discipline, but a reaction of reporting and investigation, which may lead either to rule change or to discipline to encourage compliance. Compliance is important, but understanding non-compliance is more important.
- 11 An organisational or group culture defines its routines and is defined by them. If rules, or adaptations of them, are produced in a bottom-up way by operators at the sharp end, this process must be made explicit so that the organisation can influence and manage it. The construction of rules by social groups is valuable, but it can drift towards the boundaries of the safe envelope under social, group or supervisory pressure, unless steered and controlled.
- 12 All rules have a life-span and become old and potentially outdated with time. They need to be challenged regularly. A 'sunset provision' – whereby any rule is subject to a regular, planned review that can lead to repeal or reaffirming in the same or a modified form – can be a valuable tool to avoid rules becoming disconnected from the reality of task demands.
- 13 In activities where people have to work together, there is a stronger case for a more central (group or system level) formulation of rules, so that each individual operates predictably for the others. Typical of these are traffic systems, shared sites, eg construction and maintenance, emergency situations.
- 14 Where different groups and organisations operate together in an activity, there is an added need to integrate their rule systems. This requires considerable discussion and negotiation to co-ordinate the steps in the rule management process, as well as to identify and resolve conflicts in objectives and priorities. It may also require agreement on harmonised rules that are less than ideal for any one organisation or group.
- 15 The rule set (safety manual) needed by an auditor to assess the effectiveness of the safety management system (SMS) will be completely different from that needed by an operator – novice or expert – at the sharp end. The design of the two rule sets needs to be co-ordinated so that the SMS stays up to date, although the form, structure and size of the two sets will be completely different.

The rule management process

Figure 1 summarises the rule management process. We assume that most users will start with an existing organisation or activity along with a set of existing rules that they're in some way dissatisfied with. They may feel there are too many rules, that they're not fully applicable or consistent, that they're continually violated, that they don't protect against all the risks they should, or that the rules can't be found when needed. Users in such a situation should start with box 1. This is probably also the best starting point for those with a rule management system they want to benchmark with good practice.

Those who have a clean sheet of paper, with a new process or activity, should start at box 6 and go through to box 9 and then box 4, until they reach the point where the rules are being used in practice and they join the first set of users. Box 6 as an entry point applies both to those who devise rules for a process which has none up to now, and to anyone faced in practice with a situation they have no rule for and have nobody to devise one for them. Starting there can result in a more radical review of the reasons for having rules, the alternative risk control measures there can be, and the complete design and structure of the rule system.

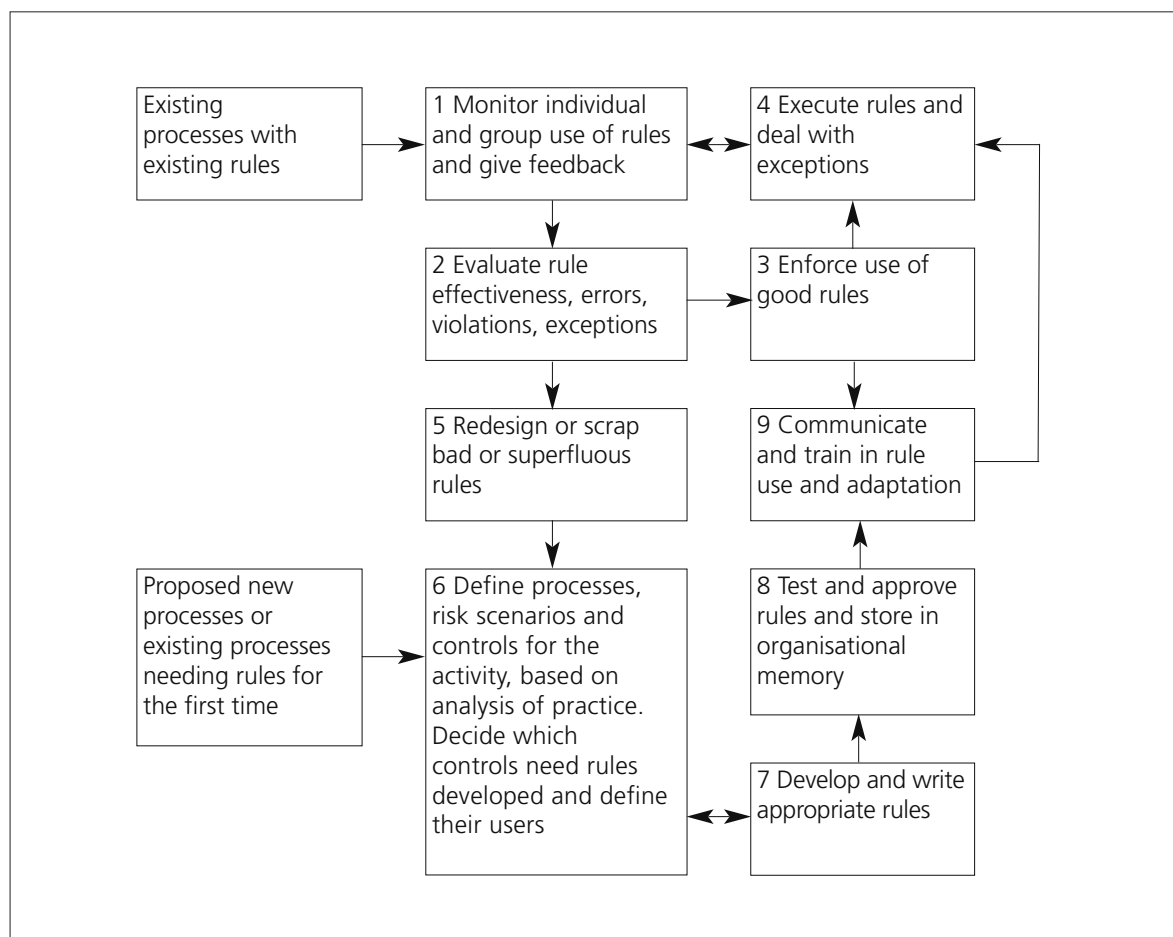


Figure 1: The rule management process

1 Monitor individual and group use of rules and give feedback

This step drives rule making and improvement. It provides the essential information about whether the current rules and procedures are working satisfactorily or need change. Rule management is never finished, so this step should be repeated at regular intervals. This step considers the gap between rules and reality, and the need to adapt rules to meet the diversity of local conditions. It's an important part of the core task of every supervisor and manager.

Rule users are often not aware that their behaviour now deviates from what they believe they learned and what they think they perform. Observations, supported by video or photographic material – if everyone concerned agrees and if it has been cleared with bodies such as unions or works councils – can confront them with this discrepancy and drift in behaviour, and make them aware of the need to comply again.

Monitoring requires interaction between rule users, supervisors and rule makers. The skills of supervisors in encouraging reporting and discussion, and coaching frontline staff, are crucial to the success of this step. Monitoring can include:

- observing work in practice, with discussion of any deviations from current rules; observation may be by colleagues or supervisors, depending on what fits the organisational culture, and may be part of a formal behavioural auditing programme
- reports through formal or informal incident reporting or suggestion schemes in which workers propose rules that should be abolished, reviewed or replaced
- discussions about the adequacy of rules and the issue of exceptions held at toolbox meetings or at training and refresher training courses

- analysing incidents and accidents in search of deviations from current or assumed rules
- results from internal or external audits
- automatic recording of behaviour through 'black boxes', CCTV or other information technology
- experiments where a group or department 'works to rule' for a short period to see which rules are not useable in practice, which can trigger reform.

Monitoring the rule use of lone workers is particularly difficult, especially if they move between areas in a workplace. It requires particular attention to self-monitoring and discussion.

Where different organisations work together and their rule systems interact, monitoring needs to be co-ordinated between them, defining who is expected or required to monitor and correct whom.

Deviations from rules happen for many reasons, both negative and positive. The positive reasons are often that there are other, more effective or efficient ways of achieving the task goals than those laid down in the rule or procedure. Negative reasons may be because of poor rules (not matching real-life situations, or poorly formulated), poor communication or explanation of them, production pressures, peer pressures or other conflicting objectives, supervisors turning a blind eye to non-compliance, or individual factors.

Widespread and persistent violation of a rule is almost always a signal to change the rule.

The discovery of violations, deviations or exceptions, or other inadequacies in rules, should be rewarded with praise and treated as an opportunity for learning and not, at least in the first instance, be treated as a disciplinary matter. The discovery of good compliance with good rules should also be praised. Feedback about the results of monitoring has the effect of confirming the importance of the rules and participation in making, monitoring and working with them.

Particular care needs to be taken with automatic recording equipment and recorded observations. Any such use would need to be cleared with employee representatives (trades union, works council, or other relevant bodies). Rules need to be agreed for the use of any such data, their confidentiality, how long they're kept and so on.

Accident and incident investigators should have a clear goal of assessing whether rules can be simplified or scrapped, in order to counterbalance the tendency for the result of such investigations to be an increase in the number and complexity of rules.

Managers and supervisors have an essential task as role models in complying with rules.

2 Evaluate rule effectiveness, errors and violations

Evaluating rule effectiveness, errors and violations must take into account the extent to which rules reflect the reality and diversity of activities in a workplace, as opposed to the expectation that reality and the diversity of activities should fit the rules. The latter path inevitably leads to exceptions, errors and rule violations. The participation of those at the sharp end is a crucial aspect of rule evaluation so that the informal rules based on shared practical experience and tacit knowledge can be made explicit. Building trust, however, is a necessary organisational precondition if this is to occur. Making tacit rules explicit will also reveal gaps between rules and reality that would otherwise remain hidden and be difficult to manage. This point is critical to achieve the goal of reducing the number and complexity of rules without compromising risk. Fewer and simpler rules targeting critical activities and their associated risks may lead to higher levels of compliance without compromising production or safety. This approach will also make it easier to enforce the use of good rules (the next step in the process).

It's recognised that evaluation goes on automatically among individual rule users and tightly knit work groups. However, only if it's made explicit can the learning from it be harnessed for use by others and the organisation.

This step should also be a collaboration between rule users, rule makers and supervisors to find out why the rule is being deviated from and what the consequences are. The evaluation needs to consider whether:

- the rule, together with other barriers, is an effective way of controlling the risk
- the deviation is a better method of behaving, or at least as good for the situation in question, which may be an exception to the general rule
- the risk is significant enough to need an explicit rule
- the rule is well-formulated, given the diversity of situations it's supposed to cover
- the rule has been communicated, explained and accepted.

Evaluation can have the following outcomes:

- The rule is found to be good, appropriate and well-formulated, and the deviations inappropriate, in which case enforcement is needed (see 3).
- The deviation is justified, the risk is relatively low, there are several ways of achieving a good and safe outcome that are known to the rule users, and the rule is not needed, in which case it should be nominated for scrapping (see 5).
- The deviation is justified or understandable given the formulation of the rule, and the rule is not adequate as it stands and should be redesigned (see 5).

- A rule is conceivably not the best way of ensuring safety in the circumstances, as the physical situation may strongly condition or 'force' deviant behaviour. In this case it may be necessary to redesign the work methods, tools, machines or other aspects of the workplace, rather than hoping that rules, even with strict enforcement, will overcome the 'forcing function' of the situation.
- The evaluation reveals conflicts or a lack of consistency between different rules in the rule set for one person or group, or between the rules governing different people or groups (see 5).

Deviations that are common practice in a whole group point to the need to address the group culture and why the rule deviation has become so ingrained without being detected earlier, and whether the group is right and the 'deviation' should be accepted as appropriate behaviour.

Deviations in one or a few individuals may point to issues of specialised tasks, inadequacies of selection or training, or individual tendencies to non-compliance.

3 Enforce use of rules

If rules are good, they must be enforced in order to confirm their value. This enforcement of good rules can be through:

- social control, consisting of a work group reinforcing each other's behaviour
- supervisory or management 'pats on the back' for rule compliance.

If good rules are not complied with, non-compliance needs to be uncovered and dealt with so that supervisors and managers (and regulators) don't turn a blind eye to it.

The first response to non-compliance with good rules should be to communicate again why the rule is necessary and why the non-compliance is not as safe. Another option is to demonstrate that the deviation does not win anything significant in other ways (time, effort, quality, approval and so on).

Disciplinary action for non-compliance with good rules should be used as a last resort, once it's clear that the non-compliance doesn't have any convincing justification. The disciplinary action should be proportionate and progressive, and its structure should be known in advance. It may extend first to progressive warnings and finally to dismissal in the case of persistent non-compliance with rules that have significant consequences (see 'golden rules' below, at step 7).

4 Execute rules and deal with exceptions

This step is the proof of the effectiveness of rules and procedures and requires that all the resources necessary for rule execution must be available at the appropriate time and place.

Exceptions to rules are the norm in any work situation: there are very few 'golden rules' that have no exceptions. Rule users, therefore, always need to exercise some discretion and the rule management system needs to have an explicit function to adapt to those exceptions. It's important to avoid both over-compliance with bad rules and non-compliance with good ones.

Rules often have to cover a diverse range of situations, some of which require adaptation of the rule or exceptions from it. These need to be managed by one or more of the following:

- giving frontline personnel the option to modify the rule or decide on an exception – if so, they need training and supervision on how to exercise their discretion
- providing a more expert person (supervisor, system expert) or electronic support system who or which is available at all relevant times to propose or agree a modification or exception
- arranging for that support system within the work group.

5 Redesign or scrap bad or superfluous rules

Rule adaptation and redesign are core tasks for supervisors and managers, and ones they need to be trained and coached in, particularly in how to engage the participation of rule users.

Rules have a strong tendency to grow in number and complexity over time, as deviations and exceptions are recognised and new risk scenarios are encountered. This process requires active and explicit management by reconsidering individual rules and the rule set at planned intervals. Rule simplification and rule reduction should be an explicit goal for audit and management review. Also, integrating safety rules with other work rules will result in a significant reduction in the bulk of rules and an improvement in their relevance to each person's specific activity. It may be appropriate to give rules a 'sunset clause' indicating the point at which they will be reviewed and may be repealed, renewed or reaffirmed.

Rule simplification and scrapping usually requires an independent facilitator to overcome or reconcile entrenched views.

One way to assess the relevance of a rule could be to create experiments where workers 'work to rule', a technique used as a lever to gain advantage in industrial disputes. Working to rule inevitably slows down the achievement of organisational goals, and highlights the gap between rules and reality. Organisations could apply this technique to their advantage to weed out and then revise or scrap those rules that don't contribute to productivity or safety.

6 Define risks and controls and the role of rules in them

The purpose of this step is to challenge the whole reason for rules and to ask the question: are rules really necessary, or are there other, better ways of controlling the risks?

To develop new rules or modify or scrap bad ones, those involved must have a good understanding of the risks to be controlled and the part that behavioural guidance can or should have in controlling them. This depends on good risk assessment, covering the full range of situations that will be met with in reality. The involvement of rule users is essential to achieve full coverage, especially in relation to understanding non-normal operation and the transitions between states such as production, degraded operations, maintenance, repair and emergencies.

Risk assessments should be documented and remain available as explanations of what those risks are, under which circumstances (scenarios) they arise, and how they're expected to be controlled. The reasons given for the rules that are arrived at should be recorded and be available for training current and future users, and to inform people coming along later to modify or update the rules.

A risk control hierarchy should be applied to the choice of risk controls, under which eliminating hazards or controlling them by technological barriers is preferred over a reliance on human behaviour.

A valuable default position to adopt is that no written rules should be made unless there is a strong argument for them being essential. Alternatives are communication and training to internalise behaviour patterns, social or supervisory control to enforce agreed behaviour, and better design of processes that may negate the need for rules. A decision to rely on social processes for the control of behaviour rather than rules will have implications for leadership, culture and trust in the organisation. Not only will workers need to develop trust in one another's knowledge and experience, but there will need to be a bond of reciprocal trust between workers and supervisors/managers. This means that the organisation will need to understand which supervisor/manager behaviours engender trust in the minds of the workers, so that tacit knowledge regarding how work is performed can be brought to the surface and be shared to better understand and manage the gap between rules and reality.

When rules have been decided on as essential elements in risk control, their objectives need to be defined carefully, as well as who will be their users and who will own, monitor and adapt them.

7 Develop and prepare appropriate rules

What is appropriate will depend on the user. Potential users should be defined and may be:

- 'Operators' at the frontline of a hazardous process or activity controlling it in normal situations, or in abnormal or emergency conditions. Easily accessible written rules are more necessary for abnormal and emergency conditions, if that is at all possible given the time constraints for action. If not, a very high investment in simulator training or other intensive means of practising is needed. Normal training and practice can deal with the common, normal situations. Operators vary from experienced professionals and trades people to largely untrained, temporary staff. The latter need more detailed and explicit rules than the former, who internalise their own complex of nuanced rules through long experience.
- Managers who need to understand the rules that should govern both their own behaviour, to keep themselves safe, and the behaviour needed to give a good example to their staff and to influence staff's behaviour.
- Managers and safety professionals who evaluate the safety rules of a whole system or activity, to assess whether all risks are controlled.
- Auditors or regulators who assess whether all risks in an organisation or site are controlled.

The last two users require a completely different set of rules and their formulation from the first two. Operators need rules that are short, simple and easily available. Evaluators, regulators and auditors need the organisational memory or 'instruction book' for the safe operation of the activity or organisation that should be contained within a (written) SMS, and should therefore be extensive and exhaustive. Specific resources need to be available and used promptly to

keep the organisational memory rules up to date with reality as the plant and processes are modified.

A choice should be made as to which level (goal, process or action) a rule should be written. Rules must match the situation and the user, eg action rules for emergency situations and inexperienced users; process rules or goals (or no written rules) for experienced and professional users; and process rules for unpredicted or unusual situations (which, under certain conditions, may include emergency situations).

Rule makers should concentrate on devising rules to help frontline personnel navigate within the safe envelope of operations, coping with the diversity of reality, rather than hoping to define only one way of acting safely that will be appropriate to all situations. It may be suitable to formulate rules as guidance or as an appropriate way to behave, unless the competent operator knows an alternative that is at least as safe and achieves the objective.

Making rules requires four sorts of expert:

- operators with expertise in the reality of operational situations
- designers who are well-versed in the capabilities of the technology
- safety professionals with an overview of unwanted consequences
- writers with the skills to formulate rules clearly and unambiguously.

All experts need to be aware of the extent and limits of their expertise.

Rules work best for high-risk situations and those occurring relatively rarely, but still predictably. They work badly in situations with low perceived risk, requiring either extra effort to convince people that the risk is higher than perceived, or a decision not to use written rules in such situations.

Written rules need to be clear, unambiguous, and be adapted to the reading age and language of the user. They should also be available for consultation when required. Pictures and diagrams can work well in many cases, especially for non-native speakers or those with a low reading age.

Rule makers need to identify whether rules are mandatory and must always be followed, or are advisory and may be adapted, and if so, by whom. If there is a conflict between two or more rules, they may also need to indicate which rule takes precedence.

Golden rules?

A number of organisations experiment, or have experimented, with defining a small number of behavioural rules as 'golden rules' which should never, under any circumstances, be broken. Breaching them, therefore, results in severe penalties, up to the level of summary dismissal. Rules that have been put in this category need to be specific, simple and related to significant risk.

They include:

- wearing seatbelts at all times
- not driving with more than a permitted level of alcohol in the blood
- engaging the handbrake and removing the keys when getting out of a vehicle
- not using a mobile phone when driving
- earthing a tanker when unloading
- wearing personal protective equipment in defined areas
- not carrying ignition sources in chemical plants or potentially gas-filled mines
- not smoking inside buildings or other designated 'no smoking' areas
- 'breaking' a shotgun when not actually shooting with it
- using fall protection when working above a defined height
- placing approved barriers to cordon-off work areas from the public
- determining the presence of underground services before digging
- using a permit to work or other work authorisation for all work
- not disarming or disabling safety devices without explicit permission
- tying all ladders before using them.

Issues which arise with this approach include:

- are all the terms used in the rule defined in a way that is not open to dispute?
- are there really no conceivable exceptions to the rule?*
- is there a process in place that can handle any claimed exceptions, should they arise?
- are all the 'operators' and supervisors convinced of the value of these golden rules, so that they won't try to subvert them?
- does the designation of some rules as 'golden' devalue other rules as somehow less important?

* For example, there are legal definitions of types of driver and of circumstances where the wearing of seatbelts is not mandatory – see www.gov.uk/seat-belts-law/when-you-dont-need-to-wear-a-seat-belt. Companies might decide that some of these legal exemptions are not to be endorsed by their own rule set, but would need to be prepared as to how to handle the medical exemptions. Doubtless some of the other proposed 'golden rules' have comparable reasonable exceptions, which readers can pass an entertaining time attempting to specify.

8 Test and approve new rules, including storage in organisational memory

Testing and approving rules is a core task of rule users and their supervisors. It should be done by people who did not participate in the rule-making stage, to ensure fresh eyes and an independent check.

This test needs to examine whether:

- specific rules are practicable and cover all anticipated circumstances
- the new rules are compatible with existing ones, including with legal, regulatory and contractual requirements
- the rules can be understood by all potential users
- the risk of changing existing rules is balanced against the advantages of the new rules.

Explicit criteria for testing the rules should be defined and used.

An organisation needs to have a place to store agreed rules to form its organisational memory. This store must contain the reasons for the rules, where they do and don't apply, who owns each and keeps it up to date, and when and how it's monitored and changed. It must be kept up to date by a designated person, usually the safety professional if there's one in the organisation.

The organisational memory store is for the use of regulators and auditors so that they can assess the overall risk control system of the organisation, as well as safety professionals and trainers so that they can develop and implement the risk control system. It's not for the frontline risk controllers of the risks themselves.

9 Communicate and train in rule use and adaptation

Communication must aim to get the information about rule change to all relevant staff and make sure that they take it in. The organisation's intranet and other internal communication media, toolbox talks and other briefing meetings are possible channels of communication.

For particularly significant rule changes, it may be appropriate to conduct an examination of the new knowledge and behaviour.

This step explains the 'why' of rules, which may not be written into them, except in the organisational memory store. This is particularly important in communication and training about changes to existing rules, which will have to be unlearned and the new learned.

Refresher training is an appropriate place to discuss the effectiveness and appropriateness of rules and procedures.

It's important to train both 'operators' and supervisors/managers in how to adapt the rules to different real-life situations, as well as to train them in rule use for 'normal' situations.

Supervisors need training in the coaching role they have in rule monitoring, adaptation and redesign. The development of key performance indicators for supervisors should reflect their role in rule and procedure management, by incentivising behavioural observation, dialogue, toolbox talks, inspection and auditing.

An intervention plan for improving the management of safety rules

The purpose of this intervention plan is to outline, in general terms, the steps an organisation could take to review and revise its approach to the management of safety rules, with the goal of reducing the number and complexity of rules. Underpinning the plan is a good practice approach to the management of safety rules, including a set of principles for continually challenging and revising the need for, and quality of, safety rules.

There are five steps along the road to good practice in the management of safety rules, as shown in Figure 2. Actions for each step are also proposed.

Step 1: Establish a need and identify a champion

Define what the objectives of the intervention are. Are there problems with current safety rules and their use? If so, what are they? Are the rules regularly bent or violated? Have the rules been reviewed and updated in the past few years?

Senior management should identify a manager to champion the process of improving the management of safety rules. This action will underpin your organisation's commitment to health and safety and may have a positive impact on safety culture.

Step 2: Establish current practice

To improve organisational learning, it's important to find out if any gaps have developed between the current rules and practice. To make any gaps visible:

- use the framework for rule management as a template to review how your current safety rules have been developed and are being kept up to date. Does your organisation's current approach to the management of safety rules reflect the good practice summarised in the framework for rule management?
- find out what workers, supervisors and managers think about current safety rules, which ones they think are not realistic, and why
- talk to frontline staff about how they carry out their work on an everyday basis and how they cope with what they regard as exceptions to rules or situations where rules don't apply
- review accident and incident records for examples of rule violation
- identify gaps and the reasons for them.

Identifying gaps provides the basis for planning the next steps and targeting those aspects of rule management that are causing problems and need changing.

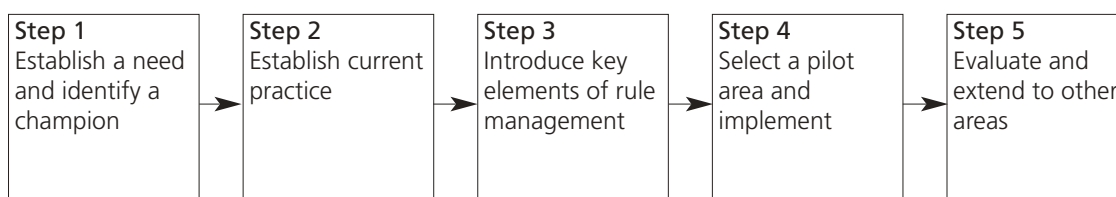


Figure 2: A five-step intervention plan for managing safety rules

Step 3: Introduce key elements of rule management

You can introduce the key elements of the rule management process through a programme of structured awareness sessions for workers, supervisors and managers. These sessions should provide an overview of the principles of rule management and the rule management framework, and stress the importance of workers' participation in reviewing, revising and discarding safety rules based on their knowledge and experience of everyday work. In some organisations, it will be important to get union representatives on board. The role played by supervisors in some organisations will change from a telling and directing style to a participating and supporting one.

Step 4: Select a pilot area and implement

Choose one area of the organisation to pilot the programme. This will allow you to evaluate the programme's effectiveness before extending it to other areas. There are a number of ways to identify a pilot area, eg accident records, a history of rule violations or enthusiasm for participating in the process. Once a pilot area has been identified, set up a working group consisting of supervisors and workers to challenge the existing safety rules and identify rules that could be deleted or changed. This needs to be supported by safety expertise and writing skills. The principles of rule management and the framework for managing safety rules should inform this process.

The outcome of this step will be an agreed set of revised safety rules and method for dealing with exceptions. Once agreed, workers need to be trained, and the new rule set put into practice. Supervisors also need to be trained in their new roles.

Step 5: Evaluate and extend to other areas

To evaluate the effectiveness of changes to the rule set, you need to evaluate it at regular intervals. In the first six weeks or so, talk to workers every fortnight about their views on the new rules and how relevant they are to their everyday work. A medium-term evaluation should be held monthly as part of your existing consultation and communication processes, including safety committee meetings and toolbox talks. Feedback must be recorded systematically, and the rule set revised to reflect feedback. Once workers see that the rules are effective in practice, you can extend the programme process, including learning from the pilot process, to other areas of your organisation.

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