Moving & Handling Strategy

An initiative of the London Group of National Back Exchange to provide

Standards for Handling People and Objects in Health and Social Care

Folder 4

Table of Contents

Appendix 5 – Risk Register

Author: David Couzens-Howard

This appendix relates to Standard B1 – 'Risk Register'

It has been developed by the NBELGSWP

Set out below are:

A process for recording and managing risk in an organisation
(Organisations will have their own systems and usually there will be a main register for the whole organisation and registers for lower levels that feed into the main one. MH risks can be fed in at any of these levels.)

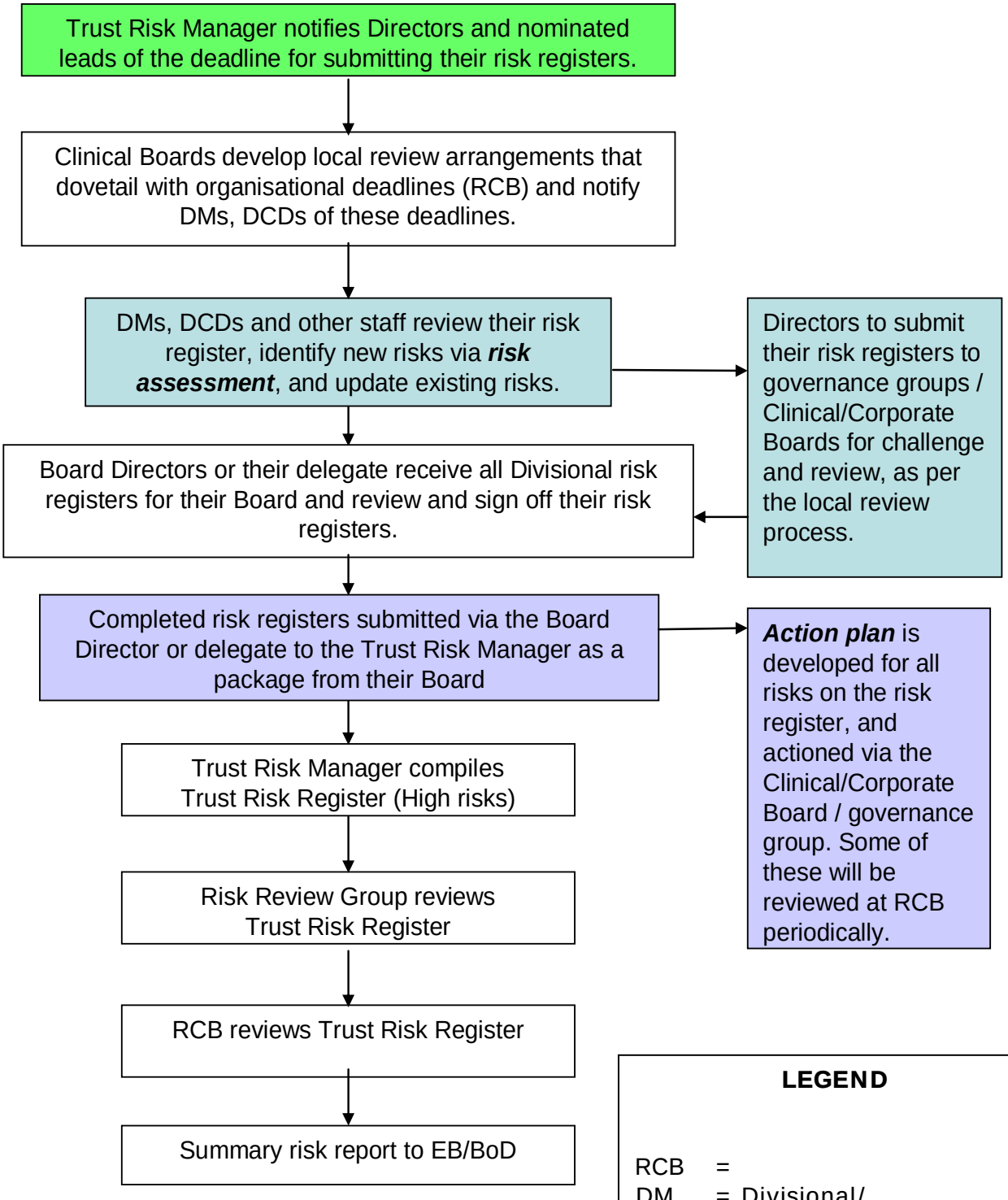
The flow chart used as an example here is reproduced by kind permission of Mark Hall UCLH.

An example of a departmental risk register

The principles to adopt are that:

- All hazards and risks are controlled in the first instance at local level.
- Risks that cannot be resolved at one level are escalated to the next level and may reach the organisations main risk register.
- Risks are escalated until they can be resolved or a decision is taken to accept the risk.
-

Flow chart summarising the risk register process



Risk Register for Department

Part A: Hazard Identification and Initial Response

Department _____

Ref. No.	Date hazard identified	By whom (Initials)	Description of hazard	Persons affected	Date risk assessment carried out	Risk level at time of assessment S x L = RR	Outcome: existing controls adequate / inadequate Y / N	Immediate action at this level, or, escalation to next level, with reasons#	By Whom	New risk level S x L = RR	Resolved / un-resolved. If un-resolved → → → Y / N	Further action req'd. Y / N If N, Go to Part B	Review date

Complete an assessment form for <u>each hazard</u> **S = Severity of Consequences (0 – 5); L = Likelihood or Probability (0 – 5); RR = Risk Rating or Level (0 – 25)**

#Escalated to higher register – Y / N **Assessor(s)** (name and signature) _____ **Date** / /

Risk register for department

Part B: Resolution of risks by means of short and long-term action

Department _____

Ref. No.	Date of this review	Hazard	Unresolved risks	Risk levels S x L = RR	Further action required – controls planned with dates Make a separate entry for each action and clarify timescale.	Action by	Expected new risk levels S x L = RR	Planned review date

Complete an assessment form for <u>each hazard</u> **S = Severity of Consequences (0 – 5); L = Likelihood or Probability (0 – 5); RR = Risk Rating or Level (0 – 25)**

Escalated to higher register – Y / N **Assessor(s)** (name and signature) _____**Date** / /

Appendix 6 – Systematic control of risks

Author: David Couzens-Howard

This appendix relates to Standard B2 – 'Systematic control of risks'

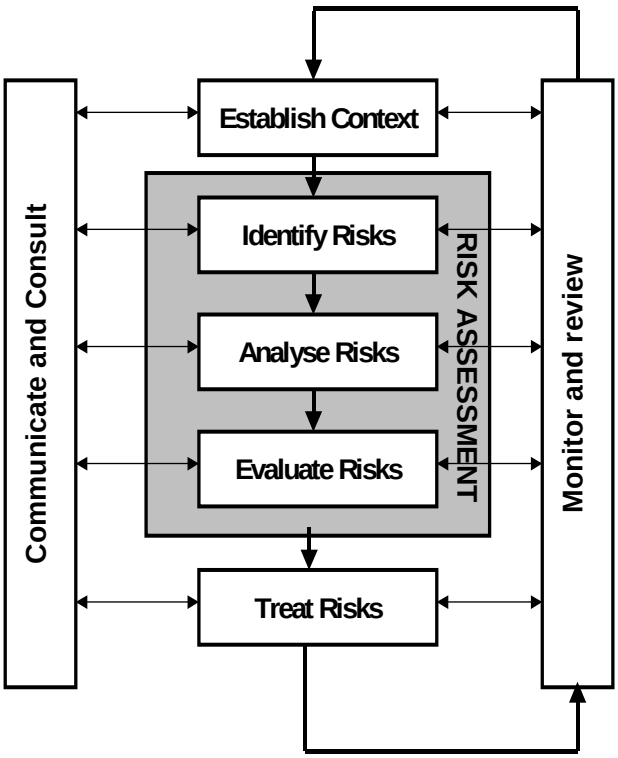
Risk management = risk assessment + risk control

This appendix has been developed from well-established risk management principles, but particular reference is made to the Australia/ New Zealand Standard Risk Management (AS/NZS 4360:2004).

Appendix 6 – Systematic control of risks

Risk management process

AS/NZS 4360:2004 - Risk management



Considerations

As may be seen from the diagram above, the systematic treatment of risks requires that, for any given hazard, we go through a process with number of stages:

1) Establishing the context
2) Identifying the hazard)
3) Analysing the risks } = Risk Assessment
4) Evaluating the risks)

5) Treat (control) the risks = Risk Control

Risk management = risk assessment + risk control

Please refer to the list of definitions at the end of this appendix.

Establishing the context
It is first necessary to establish where the hazard is and its type, e.g. a moving & handling hazard, as opposed to the many other hazards in the working and clinical

environment – physical, mechanical, electrical, chemical, biological, environmental, human and so on.

Moving & handling hazards are many and various, but for convenience may be grouped under four main headings (see Identifying the hazards below).

Risk assessment
Is about the nature of the hazard and risk and its magnitude or level and requires identification, analysis and evaluation.

Identifying the hazard(s)
What are the causative factors, or risk factors? Using the familiar 'T-I-L-E' format, or ergonomics approach to risk assessment, we can consider the risk factors in the following four groups:

Task
Individual
Load
Environment

Are they related to the task, the individual handler, the load, or the environment? The task, load and environment may be regarded as 'situational' or 'external' risk factors. External risk factors are sometimes referred to as 'exogenous' factors.

Risk factors associated with the individual are 'personal' or 'endogenous' factors.

Task factors include the movements, postures and forces required to carry out the task or manual handling operation.

Load factors relate to the nature of the load, such as: weight, bulk, etc.

Environmental factors refer to: space, layout, lighting temperature and other ambient conditions.

Individual factors take into account the ability and vulnerability of the handler(s), in terms of their health, physical fitness and competence.

Analysing the risks
Under this heading we are looking at the outcome or consequences. Examples are: an injury to a handler or a person.

A risk is said to have two dimensions and so is a vector quantity. The two dimensions are:

The likelihood or probability that an adverse event will occur
and
The severity of the consequences or impact, should the event occur.

Both need to be considered in order to establish the magnitude of the risk.

Evaluating the risks
The magnitude, or size of the risk is evaluated or quantified by considering the likelihood or probability (L) and the severity of the consequences (S).

In the NHS each dimension is graded on a scale of 0 – 5, the two are multiplied to find the magnitude of risk:

L X S = Risk magnitude

Risk magnitude, can also be referred to as risk level, risk score or risk rating (RR).

In the NHS system the highest score or rating possible is 25.
0 – 6 are considered Low; 8 – 12 medium; 15 – 25 High.
It is useful, for a number of reasons, to separate the high risks into: -
15 – 16 High; 20 Very High; 25 Extreme.

Control of risks
Having carried out the assessment, the identified risks, in order to reduce, minimise or eliminate the level of risk.

It is seldom possible to eliminate risk all together, but it makes sense to reduce the level of risk to an acceptable level. In deed this is a legal requirement. More precisely the level of risk should be reduced to the lowest level that it is reasonably practicable to achieve.

Employers and their risk managers are both required and entitled to take into account the cost of reducing risk and set this against the level of risk, when deciding the level of resources that are appropriate to allocate to control a given risk.

Options to consider
It can be said that there are four options to consider when controlling risks: -

- Terminating the risk
- Transferring the risk
- Tolerating the risk
- Treating the risk

Terminating the risk
The operation is stopped or forbidden, or the danger is removed. Suitable for high risks. This corresponds to avoiding hazardous manual handling.

Transferring the risk
Getting somebody else (individual or organisation) to take on the task and therefore the risk. Risks can also be shared. This can sometimes be achieved by contracting out services.

Tolerating risk
Low risks can often be accepted, providing everyone is aware and normal precautions are taken.

Treating the risk
This probably applies to the majority of risks, especially those of the medium level, and involves considering a range of options to bring about risk reduction.

For a further examination of controlling or treating risk, please see **Appendix 8.**

Other parts of the process
For the process of assessment and control to be successful, it must be accompanied by: -

- Communication and consultation
  and
- Monitoring and review

Initiating the Process

Filters and screens

Before starting the assessment proper, it is good practice to check first to see whether or not a significant risk is present. If it is not then a full risk assessment will be unnecessary. However, the situation could change and reasonably foreseeable risks must be looked for. This process should recorded in order to demonstrate that hidden hazards and risks have been considered.

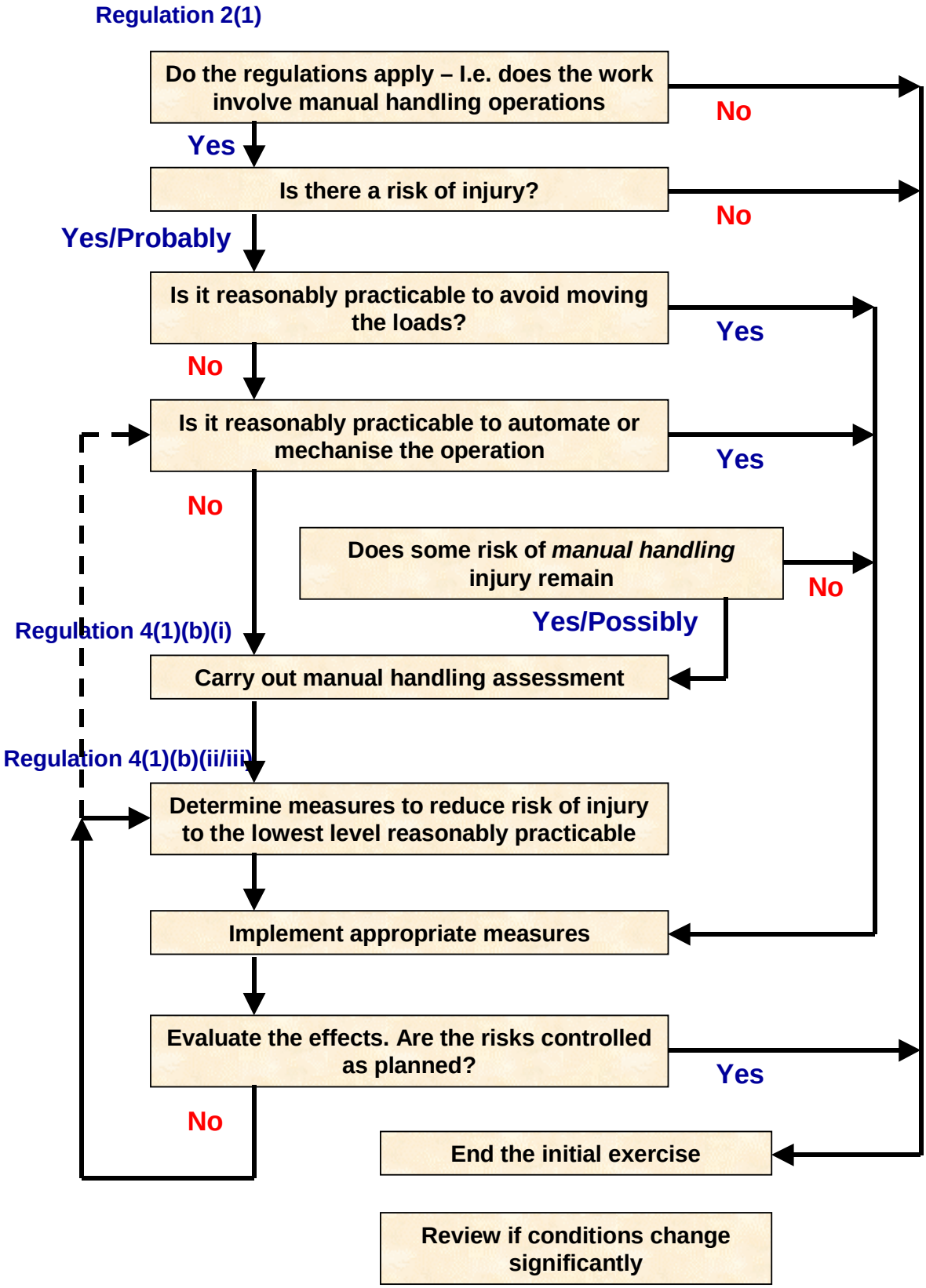
This type of approach is also suitable when manual handling can be avoided (by changing the method of work or service delivery for instance) or by automation or mechanisation, or where it can be made safer by other straightforward measures.

The risk assessment process need not be complicated if the means of controlling the risks are easy to implement. On the other hand risk assessments have to be 'suitable and sufficient' and 'take into account all relevant risk factors'. In other words, the depth of assessment has to be appropriate to the complexity as well as the level of risk.

This is common to other types of risk assessment and can be represented by the following flowchart [HSE (1998) L23 Manual handling Manual Handling Operations Regulations (1992) Guidance on regulations (2nd edition) Sudbury: HSE Books, page 5] to be found on the next page.

It is reproduced by kind permission of the HSE (Open Government Licence for public sector information).

Flowchart – HSE Guidance



Definitions

- **Action plan**
  In this context, a plan for implementing a SSW. Minimum requirements are: - Agreed Action, Time-scale /Target Date, Person(s) responsible for the action, Means of achieving.
  In connection with risk assessment other features need to be included, such as an evaluation of current controls, the costs of rectification and the risk reduction brought about.
  It is useful to consider immediate, short-term and longer-term measures. Action may be required immediately to control a risk, but this might only be an interim measure until something better can be done.

- **Assessment**
  The gathering of information in order to make a reasoned judgement on how to proceed.

- **Causal factors**
  The hazards.

- **Consequences**
  The impact if the risk were to materialise.

- **Context**
  The first of the '3 Cs', Context, Causal factors and Consequences. This is the 'risk target' and should be clearly defined; e.g.: - staff, person, department, hospital, etc. and the nature of the risk; e.g.: -financial, safety, physical loss, perception.

- **Hazard**
  Any: - thing, object, material, substance, situation, circumstances or set of conditions with the *potential* to cause harm.
  'An accident waiting to happen'.

- **Learning culture**
  Safe and healthy organisations utilise experience positively and learn from their mistakes.

- **Load**
  The thing that is being transported or supported. It may be inanimate or animate (a person or an animal). Loads come in all sorts of shapes and sizes.

- **Load**
  The thing that is being transported or supported. It may be inanimate or animate (a person or an animal). Loads come in all sorts of shapes and sizes.

- **Manual Handling**
  Transporting or supporting a **load** by hand or by bodily force. This may involve: - lifting and lowering; pushing and pulling; holding and carrying; twisting and reaching.

- **Moving and Handling**
  This term includes manual handling but has a wider meaning, also taking in moving and handling by mechanical means.

- **Prudent**
  What every employer should be. One useful definition of **prudence** is 'measured judgement', e.g. a quantified risk assessment.

- **Reasonable**
  The test that is applied in Common Law, in the civil courts is one of 'reasonableness'.

- **Risk**
  The likelihood or probability that a hazard may be realised (a potential becomes actual) *multiplied by* the severity of the consequences should that happen.

- **Risk assessment**
  The gathering of information in order to make a reasoned judgement on how to control a risk.

- **Risk control (Control measures / remedial measures)**
  The means by which risks may be eliminated or reduced.

- **Risk factors**
  Similar in meaning to hazards. These are the contributory factors. Often it is the combination of certain elements that leads to a hazardous situation.

- **Risk management**
  This has two meanings
  a) The combination of risk assessment and risk control
  b) The coping strategies used to deal with a risk that cannot adequately be controlled.

- **Safe system of work (SSW)**
  Health and safety requires a systematic approach to the control of risk. A SSW may be said to be in place when all of the risks have been adequately controlled. Control measures can include: - equipment and aids, environmental modification, written procedures, information, training, instruction and supervision; (this not an exhaustive list).

- **Safety culture**
  This is said to be present when all hazards and risks are adequately controlled. For this to occur there must be management commitment and staff involvement and everyone needs to have an awareness of hazards and respond appropriately to them. This implies a proactive, rather than a reactive management style and approach.

- **So far as is reasonably foreseeable (SFAIRF)**
  There is a duty for employers and employees to look for hidden risks and look for the worst-case scenario. If something could occur then it should be planned for. This concept calls into question the notion of a so-called

emergency situation. A proportion of these can be predicted and therefore provision must be made for such eventualities. Genuine emergencies (unforeseeable events) are fairly rare. The likelihood of occurrence, as well as the possible consequences, should be taken into account when planning controls and allocating resources.

- **So far as is reasonably practicable (SFAIRP)**
  In UK health and safety law the employer is entitled to take into account the financial costs, time, trouble and dislocation that risk reduction would cause and balance it against the benefits in safety (risk reduction) that would result from the implementation of proposed control measures. It might be reasonable in certain cases not to spend large amounts of money on a small risk. This does not mean that if control measures cannot be afforded they do not have to be implemented. The onus is on the employer to demonstrate that adequate controls have been introduced.

- **Strict / absolute duties**
  In some cases employers have to go beyond what is reasonably practicable and make provision whatever the cost. Employees are bound by these higher duties.

- **Suitable and sufficient**
  Provision of equipment, etc. has to be adequate and appropriate for the purpose. e.g. A person hoist has to be able to deal with the persons likely to be cared for and cover all foreseeable situations. There must be enough hoists. Sufficient slings need to be provided and they must be suitable for the purpose.

A more complete glossary of terms is to be found in the introduction to the Strategy and Standards document.

Appendix 7 – Evaluation / quantification of risk

Author: David Couzens-Howard

This appendix relates to Standard B4 – 'Objective evaluation of risks'

It has been developed by the NBELGSWP, and makes use of the 5X5 matrix (CASU and the Risk Register Working Group, 2002).

Appendix 7 – Evaluation / quantification of risk

Many reasons can be advanced for doing this; however, if a risk can be easily controlled then it should be and this stage can be omitted. The main reasons for trying to establish a level of risk are: -

- to determine the **size and importance** of the risk
- to provide a logical and consistent **structure** for risk management
- to help determine the **urgency** of response required
- to contribute to the equation of **reasonable practicability** (i.e. risk v. cost of rectifying risk)
- to help to **prioritise** the actions required to reduce these risks when compared with other risks, especially (as is generally the case) when resources are limited
- to **justify expenditure** and diversion of resources (in business cases for example)
- to assist in the process of **balanced decision making**

NB: Risk quantification is not an exact science – risks cannot easily be measured. Setting a level, using criteria for guidance, does however help to take some of the subjectivity out of the process.

Risk level is determined by a judgement of the likelihood of a hazard or risk being realised and the severity of the consequences should that happen.

Total Risk = Likelihood x Severity of Consequences

Risks Grading Matrix (5x5 Matrix)

Once a risk is identified within the Organisation the following 5x5 Matrix will be applied giving a score potentially from 1 – 25.

Step 1: **The Consequence** of the identified Risk should it result in an adverse outcome is first estimate on a scale of 1 to 5. The following table assists in deciding the appropriate score for consequence depending on the type of risk.

Table 1 – Consequence Score

	1	2	3	4	5
Descriptor	**Insignificant**	**Minor**	**Moderate**	**Major**	**Catastrophic**
Injury	Minor injury not requiring first aid	Minor injury or illness, first aid treatment needed	RIDDOR/ agency reportable	Major injuries, or long term incapacity/ disability	Death or major permanent incapacity
Person experience	Unsatisfactory person experience not directly related to person care	Unsatisfactory person experience – readily resolvable	Mismanagement of person care	Serious mis-management of person care	Totally unsatisfactory person outcome or experience
Complaints/ claims	Locally resolved complaint	Justified complaint peripheral to clinical care	Below excess claim. Justified complaint involving lack of appropriate care	Claim above excess level. Multiple justified complaints	Multiple claims or single major claim
Objectives/ projects	Insignificant cost increase/ schedule slippage. Barely noticeable reduction in scope or quality	Less than 5% over budget/ schedule slippage. Minor reduction in quality / scope	5-10% over budget/ schedule slippage. Reduction in scope or quality	10-25% over budget/ schedule slippage. Doesn't meet secondary objectives	More than 25% over budget/ schedule slippage. Doesn't meet primary objectives
Service/ business interruption	Loss/ interruption more than 1 hour	Loss/ interruption more than 8 hours	Loss/ interruption more than 1 day	Loss/ interruption more than 1 week	Permanent loss of service or facility
Staffing and competence	Short term low staffing level temporarily reduces service quality (less than 1 day)	On-going low staffing level reduces service quality	Late delivery of key objective/ service due to lack of staff. Minor error due to poor training. On-going unsafe staffing level	Uncertain delivery of key objective/ service due to lack of staff. Serious error due to poor training	Non-delivery of key objective/ service due to lack of staff. Loss of key staff. Critical error due to insufficient training
Financial	Small loss (up to £100)	Minor loss (up to £1,000)	Moderate loss (up to £10,000)	Major loss (up to £100,000)	Catastrophic loss (in excess of £1 million)
Inspection/ audit	Minor recommendations Minor non-compliance with standards	Recommend-ations given. Non-compliance with standards	Reduced rating. Challenging recommendations. Non-compliance with core standards	Enforcement Action. Low rating. Critical report. Major non-compliance with core standards	Prosecution. Zero rating. Severely critical report
Adverse Publicity/ reputation	Rumours	Local media – Short term. Minor effect on staff morale	Local media – Long term. Significant effect on staff morale	National Media less than 3 days	National media more than 3 days. MP Concern (Questions in House)

Step 2: The **likelihood** of this adverse outcome occurring is then estimated on a 1 - 5 scale.
If possible assign a predicted frequency of the adverse outcome occurring. If this is not possible assign a probability of it occurring in a given timeframe, either by the percentage figure or the probability description below.

Table 2 – Likelihood Score

	1	2	3	4	5
Descriptor	**Rare**	**Unlikely**	**Possible**	**Likely**	**Almost Certain**
Frequency	Not expected to occur for years	Expected to occur at least annually	Expected to occur at least monthly	Expected to occur at least weekly	Expected to occur at least daily
Probability	Less than 1%	1 – 5%	6 – 20%	21 – 50%	Greater than 50%
	Will only occur in exceptional circumstances	Unlikely to occur	Reasonable chance of occurring	Likely to occur	More likely to occur than not

Some Organisations are experimenting with the use of 'modifiers' to increase or decrease the consequence or likelihood scores in certain circumstances.

Step 3: Multiplying the consequence score by the likelihood score to obtain the Risk Rating.

Consequence x Likelihood = Risk Rating

Table 3 -- Risk Rating Matrix

Likelihood	**Consequence**				
	1	**2**	**3**	**4**	**5**
1- Rare	**1**	**2**	**3**	**4**	**5**
2- Unlikely	**2**	**4**	**6**	**8**	**10**
3- Possible	**3**	**6**	**9**	**12**	**15**
4 - Likely	**4**	**8**	**12**	**16**	**20**
5 – Almost Certain	**5**	**10**	**15**	**20**	**25**

Step 4: The Risk Rating determines the severity or priority of the risk, and the level at which the Risk should be managed.

Low Risk	Needs to be resolved or accepted at Local/Departmental Level*
Med Risk	Needs to be resolved or accepted at Directorate Level*
High Risk # ##	Needs to be resolved or accepted at Organisational/Organisation Level, i.e. Assurance & Risk Committee and Board. # 20 may be regarded as very high (VH) and ## 25 as extreme (Ex).

*If the risk is not acceptable and cannot be resolved at the appropriate level, it needs to be fed to the next level by a process known as 'escalation'.

Risk Register

All significant hazards and risks must be recorded on a risk register, at local and/or organisational level. (See Appendix 5)

Appendix 7a – Costing of risk

Author: David Couzens-Howard

This appendix relates to Standard B5 – 'Costing of risk'

It has been developed by the NBELGSWP

Appendix 7a - Costing of risk

It has been developed by the NBELGSWP

All risks should be evaluated to determine their magnitude (severity of consequences or impact, multiplied by the likelihood of the risk being realised). The magnitude of the risk should help to determine the effort that can reasonably be expended in controlling it and this justification is the meaning of the term "reasonably practicable".
One way of carrying out this balancing act is to estimate the costs of leaving the risk uncontrolled (in ergonomics terms "user costs") and set this against an estimate of the costs of controlling it. This requires robust data regarding such costs.
It is probable that such calculations will not provide exact answers, but even approximations (or "ballpark figures") can contribute usefully to the risk management process and the formulation of business cases.

Costs to the organisation of uncontrolled or poorly controlled M & H risks	**Costs to the economy as a whole**	**Personal costs**
Failure to comply with legislative and regulatory requirements	GP visits	Potential/ actual lost wages/ bonuses
Legal costs	NHS consultations	Lost job opportunities
Person and staff injuries and incidents	Hospital appointments	Loss of career
Compensation pay outs	Treatment	Negative effect on lifestyle
Complaints	Medication/ pain management	Negative effect on relationships
Interventions by the HSE and CQC	Long term disability benefits	Loss of independence
Work related sickness absence (WRSA) and early retirement	Potential/ actual lost revenue to treasury	Psychological impact/ effect on self esteem/ depression
Failure to meet business objectives	Loss of productive output	Cost of aids and adaptations
Poor clinical outcomes		
Bad person experience		
Reduced efficiency/ productivity and poor performance		
Poor morale, leading to industrial relations problems and increased staff turnover		
Recruitment and retention problems		
Adverse publicity affecting reputation and profile		

Cost of controlling moving & handling risks, include:

- Management time on planning, setting-up systems, etc.
- Staff time on the risk assessment and control process
- Changes in working practices
- Dislocation and interruption of service provision
- Environmental modifications (building work, etc.)
- Equipment purchase
- Training
- Supervision

NB 1: Formulated in a different way, this can become a cost v. benefit analysis.

NB 2: There is considerable evidence that ensuring quality and safety by controlling risks is highly cost-effective. So it can be seldom if ever justifiable to leave risks without adequate controls. As the HSE say, ***"Good health is good business"*** [HSE (1999) MISC196, www.occ-med.co.uk/ghgb4.pdf accessed 9 Aug 2011].

Appendix 8 – Logical/ rational treatment of risks

Author: David Couzens-Howard

This appendix relates to Standard B6 – 'Logical/rational treatment of risks'

The emphasis in this appendix is on the control of risks and the consideration of options.

It has been developed by the NBELGSWP.

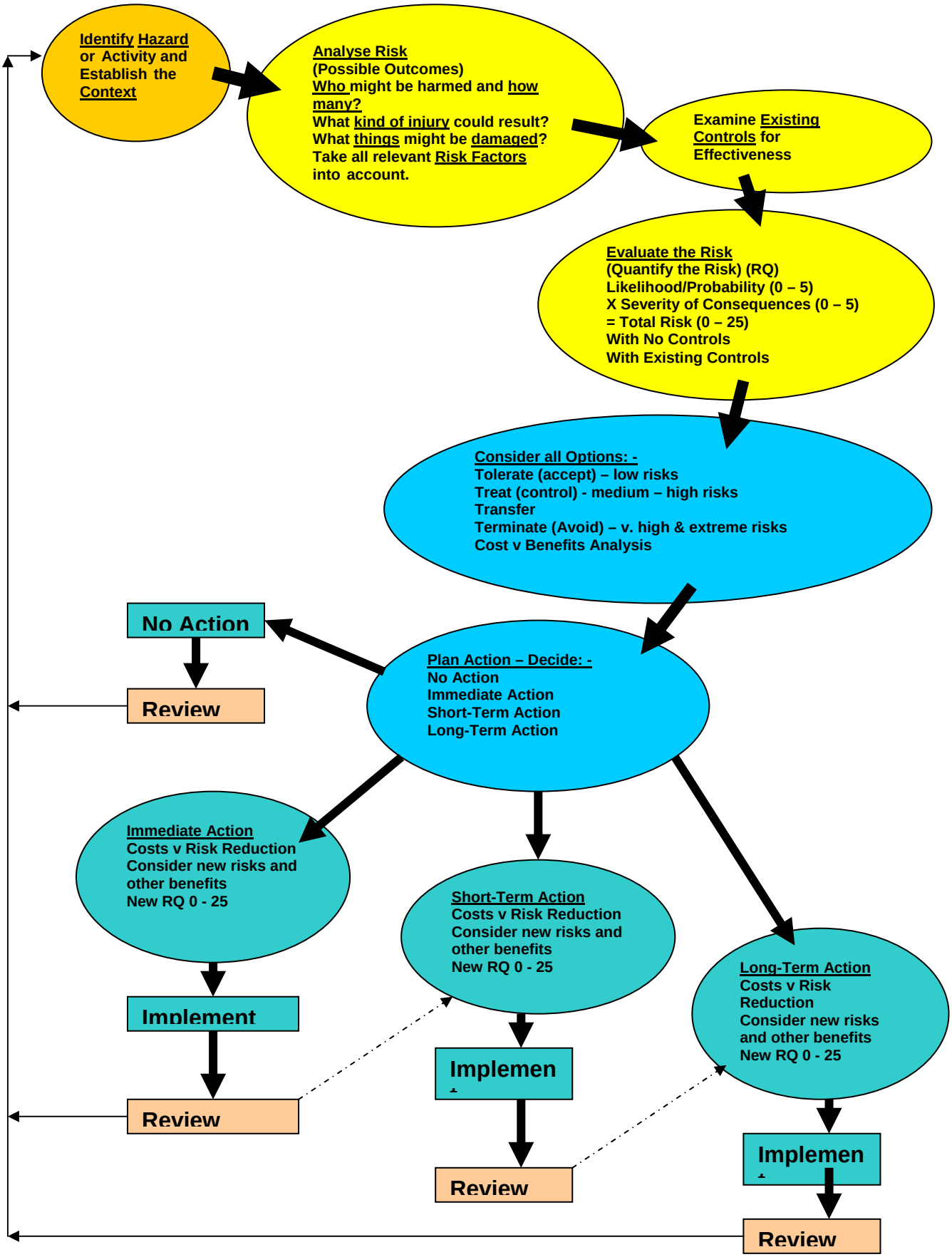
Details of the process are set out in the two flowcharts below.

Flowchart 1: Simplified General Risk Management Process

Flowchart 2: Risk Management Process for Moving & Handling

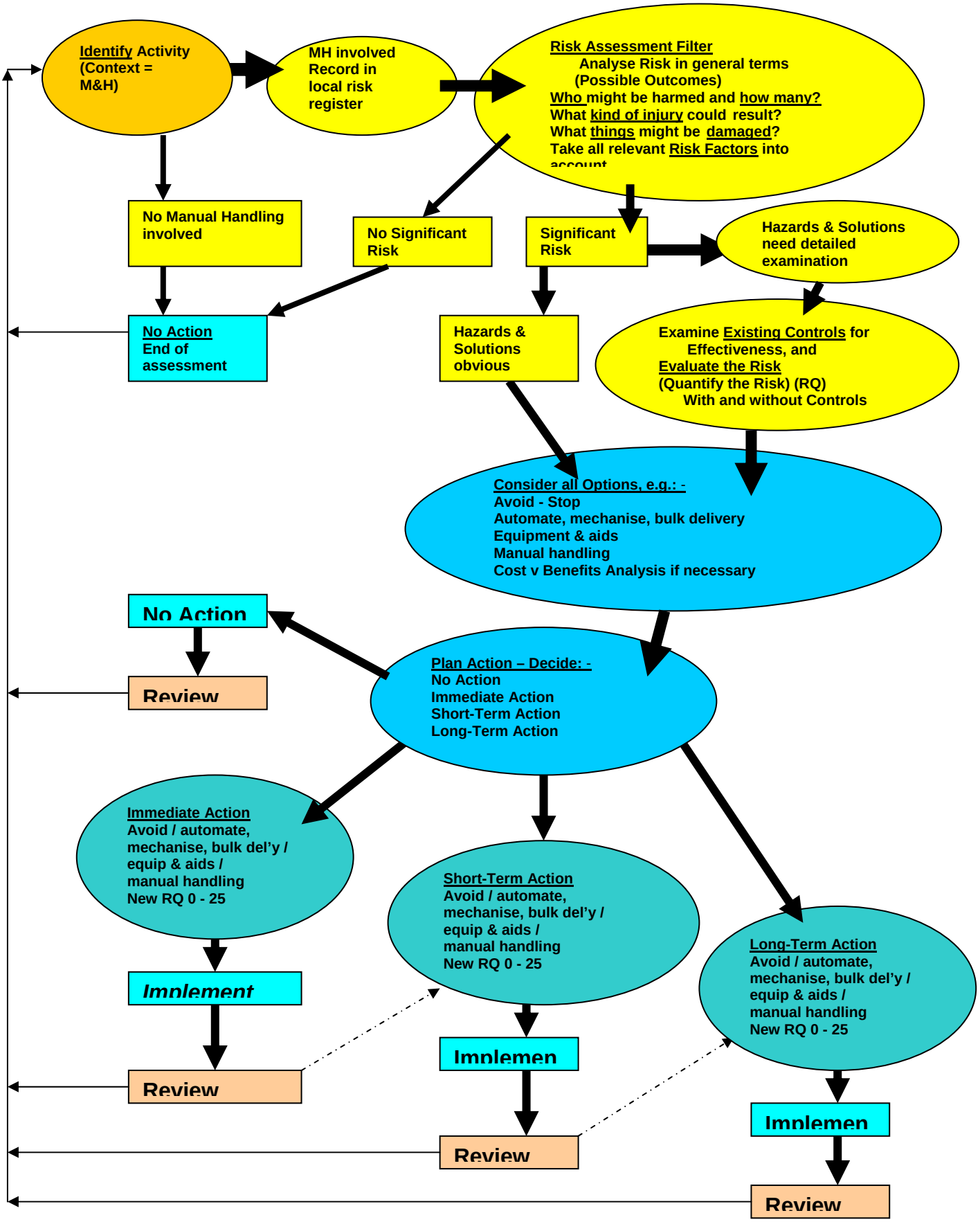
Please also see Appendix 6 Systematic Control of Risks

Simplified **Risk Management** Process



Record and Communicate at every stage. **Register the risk** if appropriate.

Risk Management Process for **Moving & Handling**



Record and Communicate at every stage. **Register the risk** if appropriate.