



## Document 3: Tower Safety and Risk Assessment

### NOTE

This document has been prepared for issue in draft form by the Central Council of Church Bell Ringers, Stewardship & Management Workgroup and may be subject to further revisions. It is being made available here to support other documents related to risk assessment for a return to ringing when COVID-19 restrictions are eased.

Please provide any comments or suggestions to [SMSEC@CCCBR.ORG.UK](mailto:SMSEC@CCCBR.ORG.UK)

### Introduction

These notes offer advice about issues that may affect bell ringers and the bell tower when considering safety and risk assessments. The notes may assist incumbents, church officers and church bell ringers; they do not intend to provide comprehensive information about health and safety or risk assessments generally. Few churches were designed or built to comply with current legislation and many are extremely historic and vulnerable structures. Every one has to be considered carefully and put in place its own procedures and policies that are suitable.

Ringers are often in churches at times when the building is otherwise unoccupied, and also in parts of the building that are separate and less accessible from the rest of the building. Make sure that the emergency procedures can be followed by ringers and other people in the tower.

Most towers with rings of bells are within the jurisdiction of the Church of England. These notes therefore focus on these but the issues are likely to apply to rings of bells in towers owned by other organisations, in churches of other denominations, and also churches elsewhere in the world. Local legislation and circumstances should always be taken into account.

### Responsibility for safety

It is important to note that the responsibility for safety and risk assessment in a church building rests with the church authorities. The church is likely to have its own Emergency

Plan and Health & Safety Policy (or equivalent documents); ringers will ideally be involved in their compilation and review. Churches will normally be insured and the insurance policy and specific schedule may set out certain terms and conditions so these should be consulted when preparing the Risk Assessment. Normally, the incumbent should have appointed a “Responsible Person” for health and safety matters.

So, where do bell ringers fit into this? First, while in the church and bell tower they should behave in a safe manner, respecting the requirements set down by the church authorities. Secondly, ringers need to use their experience and knowledge of ringing and bell installations to assist the church authorities to carry out the risk assessments within the tower. It is essential that the ringers work together with the church authorities on this.

We hope that these notes provide friendly guidance to ringers on how they can assist their church in the preparation and / or updating of an effective risk assessment for ringers and other activities in the church tower.

### Where do I start?

Your first action is for the “Responsible Person” to arrange with you to assist them with completing the risk assessment of the tower and areas used by the ringers. Ideally take another ringer and also a non-ringer with you (they will have different perspectives – a ringer may see something as “normal” when it may cause risks for others).

There may be other people involved who need access to the tower apart from the ringers: the clock winder perhaps, or the person who is responsible for the flag.

As a ringer, you will have one advantage: the tower is often self-contained with limited access, unlike the church as a whole which may have a variety of furniture and fittings and much wider public access.

The Health and Safety Executive's Five steps to risk assessment.

Step 1: Identify the hazards.

Step 2: Decide who might be harmed and how.

Step 3: Evaluate the risks and decide on precautions.

Step 4: Record your findings and implement them.

Step 5: Review your risk assessment and update if necessary.

We suggest that your tower assessment should start at ground level and go right up to the roof. Ringers may suggest that their responsibilities end at the bells but anyone who needs to go up to the roof will usually pass through the areas used most often by ringers so it makes sense to consider the whole tower.

As you proceed you will need to identify any potential hazards which could cause harm to someone, and therefore pose a potential risk. But you need also to think about 'worst case' conditions. A slightly awkward door latch could be a hazard if people were trying to get through in a power cut or, worse still, in a fire.

As you see possible hazards, note them down systematically and you might start to consider how the risk arising might be removed or minimised - the formal word is 'mitigation'. Mitigation may take a lot of thought and discussion - and we discuss these later - but your first thoughts when faced with the hazard are a good start.

We are not going try to set out a full list of possible hazards. We cannot prejudge your own observations and every tower will be different. But we will set out some hints on what to observe and question and we will do that under the broad areas of Access and Egress, Ringing Chamber and Bell Chamber, with further consideration of other areas and ground floor rings.

A church should also prepare a specific procedure and plan that aims to minimise the risks of terrorist attack.

These notes relate mainly to activities that are considered to be more routine in a tower with bells. Special events such as church or tower open days require a specific risk assessment to be prepared, depending on the nature of the event.

### Access and Egress

These are more formal words for how you get in and out, in the latter case possibly under emergency conditions. In most churches, you will be going through doorways and, except for ground floor rings (and we will come to those later), climbing stairs.

You need to think about:

- Are external paths, steps and doorways well lit?
- Are there suitable warning or information signs?
- Are all the doors (and trapdoors, in some cases) easy to open and close in an emergency
- Where security is needed:
  - are external doors well secured, probably with multiple locks, and resistant to forcing?
  - do the locks operate properly?
  - can they be opened and closed easily, especially in an emergency conditions?
  - is the church locked with ringers inside on practice night, during quarter peals and peals? How then do they exit?
  - how are keys controlled?
  - do church security alarm systems extend throughout the tower
- Are the floors and stairs in good condition, to avoid slips and trips?
- Is any part of the access constricted or with limited height?

- Is there a robust handrail?
- Are there any height restrictions?
- Is the lighting adequate and in good condition and are there emergency lights in case of power failure?
- Are any ladders in good condition?
- Are there any “dead ends” or doors that do NOT lead out of the exit door?
- As you leave, are the exits clearly marked?

Remember that there may be hazards that are more visible on the way out than the way in, and vice versa, so work carefully while going in and then out.

### Ringling Room

This is the room where ringers spend most of their time. It may be at ground level or upstairs. That familiarity means that some hazards may be overlooked, especially by the local ringers, but what about visitors, quarter peal and peal bands who are perhaps visiting the church for the first time?

The familiar term 'Belfry' can be used to refer both to the room from which the bells are rung and the chamber where the bells are located. To avoid confusion, we will use the terms 'Ringling Room' and 'Bell Chamber' respectively.

- Are there trip hazards from trailing electrical leads, boxes, uneven floors, mats, or general clutter?
- Is there a possibility of electric shock from damaged leads or defective portable equipment?
- Are portable electrical appliance (PAT) tests carried out at the set intervals and recorded?
- Are there enough power sockets? Or is there a tangle of extension leads?
- Is the lighting satisfactory?
- Is there emergency lighting, is it tested routinely and records kept?
- Are there suitable fire extinguishers? Are they regularly inspected with appropriate records?
- Is First Aid equipment accessible for ringers?
- Are tower contact details clearly displayed in case of emergency?
- Are emergency exit routes clearly marked?
- How would emergency services be called, and how would they locate and access the tower and ringers?
- Are there appropriate alerts about clock chimes and clock hammers?
- Moving bell ropes present a hazard:
  - Are the ropes maintained to minimise the chance of a broken rope?
  - Are all ringers instructed in the disciplines of remaining still when not ringing and not to cross the circle while ringing is in progress?
  - Are learners properly supervised?

- Are the rope paths clear of items around the ringing room? Consider statues, furniture and items stored by other users, especially in ground floor rings. Remember that learners may not keep as straight a rope as more experienced ringers.
- The most likely mechanical failure to have an effect in the Ringing Room is a broken stay:
  - Are the stays inspected regularly to detect incipient cracking?
  - Are learners instructed in the action to be taken in the event of a broken stay?
- Are ringing visitors and non-ringing visitors welcomed to the tower and advised on specific local risks, for example more difficult bells?

### Bell Chamber

This room has the potential to be a high-risk area, with multiple trip hazards, risks of falling and danger from moving bells. It is advised that a specific risk assessment is carried out prior to any work in the Bell chamber, depending on the nature of the work to be done.

- How is access to the Bell Chamber secured?
- How is access limited to people who have authority for access?
- How are those permitted access advised of the risks and demonstrated to be competent?
- How are they equipped with suitable protective clothing?
- What are the arrangements to eliminate, or at least control, lone working in the Bell Chamber?
- Is there adequate power and lighting?

### Other areas within the tower

There may be intermediate rooms in the tower in addition to ringing room and bell chamber. If between the two, then the ropes will pass through during ringing.

- Is access to these spaces secured during ringing?
- Is anything stored in these spaces which could interfere with the ropes?
- Such a room may house the church clock. Are the clock winders aware of possible hazards?

### Special requirements for ground floor rings

Ground floor rings are usually found at one end or one side of the church, although some are in the body of the church, particularly where there is a central tower. This arrangement avoids many of the problems of access up a staircase for normal ringing, but it can introduce other hazards:

- The ringers may share their accommodation with a choir vestry or the tools for churchyard maintenance. This raises risks which can only be mitigated by discussion and cooperation with the other users of the area.

- The necessity for ropes to be hoisted up and secured when not in use is essential.
- Make sure that other church users, including casual visitors, are not able to wander into the rope circle, during ringing.
- Warning notices are essential during ringing; ensure that all the ringers understand how ringing could be STOPPED immediately, if circumstances demanded. During some ringing - perhaps a peal for a special occasion - it may be necessary to lock the church or position stewards in the area.

## What happens next?

You will now have a long list of potential hazards. You may be worried about this, or you may have already started to see ways in which the hazards can be addressed. Towers vary so we cannot tell you how to deal with every hazard but we will give you some ideas about what may need to be managed by the church authorities. The criterion used is "**ALARP**" ie "*as low as reasonably practicable*".

Later, we give you contact details for sources of information or services.

- In many cases the hazard can be removed. Examples are:
  - A defective electric fire can be repaired or replaced by a new one.
  - Many problems such as trip hazards can be eliminated by better housekeeping: control of electrical cables and removal of unnecessary items from the Ringing Room, for example.
- Modifications, some of them expensive, may be required:
  - Locks may need to be changed, or new padlocks purchased.
  - Handrails may need to be fitted on stairs.
  - Work may be needed on the electrical installation by professional contractors.
- Procedural mitigations may be possible. These are where we can only mitigate a hazard by asking people, ringers and visitors, to behave in a certain way. Examples are:
  - Respecting the need to remain seated while not ringing.
  - Respecting restrictions on who is allowed in the bell chamber.
  - Requirements on teaching learners - who can provide teaching, the precautions to be taken.
  - Brief visiting ringers before ringing; experienced ringers should set an example by respecting them too.
  - Such mitigations can be enforced by instruction and warning notices. But, most of all, you need careful explanation to ensure that all members of the band, especially visitors any new recruits, understand why these are necessary.
- Hazards arising from the bell installation, most notably a broken stay or rope, will be mitigated by a comprehensive programme of maintenance. The Central Council

publication 'Manual of Belfry Maintenance' (see below) offers guidance here. For more serious problems, or if none of your ringers have maintenance experience, you should contact your local ringing Guild or Association, or a professional bell hanger.

- Opening a tower to non-ringing visitors poses particular challenges and this is a case where guidance provided by insurers such as EIG is particularly helpful. A specific risk assessment should be carried out. Some general points are:
  - Set up a system to control the maximum number of visitors in the tower at any time.
  - Visitors need to be warned that the spaces may be constricted and that there may be views from a height.
  - They need to be warned that there may several sets of stairs to climb and that these may be uneven and of limited height.
  - People with certain medical conditions should consider whether they enter the tower, as should those who are less mobile, claustrophobic or dislike heights.
  - It is recommended that children are accompanied by a parent or guardian. .

### Now for the paperwork

The risk assessment is recorded on paper demonstrating the identified hazards and the steps to be taken by the church to remove or mitigate them.

There are several 'Risk Assessment Tools' available, with templates to fill in. We reference these later and you may wish to look at these to get an idea of what will be required by your church. We advise that you help make it fit your needs as ringers.

But, of course, something like this will not be done just once. Do not put it away in a cupboard and forget it! The actions should be completed and it should be reviewed regularly (probably annually) and certainly after any changes to the building or the personnel. It should be readily available and key points made known to new recruits and visitors. Ringers also need to check that any mitigations are completed and followed.

Your church authorities should produce a risk assessment for the rest of the building and the tower assessment is normally part of that. There are examples of possible reporting formats in the information provided later, if required. As a minimum, any record should provide the following information for each hazard (you may find it easier to do this in landscape format):

<b>Hazard</b>	<b>Description</b>	<b>Mitigation by whom and by when</b>	<b>Date completed and any further action</b>
<i>Brief name for the hazard</i>	<i>More detailed description</i>	<i>Description of the mitigation adopted</i>	<i>Requirements for any further action or review</i>
<i>And so on...</i>			

The date of completion and date of next review should be added; it is helpful if the person completing the assessment adds their name.

## Useful information

You may wonder why we did not offer this information right at the start. Well, we think that starting off by ploughing through all this information would be enough to put you off the whole idea. But there is useful information here and the time to use this information is when you have understood the challenges in your own tower. The sources below may highlight things you have missed and may help you with identifying mitigations. You should also consider the list of general safety principles given in the appendix. (Specific weblinks are not provided as they tend to go out of date. The information should be easily found by simple searches.)

The **UK Health and Safety Executive** provide extensive risk management information on their website, including an example risk assessment template, health & safety policy and emergency planning. None of this is specifically written for churches and bell ringing but may be useful.

**Ecclesiastical Insurance group (EIG)** - the insurers of many churches - provide many helpful documents on their website including:

- Guidance on bell ringing
- Church Health and Safety Policy
- A document providing guidance on "Tower tours"

The **Central Council of Church Bell Ringers** has produced several relevant documents, for example:

- Church Tower Access. What you need to know about stairs, ladders, doorways and trapdoors.
- Lighting in and Around Church Towers.
- Lightning Protection and Bell Frames in Church Towers. This may not seem relevant to ringers but it has implications for metal bell frames and fittings.
- Fire safety and risk assessment.

Guidance on maintenance is provided in the Central Council publication '*Manual of Belfry Maintenance*', available from the online CCCBR Shop.

The Association of Ringing Teachers provide advice on teaching ringing.

## Appendix: General Principles for Safety in the Bell Tower

- A clean and tidy environment is maintained within the tower.
  - This is more likely to be achieved by encouraging a 'tidy culture', rather than by irregular massive clean ups.
  - Tower contact details (Post Code, what3words reference) are clearly displayed in case of emergency.
  - Adequate space is provided for hanging external clothing.
  - Large items such as luggage, backpacks and pushchairs are not brought into the Ringing Room.
- It is now good practice to record the name of each person entering the tower and during ringing, with date, time of arrival and departure. This acts as a record for safeguarding purposes and also as an aid for emergency services in the event of a need to evacuate the area.
- All the electrical equipment and fittings are safe and tested (extension leads not be “daisy chained”).
- Lighting is adequate and reliable and includes emergency lighting inside the tower and along emergency exits.
- Heaters and other electrical equipment are PAT tested, safe and switched off when not in use (equipment switch and wall socket both off, plug out).
- Fire extinguishers suitable for the hazards present are visible and checked at the set intervals (they are easily overlooked if behind closed doors or upstairs).
- Rope heaters are appropriately designed, tested and use low powered heating elements, not filament bulbs.
- All doors and trapdoors work smoothly and locks are secure, but that emergency evacuations are feasible, including when the church is otherwise closed.
- All keys are limited to those that need them and a register of keyholders is maintained.
- All ringers and visitors are briefed and understand the principles of belfry discipline.
- Only those with specific authorisation can access the tower and bells. Any other visitors are escorted.
- Ropes are not accessible to people without permission.
- Learners are taught and accompanied only by experienced ringers.
- Tower captain is appointed by the incumbent and knows their responsibilities.
- Bells are left down when not being rung unless there is a justifiable reason for some or all to be left up. If up, this is clearly indicated in ways that make the risks understandable to non-ringers.

This list is intended to help you and the church authorities spot hazards and to identify mitigations. Please don't think that you can complete a risk assessment just from this list. Your assessment should be based on **your** tower and **your** assessment of risks and mitigations.

- The bell chamber is not accessible to unauthorised people.
- Anyone entering the ringing chamber can tell immediately if anyone is working in the bell chamber.
- Work in the bell chamber is controlled: the bells are not able to be rung, at least one person is competent to do so and authorised, and there is no lone working.
- Bells and fittings are regularly checked and maintained by competent personnel, with records kept.
- A comprehensive procedure is in place for when the tower is open to non-ringing visitors.