# 7

# Health and safety and water handling

Spa facilities are associated with serious risks and hazards, so it is therefore essential that a spa manager has sound understanding of health and safety systems and regulations, in addition to knowledge of the fundamentals of pool plant operations and water handling.

Each country has their own health and safety regulations which may differ, however, there is generally a commonality in their approach. Because this book is aimed at a wide international readership, this chapter focuses on these commonalities rather than specific legislation(s). For a more detailed overview, the WHO "Guidelines for safe recreational water environments" is recommended.

There are three main goals of health and safety in the spa:

- 1 To ensure that the spa facility is as safe as possible 'facility' refers to the building, the equipment and the people in it.
- **2** To ensure that the staff, guests and premises are supervised properly through systems and control measures (i.e. checklists, audits, Hazard Analysis Critical Control Points, Control of Substances Hazardous to Health etc.).
- **3** To ensure that the staff are following health and safety regulations and that they are trained in health and safety procedures (i.e. emergency action plans and procedures)

(Crebbin-Bailey, Harcup and Harrington, 2005).

Aside from the water handling itself, there are certain health and safety areas which require an active participation on behalf of the manager. These are:

- Risk assessments.
- Health and safety procedures to reduce risks (including emergency action plans).
- The safe handling and storage of pool and cleaning chemicals (Control of Substances Hazardous to Health COSHH) and as well as agents and oils for massages and other treatments.
- The safe and hygienic handling of food & beverages (Hazard Analysis Critical Control Points HACCP).

# **Risk assessments**

A risk assessment "entails a careful evaluation of all of the aspects of a spa that could cause harm to employees and to persons using the spa, in order to determine whether sufficient precautions are being taken to minimize these risks or whether more measures need to be put in place" (Crebbin-Bailey, Harcup and Harrington, 2005: 144).

A risk assessment on the spa will normally be carried out at least once a year:

- **1** To review recent *precautions* put in place.
- **2** If there has been any change to the *physical structure* of the spa facility.
- **3** If there has been any change in *tasks* or *workflows*. (For example, the introduction of a new treatment, cleaning agent or procedure.)
- **4** If there has been an accident and any *weaknesses* have been uncovered.
- **5** If there has been any *change to health and safety legislations* a review to ensure that the systems ensure compliance.

Risk assessment forms will differ from country to country but all risk assessment forms should contain the following:

- A list of the potential hazards. (This might be anything from slippery water pooling around the side of the pool, to an unlocked electrical cupboard.)
- Who may be affected guests and/or staff.
- The chances of an accident ranging from hardly likely to extremely likely.
- What action has been taken to resolve the hazard (e.g. for the slippery water pooling, maybe a slip mat has been ordered; for the unlocked electrical cupboard, maybe the lock has been replaced and a sign placed inside the door telling staff to lock the cupboard after use).
- All actions should be recorded in the risk assessment and should include the name of the person responsible for supervising the rectifying of the hazard (or potential hazard), the deadline for the action and the date of completion.

## Emergency action plans

An emergency action plan is a written document concerning how to handle emergencies that have a reasonable possibility of occurring in the spa. The action plan will include:

- The *procedure*(*s*) to be followed in the case of an emergency.
- The *evacuation plan* (if needed), with evacuation routes.
- Procedures to account for employees and staff after the emergency has taken place.
- *Telephone numbers* of who to contact.
- What *reporting procedures* are required.

#### ■ The main areas of risk

There are three main areas of risk in a spa: drowning and injuries, microbial hazards and chemical hazards (WHO, 2006: 2).

#### Drowning and other injury risks

- **Drowning:** is the biggest serious risk in spa facilities, particularly if children are permitted to use the pools or alcohol is served on the premises.
- **Slips:** in pool areas are likely to be the most common form of accident experienced.
- **Impact injuries:** from hitting hard or sharp surfaces.
- **Burns:** particularly from touching the coals in the sauna or from the steam jet.
- Overheating from the heat experiences: fainting and adverse circulatory and heart reactions can be common.
- **Suction forces in the pool:** that might trap people in the water by a body part or hair.
- **Reactions to treatments:** Adverse reactions to certain treatments or creams.

#### Microbial hazards

■ Infection and water related diseases: from unclean or poorly treated water vomit, faeces, blood.

#### Chemical hazards

■ Chemical and water handling: if pool chemicals are not handled according to instructions, they can cause gas leaks and even explosions.

In addition, there are other occurrences which also should have emergency action plans:

- **Fire**: saunas pose the highest risk for possible fire outbreaks in spas. These can be caused by electrical malfunction, oils, newspapers or towels left on or near the coals.
- Other: power outages, damage to the building by weather or natural forces, leaks, theft, death, etc.

### The plan's contents

The emergency action plan should consist of:

- The *title* of the emergency
- The *department* it affects
- Important *telephone numbers* and *contact persons*
- *Steps of action* (normally in the form of a flow diagram)
- Who to inform.