

Psychology and safety showers

Safety showers and eye baths are essential first aid equipment in minimising the damage caused by contamination of workers with harmful materials. Showers are simple to operate and, as long as they have been purchased from a good manufacturer, will deliver the necessary amount of water when required. As long as the showers are installed at the appropriate location and staff are trained how to use them correctly then they should offer good protection in the case of accidental spills.

The reality, however, is that despite following all the rules as outlined in the various standards there are still some barriers that prevent effective usage of these essential safety devices. This article explores how psychological factors can play a role in the poor usage of safety showers and then explains how some product features can be used to remove those psychological barriers.

Taboo about nudity

Let's face it - for the vast majority of people getting naked in front of one's work colleagues is not high on their "to do list". Indeed a common recurring nightmare in many people is being naked at work or some other public place. Most of us have probably had such unpleasant dreams at some stage. It is clear that this fear of public nudity is embedded deep within our subconscious minds and that there is a very strong social taboo against public nudity. We should not underestimate the power of these taboos.

Good practice, in the event of a chemical spill, is to remove ALL contaminated clothing and that really means all clothing. Now if someone is in absolute agony from a serious acid spill then it is likely that social taboos will go out the window fairly swiftly, but most acid spills are not that extreme or at least do not appear to be initially. The psychological barrier to not strip down naked is strong enough to make most people not do so, even in the event of contamination with substances they know full well are very dangerous. The logical part of the brain that understands the risks and dangers is all too easily overridden by the emotional, illogical part of us. Failure to remove all clothing can result in substantially worsening the damage sustained by a contaminated individual.

Not wanting to be seen as a fool or disruptive

Most accidents with dangerous materials will be down to handling errors. Either the correct protective equipment was not used in the first place or some other procedure was not followed. Everyone knows this is the case and it is inevitable that a certain amount of blame will be attached to the person who has an accident. This is particularly true of highly efficient and well run work places that have a culture that prides itself on excellence. Whilst this type of culture is excellent at preventing accidents from happening it can sometimes create a barrier to correct action being undertaken when they do.

Furthermore, safety showers can be messy things. When operated they can often dump water over a nice clean lab, it will go on the floor and potentially soak through to the floor below. If used the safety shower will inevitably cause disruption to other workers. So not only does the use of the shower draw unwelcome attention to a potential error, it also will cause annoyance to co-workers and managers who will have their work disrupted. Again this problem can be exaggerated in efficient and well run work places as well as those running on very tight manufacturing deadlines.

The perception of blame and the potential wrath or scorn of management and co-workers results in a psychological barrier to using safety equipment. If the spill seems minor then it may be strong enough for the person to try and wash out the spill in the sink or to simply remove the contaminated over garments and “soldier on”. Clearly this lack of correct procedure can be highly dangerous to the person concerned.

Now, one would think that with good education on the dangers posed by the various hazards around the work place everyone would overcome their embarrassment and follow the correct procedure. A logical thought process would be as follows:

“Do I risk a bit of embarrassment at turning on the shower and disrupting the work of my colleagues?”

Or

“Do I save myself the embarrassment but risk my long term health?”

On the logical level it's barely a decision at all. No one would choose to risk their long term health over a little embarrassment right? Well no actually. In reality people will often act illogically and the social, emotional pressures often override logic completely. Sadly humans often make very bad decisions that are against their own interests.

Life is full of such instances. Ask yourself have you ever been too embarrassed to own up to a mistake even when you know it's the right thing to do? Have you ever smoked or drank or eaten too much even though you know it's bad for you? If we are honest most of us have made decisions that we know are bad due to social or other emotional pressures. Whilst we all like to think we are logical creatures, with a bit of honest introspection we see that a lot of the time we are not.

Seeing the shower as non-essential

Safety showers are one of those bits of kit that is hopefully rarely used. Despite any amount of good training to the contrary it is inevitable that the safety shower will be seen as just sitting there taking up space by workers. Over time the perception can be that the shower is a bit of a waste of space, or worse it simply isn't even noticed anymore. This attitude can lead to potentially dangerous actions over time.

The space underneath a shower needs to be kept clear for obvious reasons. If the shower is viewed as essentially useless then this space may become cluttered. Matters are worse with tank showers as the enclosed nature of the shower lends itself nicely to becoming a makeshift storage area. In outdoor workplaces such as on docksides, the covered and sometimes enclosed nature of tank showers makes them perfect places for a cigarette or tea break as they offer some protection from the elements.

Obviously such ad-hoc "re-purposing" of safety showers could be disastrous if an accident did happen. Not only would there be an increased risk of harm due to delays in treatment but also the litigation risk would increase as it is the employer's responsibility to ensure the shower is accessible. An employer can, and should, ensure showers are accessible through regular inspections but sometimes, particularly on night shifts, these problems do go unnoticed.

So what can be done?

Good training is always key to overcoming these barriers but more than that a genuine culture of safety should be adopted. By this it is meant that safety concerns are paramount within the working culture of the business so that it becomes more of a taboo to breach safety protocol than to say strip down completely when entering a safety shower. Achieving this cultural change is often very difficult and health and safety professionals struggle to do so. It is often the lofty goal that is never quite reached. So are there other more immediate, easier to achieve solutions?

Indeed there are. Rather than working to overcome deep rooted psychological barriers there are steps that can be taken to work within the constraints of these barriers. Consider the following product features that may help:

Panelled showers

It may seem a bit of a luxury to enclose a safety shower in panels to give privacy but given the above analysis it could prevent injury. If the investment in panels means that workers will be more inclined to remove all contaminated clothing, as per procedure then it could save lives or at least reduce harm.

Catchment sumps

A catchment sump under the shower or eye bath will help prevent run off liquid from causing disruption to other workers. If combined with side panels then all the water should be contained minimising the effect on others. It may well be the case that such product features are desirable due to other considerations such as contamination worries or the proximity of water sensitive equipment, but it may also be worth pausing to consider whether they may also promote the correct usage of the shower.

Platform activation

A simple solution to the “re-purposing” of showers as a storage area or a tea room is to include platform activation. With these systems as soon as any weight is placed on the panel under the shower it activates. Showers fitted with such activation systems will thus always remain clear from debris as the temptation to use them for other purposes is removed. Indeed many of the psychological barriers discussed above now act to prevent improper usage. Let’s face it - someone who gets a soaking after popping into the safety shower for a crafty fag is very unlikely to make that mistake again!

Conclusions

The key to making a health and safety policy work is always creating the correct culture. But creating a culture where safety is the primary focus of all workers is often difficult. Human psychology is an odd thing and it often means that even with good, regular safety training the message is ignored. The psychological barriers and oddities of human behaviour discussed above are very real and it is a dangerous deception to think that “no one would be so silly” and thus ignore them. A little bit of thought on adding the product features highlighted above can ensure that the product “works with” the existing psychology of workers and thus creates a safer environment.

Written by: Ivan Zytynski



A panelled shower with catchment sump – gives privacy and prevents mess



1 About SSP

The Safety Shower People are a specialist supplier of emergency showers, eye baths decontamination showers. We are the exclusive distributors for world leading safety shower manufacturers FSP Tech.

Our showers and eye baths are essential first aid equipment on any site where substances dangerous to human health are used. The presence of proper shower equipment can help reduce injury, save eye sight and lives in the event of a chemical spill and or burn. All our showers will meet the EN15154 and or the ANSI Z358 standards.

SSP are part of the Spray People Group of companies.

2 About the Spray People Group

The Spray People Group of companies consist of the following business units.

The Spray Nozzle People (Bete Limited) – Suppliers of spray nozzles

The Safety Shower People – Suppliers of safety showers and eyebaths

The Professional Sprayers People - Suppliers of handheld and backpack sprayers, granule and dust applicators

Technical Fulfilment – specialist warehousing and logistics services

The group consists of focused business units selling a variety of spray and fluid handling equipment. The business philosophy for each unit is simple: To provide the very best products backed up with expert technical knowledge and support. Often the products we supply are complex and so require specialist knowledge to ensure they are correctly specified. This necessitates a level of trust between us and our customers. This is why we believe that people are the most important element in our business. It is the trusted relationships formed between our employees and our customers that create true value.



THE
SPRAY PEOPLE
GROUP



THE
SPRAY NOZZLE
PEOPLE

Bete Limited



THE
SAFETY SHOWER
PEOPLE



THE
PROFESSIONAL SPRAYERS
PEOPLE



THE
FULFILMENT
PEOPLE