More important than ever: Fire safety in dental practice

By Stuart Collyer, UK

Being a dentist, you will be familiar with the need to carry out regular checks on your patients to spot potential problems before they become major ones. This preventative approach should be applied to your fire safety procedures and equipment too. Just like any other business, complying with fire safety regulations, like the Regulatory Reform (Fire Safety) Order 2005 here in the UK, is an obligation. By carrying out a fire risk assessment, you can secure the longevity of your business by reducing the likelihood of a fire starting, as well as preparing for the worst.

In fact, studies have shown that over 70 per cent of businesses that have been involved in a major fire either do not reopen or subsequently fail within three years. Fire prevention is far easier than trying to recover from the worst.

More importantly, a fire risk assessment ensures the safety of your staff and patients. Thankfully, fully meeting the regulations is not as difficult as one might expect, but failing to do so comes with the risk of a large fine and even a prison sentence.

The five stages of a fire risk assessment

By completing a fire risk assessment, you will gain a full understanding of your business in terms of the activities that are carried out and the risks present. By going through the five steps, you will have made your dental surgery safer and compliant.

Step 1: Identify all potential combustibles and possible sources of ignition.

Step 2: Consider all the relevant people who are at greatest risk from fire.

Step 3: Remove or reduce the risks of fire as far as possible and take precautions.

Step 4: Prepare for an emergency through fire safety equipment, by providing training and by having a plan of which everyone is aware.

Step 5: Record any findings and regularly review the assessment to keep it up to date.

The risk assessment should be recorded at all stages, including the actions you have taken along the way. If you hire five or more members of staff it is a requirement to have written proof that you have fulfilled your duty as a responsible business owner.

Dental practice fire hazards

For a fire to burn, it needs heat, fuel and oxygen. With one or more of those elements removed, a fire is instantly less likely to break out. Therefore, you need to identify those items that can burn and potential sources of a fire and keep them separated. Possible sources that can cause a fire are radiographic and other electrical equipment when they overheat, or miswired or faulty. This can be avoided with regular inspection and servicing by professionals. Heaters, cooking equipment and smoking materials are other risks. There is also the possibility of arson. When looking around for potential fuel sources, there are many to consider, including medical supplies, toilets, aerosols, furniture, clothing, cleaning products, and waste. In a dental practice, the oxygen stored in cylinders can be a fire and explosion risk if damaged or used incorrectly. It is therefore important to take particular care in their use and storage.

Identify those at risk

The next step is to consider the people who could potentially be present on your premises at the time of a fire. Of course, this includes staff and patients, but also take into consideration agency staff, contractors and other visitors to your practice. There may be particular individuals who would need assistance in making a swift escape in an emergency. Those with mobility issues, such as the elderly and disabled, are particularly at risk. Ask the children. Think specifically about the best way of getting those people safely down any stairs. You may find that an evacuation chair is vitally important for them and to help familiarise staff with the plan.

Evaluate and act

Having now identified all of the potential problems and hazards that are present in your dental surgery, you can now take the relevant action to take precautions to reduce those risks as far as practically possible. The most reliable solution is installing fire detectors throughout the building and using smoke and heat detectors, along with all points as part of a fire alarm system. When the alarm sounds, fire exit signs will then direct people to safety while emergency lighting illuminates that route to keep people safe, no matter what.

Having the correct fire extinguishing equipment installed through-out the premises is one of the best ways you can prepare. Fire blankets in the kitchen area will help tackle small fires with little mess or hassle, while fire extinguishers are best in waiting rooms, corridors, offices and treatment rooms. Water extinguishers are suitable for general fires, including paper, cardboard, rubbish and furnishings, whereas foam extinguishers can be used for flammable liquids. Powder extinguishers are versatile, lighter and safer to use around electrical equipment and flammable liquid and gas. However, they can affect visibility and breathing, so should be mitigated by a health and safety risk assessment and then specified for indoor use. On electrical equipment, carbon dioxide extinguishers are the safest method and will prevent further damage to the electronics.

Each extinguisher needs to be part-marked and a temporary identification sign and should be commissioned upon installation and then serviced annually by a trained professional.

Record, plan, inform, instruct and train

In order to deal with any fire situation, you need to have an emergency plan. This means that all staff will know what to do and ensure the premises are safely evacuated. Further ensure all new staff are informed. It is your duty of care to take on fire warden responsibilities. Once they have received the appropriate training, you should then have plenty to ensure there is always a fire warden present in spite of sickness and holidays. The purpose of fire wardens is to help educate the other staff, besides taking charge in the event of an emergency. Their training will help them to act appropriately and calmly in a fire situation and to evacuate the premises. They will also be on hand to help you with your fire safety duties, such as performing visual checks of equipment and leading fire drills to test the effectiveness of your procedures, and to help familiarise staff with the plan.

Lastly, inform all staff on how to use the fire extinguishing equipment in your surgery.

Review

A risk assessment is never finished, and you should constantly monitor what you are doing to see how effectively the risks are being controlled. It also needs updating should there be a change in building layout or the activities that are carried out. Acquiring a new piece of equipment may seem like just a small change, but together, a few small changes can have a significant effect. That is why many fire services recommend reviewing the assessment at least once a year so you know it is up to date.

The ultimate responsibility for complying with the Regulatory Reform (Fire Safety) Order 2005 falls to the owner of the dental practice. He or she can either carry out the fire risk assessment himself or herself or ask a competent individual to assist. Many business owners choose to hire professional risk assessors to complete it on their behalf. They not only saves them time and effort, but also gives them the peace of mind that it has been done correctly and that no risks have been overlooked.

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“Good design will pay off”
An interview with Drs Mona Patel and Marcus Riedl

By DT

Just as in dentistry in general, where aesthetic aspects are becoming ever more important, dentists today are pursuing intentional design of their dental practices. With the launch of four new design lines, Dentsply Sirona Treatment Centers presents dentists with the opportunity to enhance workflows and treatment efficacy through clever and cutting-edge solutions while conveying their individual style. Dental Tribune spoke with German dentist Dr Marcus Riedl and Dr Mona Patel from the US, both of whom have ensured careful design of their practice environment based on their needs and preferences with a Dentsply Sirona line, about the role of aesthetics in daily dental practice.

Dental Tribune: Design can convey emotions and distinguish a dental practice from others. In your opinion, what relevance does design have in this regard?

Dr Mona Patel: In the US market, it has not played an important role for a long time. Now, with the newer generation of dentists, design is increasingly significant. I think it is just as important as the type of equipment that one purchases or the insurance one carries, because image is everything. In my opinion, the design of the practice is a direct reflection of how one provides care as a dentist. This correlation was not present in previous generations, but it is now.

Dr Marcus Riedl: I can speak for Germany and I think design aspects were mostly neglected in the past. Now, the influence of design in our practices is increasing. One has to consider that we spend almost half of our lives in our practice, so we should feel comfortable. For example, I love the mountains, skiing and the atmosphere of the Alps. Incorporating this love for nature into the design of my practice gives me a holiday feel at work.

When deciding on a particular design or the overall look of your practice, what did you put special emphasis on?

Patel: Dental anxiety is a huge component of what we have to manage, so we need to create an environment that first and foremost has a calming, spa-like feel and reduces our patients’ anxiety when they walk through the door. Secondly, in my practice, I wanted the design to be evidently smart, because that reflects my meticulous personality. I equipped the whole office with Dentsply Sirona products—in fact, it was the first all-Dentsply Sirona office in the US. I wanted to showcase the high tech equipment and design a nice, simple office around that—not to compete with the equipment, but to enhance it.

Riedl: For many of our patients, the design aspect is just an outer shell, since they come to us for the content. We designed our practice for patients to feel at home. When they come into the office, they do not see any units at first. As for dental phobia, in my opinion, reducing anxiety mainly is the responsibility of the staff. However, a calming atmosphere is a great support, of course.

Patel: In health care, whole-body awareness and preventative health are becoming ever more important. A practice today is not just about treating tooth pain, but about establishing a dental home, creating a place where patients can establish a relationship with their dentist and their hygiene team.

Dentsply Sirona has developed four different design worlds: Embellished Elegance, Cheerful Patterns, Honest Materials and Pure Shapes. Which one did you decide on and why?

Patel: We chose Honest Materials because our practice has all this enhanced digital technology, which can be intimidating. I wanted to balance this digital aspect of our practice with natural and organic materials. We have a lot of birch and wood—clean, sleek, simple and balanced materials that hopefully move the focus from the equipment. My design in general is very monochromatic, nothing too messy or cluttered.

Riedl: We too choose Honest Mate-
The design of the practice is a direct reflection of how one provides care as a dentist. Patel: I was designing a new office, so I had a clean slate to work with. I did a great deal of research and comparisons. For me, the look and the design were important, as were functionality, integration, longevity and being able to sanitise it easily. I was instantly drawn to Teneo, because, as I said, I do not like clutter. The fact that everything was integrated was an instant attraction to me. I found solutions to all my wishes in the Teneo. It was an easy decision to make and we designed the office around the units.

Thank you very much for the interview.

The design of the practice is a direct reflection of how one provides care as a dentist.

Pets: Good design does not have to be expensive. Nevertheless, for some reason, if one puts a great deal of effort into the design of one’s practice, it is perceived as though one put a lot of money into it, which is not always the case.

Would you say that the investment in the design is also reflected in the success of the practice?
Pavel: In the US, many things are based on return on investment. It is easier to convince oneself to invest in a CEREC or CBCT device, because one sees an immediate return on investment. However, trying to convince oneself to invest in the design with nicer cabinetry or floorplans, where there is not a direct return on investment, is more difficult. But, I am a firm believer that if one works in a beautiful and happy place, it reflects one’s standards and that is the greatest return on investment. Patients see that. If one sees that love is in every detail, the financial aspect fades in importance; the design fulfils one as a person and one’s patients appreciate the resulting work.

Riedl: Sometimes, it is about the little things. For example, my wife puts fresh flowers in every corner of the practice, which I love. However, design polarises. It divides our patients into at least two groups. Those who are interested in and impressed by our design appreciate it, of course. Others do not. I believe that treatment units and high-end equipment establish a sense of professionalism, quality and exclusivity. No patient can judge a dentist’s quality and knowledge at first sight, but, in the eyes of the patient, design and technology often are equivalents for quality, so good design will pay off.

There are countless treatment units on the market and they differ a great deal. What did you consider when deciding on a system?

Riedl: The treatment units are our workbenches—very expensive ones (laughs), but workbenches nonetheless. It has to be stable, easy to use, intuitive, ergonomic and comfortable for the patient, as well as for the dentist and the assistants—and, of course, easy to clean. It has to aid our treatment and therefore our daily work as a dentist. It is like the assistance systems in one’s car or a smartphone. A good design, of course, is welcome too. That is why the Teneo was our system of choice.

You both use Teneo. What sets the unit apart from those you have used before?

Riedl: As a dentist, I have always worked with Sirona, now Dentpally Sirona. Therefore, there was no question of the brand I would choose. In our previous office, we used the M1 for almost 30 years—I, of course, used it only for about ten years—and I did not want to change my habits and movements during treatment. Comparing the M1 with the Teneo is like comparing an old Benz with a new one. It is the same quality. The Telleo might be not as solid as the good old M1, but has more features that are useful.

Patel: I was designing a new office, so I had a clean slate to work with. I did a great deal of research and comparisons. For me, the look and the design were important, as were functionality, integration, longevity and being able to sanitise it easily. I was instantly drawn to Teneo, because, as I said, I do not like clutter. The fact that everything was integrated was an instant attraction to me. I found solutions to all my wishes in the Teneo. It was an easy decision to make and we designed the office around the units.

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