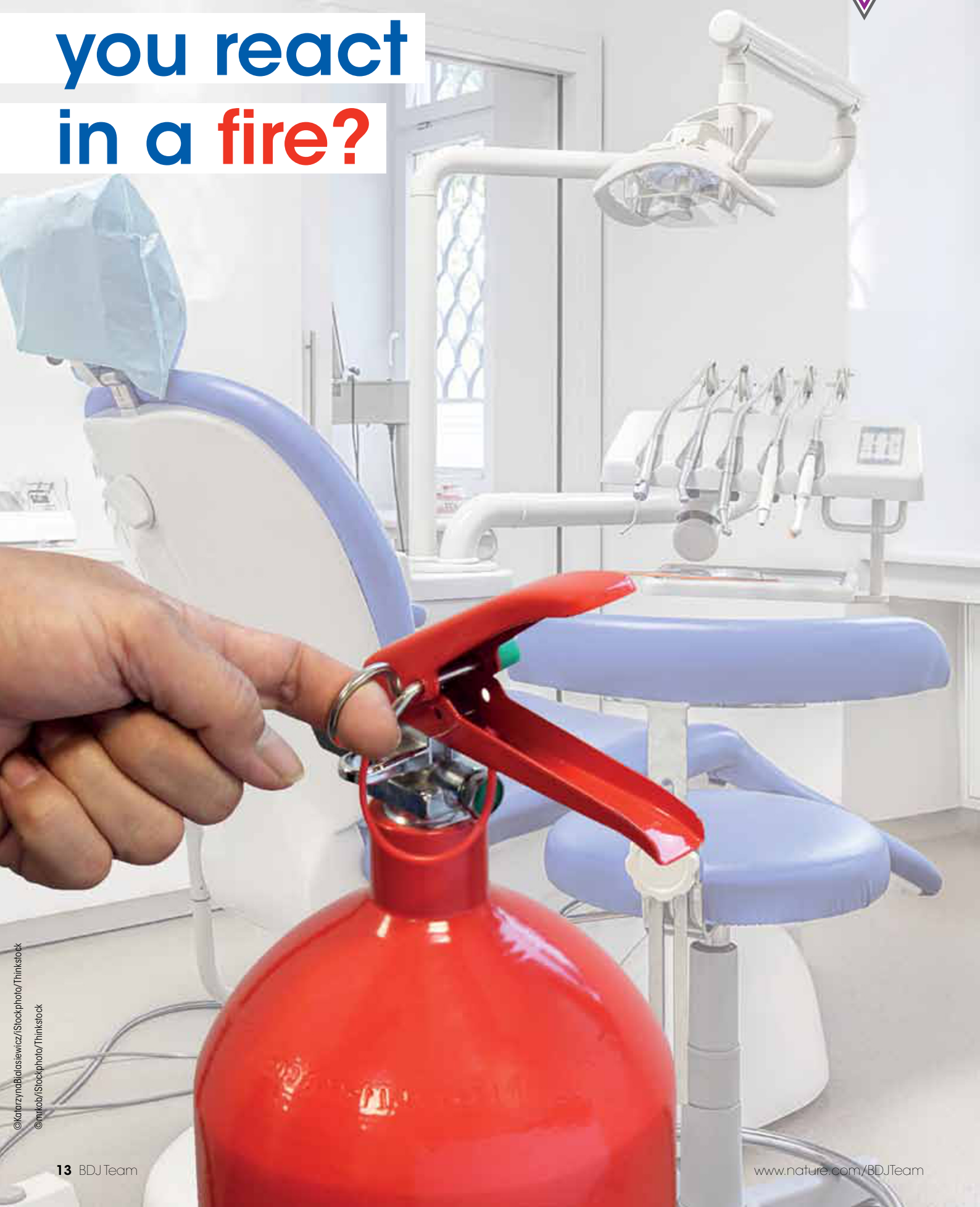


How would you react in a fire?



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Bricks and mortar are easily replaced after a fire, but the emotional, financial and physical scars may be visible forever.

Jon Kyle Anderson¹ trains dental practices in fire awareness and fire safety.

Legislation

The Regulatory Reform (Fire Safety) Order 2005 is a single piece of legislation that clearly identifies the employer as the Responsible Person with a duty to ensure that buildings are safe. Part of this duty is to ensure that a Fire Safety Risk Assessment (FSRA) is undertaken and that such an assessment is reviewed at least annually. An FSRA answers questions such as:

- Have you identified anything that could start a fire?
- Have you identified anything that could burn?
- Who could be at risk?
- Who could be especially at risk?
- How will everybody escape?

Causes of workplace fires

Causes of workplace fires include:

- Arson
 - Disgruntled employees or ex-employees may start a fire
 - Ensure buildings are secure

- Check that tamper seals on fire extinguishers are intact
- Faulty and misused electrical equipment
 - Do not overload electrical sockets and extension leads – these can overheat and burn
 - Cables that are frayed are also a personal injury risk
 - Check that plugs are not cracked or show signs of overheating
- Cooking
 - Do not leave pans unattended
 - Clothing (particularly sleeves) can catch alight on a gas hob
- Poor housekeeping
 - Storing goods and equipment in corridors. The corridors become narrowed, and the goods and equipment might be knocked over and thus delay or prevent escape from a smoke filled area. The goods and equipment are also a potential ignition source
 - The build-up of rubbish, whether it is waste bins or recycling bins, is a fire risk. Do not allow such rubbish to accumulate
- Smoking
 - Discarded cigarette ends
 - Covert smoking.

Fires and people

People react very differently when confronted with an emergency situation:

- The sound of a fire alarm may be completely ignored, or occupants will look for the reaction of others before doing

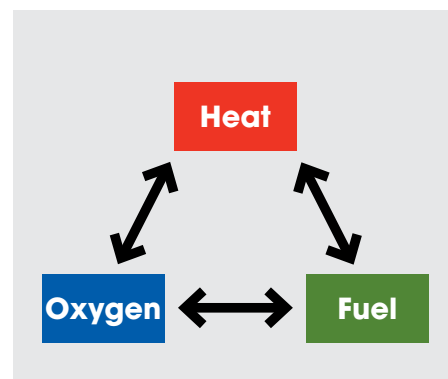


Fig. 1 The fire triangle

anything themselves

- Panic can lead to distress and confusion, with occupants bypassing a fire exit in order to leave a building by the front door
- Occupants can become extremely frightened.

The classifications of fire

Fire is classified according to the material that is burning. The six classifications are:

- A – Solids
- B – Liquids
- C – Gases
- D – Metals
- E – Electricity (this is a cause of fire rather than a material)
- F – Cooking fats and oils.

The fire triangle

The fire triangle in Figure 1 highlights that fire needs heat, oxygen and fuel to develop. The fire cannot continue if the heat, oxygen or fuel is removed.

'HAVING FIRE EXTINGUISHERS AND FIRE BLANKETS IN THE WORKPLACE DOES NOT MEAN THAT TACKLING A FIRE IS SAFE – YOU HAVE TO DECIDE WHETHER OR NOT YOU FEEL SAFE IN DOING SO.'



¹Trainer and former paramedic. Visit www.st4training.co.uk for more information on bespoke training for your dental practice in resuscitation, anaphylaxis, defibrillation, manual handling, first aid, evac chair and fire awareness. Or call Jon on 07837 130700.

Table 1 Selecting the correct extinguishing medium in the event of a fire	
Material that is burning:	Extinguishing medium:
Class A – Solids	Water or Foam
Class B – Liquids	Foam, Carbon dioxide gas, Dry powder
Class C – Gases	Dry Powder
Class D – Metals	Dry Powder (special)
Class E – Electricity	Carbon dioxide gas, Dry powder
Class F – Cooking fats and oils	Wet chemical



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***‘THE RESPONSIBLE PERSON NEEDS FIRE MARSHALS
TO BE THE EARS AND EYES ON THE GROUND,
HELPING TO KEEP PEOPLE AND
BUILDINGS SAFE FROM FIRE.’***

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Fire extinguishing media

Fire extinguishers and fire blankets kill a fire by removing either the heat or oxygen (or both). Following discussions with your supplier, you will be able to make a decision as to which fire extinguishing medium is most appropriate for your individual needs. Selecting the correct extinguishing medium is vital (Table 1).

A fire blanket usually measures 1 m² or 1.2 m² and is ideal for extinguishing fires involving cooking fats and oils. A fire blanket can also be used to extinguish a small Class A fire (provided the blanket excludes oxygen from feeding the fire) and for covering a burning person. In all such cases, the blanket kills the fire by depriving the fire of oxygen – it smothers the fire.

Having fire extinguishers and fire blankets in the workplace does not mean that tackling a fire is safe – you have to decide whether or not you feel safe in doing so.

Tackling a fire

Never tackle a fire:

- That is bigger than a waste paper bin
- That is spreading
- If the room is filling with smoke
- In the presence of gas cylinders, gas appliances or chemicals.

If you feel it is safe to tackle a fire:

- Sound the alarm
- Ensure the fire service has been called
- Only use an extinguisher if you are confident to do so
- Choose the correct extinguisher
- Only use one extinguisher
- Keep your back to the nearest exit route.

Leave the building immediately if the fire:

- Is getting bigger
- Is not reducing
- Has not been extinguished with one extinguisher (never used a second extinguisher).

The PASS word

Operating instructions vary depending on the make and type of fire extinguisher. In general, the acronym PASS is a good way to help remember how to use an extinguisher:

- P** **PULL** the safety pin which will also break the plastic tamper seal
- A** **AIM** the nozzle, discharge horn or hose at the base of the flames
- S** **SQUEEZE** the handles together so the extinguisher discharges
- S** **SWEEP** from side to side at the base of the flames until the fire is extinguished

The Fire Marshal

Prevention is better than cure, so fire marshals are an invaluable asset. The role is proactive (helping to prevent a fire from starting) and reactive (taking definitive action on discovering a fire or when hearing the fire alarm). The Responsible Person needs fire marshals to be the ears and eyes on the ground, helping to keep people and buildings safe from fire.

- Examples of the proactive role are:
 - Having an understanding and working knowledge of the Fire Safety Risk Assessment (FSRA)
 - Knowing the organisation’s response to the fire alarm – being aware of the actions to be taken in the event of an emergency
 - Conducting regular inspections – an example being to check that corridors are clear of obstructions and combustible materials, and that fire exits are clear on both sides of each exit
 - Checking that in the event of a fire alarm sounding, every employee or visitor should be immediately able to see a sign indicating the location of the nearest fire exit
 - Knowing of any specific hazards within his/her zone of responsibility (eg where oxygen cylinders are kept)
 - Maintaining an awareness of the location and work processes of contractors
 - Reporting and writing down any concerns
- Examples of the reactive role are:
 - Activating the fire alarm
 - Ensuring that somebody calls 999/112
 - Evacuating people from his/her designated zone
 - Understanding the additional time needed to ensure the evacuation of people affected by problems associated with their age, sight, hearing, mobility and cognition
 - Carrying out a final sweep of his/her designated zone, closing any doors and windows (if safe to do so)
 - Carrying out a roll call at the assembly point
 - Reporting to the fire officer.

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bdjteam20158