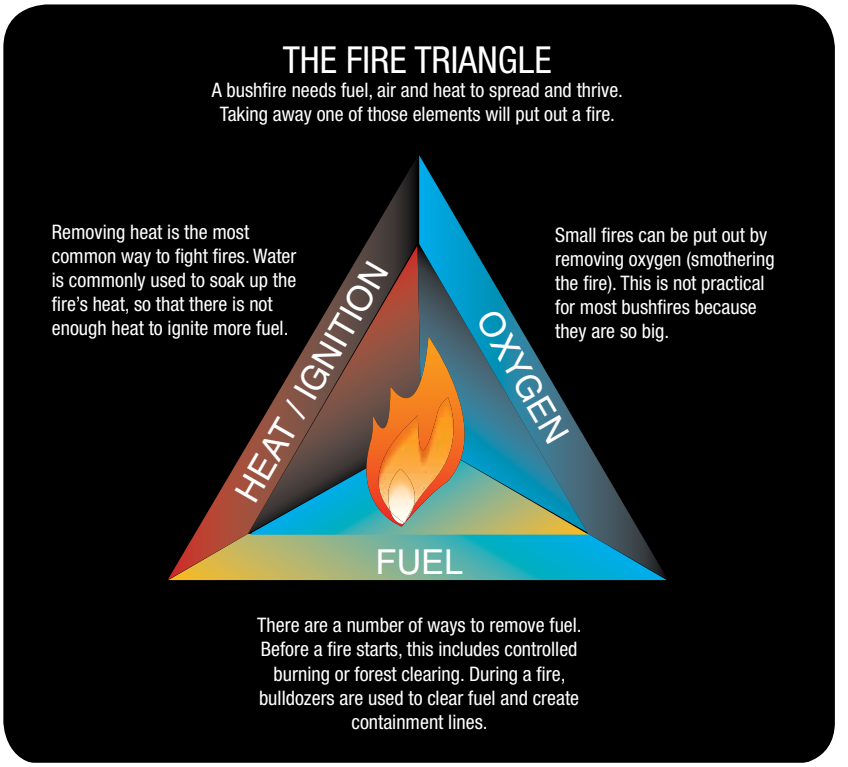
FACT SHEET FIRE BEHAVIOUR

There are thousands of bushfires in Western Australia each year. Western Australia is one of the most bushfire prone parts of the world. No one knows where or when the next major bushfire will hit. You can increase the chance that your home and loved ones will survive a bushfire.

In 2010, career and volunteer firefighters responded to and put out more than 7000 bushfires across Western Australia.



HOW BUSHFIRES BEHAVE

It is important you understand how bushfires behave to help you protect your family and home against them. All fires need fuel, air and heat.

FUEL

Vegetation around your home like dry grass, leaves, twigs and bark provide fuel for a fire. This fuel plays a part in how hot a fire can be and how fast it can spread. If fuel is removed, the fire will starve.

HEAT

Bushfires generate unbelievable heat. Much of this heat goes up into the air but significant heat also radiates at ground level. This radiant heat spreads the fire by drying out vegetation so it will burn.

RADIANT HEAT

Radiant heat is the main cause of people dying in a bushfire. Radiant heat may not set fire to your home but it can crack and break windows that will allow embers in. The best protection from radiant heat is distance.

EMBERS

Even if the fire front does not reach your home it can still be damaged by burning embers carried by strong winds. Embers can get into your home through gaps in roofs, walls, evaporative air conditioners, windows and doors. They can land on materials that easily burn and this can start a fire. Research has shown that ember attack is the main reason that houses catch fire during a bushfire. Embers can continue to threaten your home even after the fire front has passed.

DIRECT FLAME CONTACT

When materials close to your home catch fire flames can touch the outside of your home. How long flames are in direct contact with your home depends on the amount of fuel to be burnt.

AIR

A bushfire needs air to keep going and the more there is the faster the fire burns. Strong winds not only force the fire along but also increase air circulation and provide more air.

Any change in wind direction or speed can rapidly increase the rate of spread and the direction of the fire. The prevailing afternoon breeze in summer presents the most common threat as it fans bushfires when fuel is at its driest during the day.

WIND

Strong winds usually come with bushfires and as the wind increases so does the fires temperature. The wind pushes flames closer to fuel making the fire travel faster. Embers and other burning materials are also carried by the wind which can damage homes kilometres from the fire front.