

1 All you need to know about the risk from SBD

Taking a reasonable proportionate and reasonably practicable approach

1 This guide gives you the facts about the risk from Summer Branch Drop (SBD). Looks at the overall risk and reviews what we currently know and don't know. Then provides you with some risk management advice.

1.1 What is SBD?

Branches that unexpectedly fail after hot dry weather

2 SBD is a very loose term for branches on mature trees that have no obvious tree risk features, which unexpectedly fail after a period of hot dry weather.

1.2 Fact-checking the risk

The overall risk is mind-bogglingly low

3 Compared to other everyday risks that we readily accept, the overall risk from SBD is mind-bogglingly low. From the data^{1 2} we have, the annual risk of death or serious injury is less than one in one hundred million. That's so low, we're at greater risk for the few minutes it takes to cover about 5km/3mi on a drive, than we are from SBD over a whole year.

1.3 What we know and what we don't know

There's no agreement about what SBD is or what it's called

4 Perhaps because the overall risk from SBD is so mind-bogglingly low, it's not been very well researched. There's no agreement about what SBD is, or even what it's called - it's also known as Sudden Branch Drop and Sudden Limb Drop. SBD is often used as a catch-all term to describe branch failure when wind or extensive decay doesn't appear to be an obvious explanation.

There's no agreement about the critical factors that trigger branch failure

5 In the published literature, the causes of SBD are not agreed or clear^{3 4}. Amongst these, there's no agreement about how hot and dry it needs to be, and for how long; or if humidity plays a role. Or whether the branch has to be horizontal or if its length is a critical factor. There's no agreement either about what time of day it's likely to happen, and if rain is required. Or even if the branch has to be free of obvious tree risk features to qualify.

1.4 Species profiling and a lack of obvious features

Many tree species can suffer from SBD

6 In the literature, SBD's been recorded on the following species; Ash, Beech, Cedar, Corymbia, Elm, Fig, Eucalyptus, Giant Sequoia, Horse Chestnut, Liquidambar, Oak, Pine, Plane, Poplar, Silver Maple, Sweet Chestnut, Tree of Heaven, Willow. There are probably more species not yet recorded.

We can't tell which branches will or will not fail

7 Branches that might fail because of SBD, on trees that don't have a history of it, lack any obvious tree risk features. This means an Arborist can't tell the difference between branches that have a high likelihood of failure from those that have a low likelihood of failure before they unexpectedly fail.

1.5 Managing the risk

Unless a tree has a history of SBD the risk is Acceptable

8 If your trees don't have a history of SBD, then even at the times of the year when it's most likely to occur, the risk is Acceptable. That means there's no need for you to reduce the risk any further. If any of your trees have a history of SBD then you should manage the risk to an Acceptable level.

Further Information

9 **1 National Tree Safety Group | Risk Research**
2 List of Deaths From Falling Tree Parts in Australia
3 Sudden Branch Drop: A Case for Closer Inspection
4 Summer Branch Drop | Arboricultural Research Note