

**Taking a reasonable proportionate and reasonably practicable approach**

## 1 All you need to know about the risk from SBD

1 This guide looks at what Summer Branch Drop (SBD) is. Fact checks the risk. 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<sup>1 2</sup> 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 most commonly 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<sup>3 4</sup>, there's no agreement about what causes of SBD. 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.

### 1.4 Species profiling and a lack of obvious risk features

**Many tree species can suffer from SBD**

6 In the literature, SBD has 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 fail.

### 1.5 Managing the risk

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

**Don't put up warning signs like this**



**Want to know more about SBD and risk from tree failure?**

8 If your trees don't have a history of SBD, even at the times of the year when it's most likely to happen, 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, reduce the risk to an Acceptable level by lowering occupancy or pruning.

9 Warning signs are unnecessary, or not effective. If a tree has no history of SBD, they're unnecessary because the risk is Acceptable. If a tree has a history of SBD, and the risk is not Acceptable or Tolerable, warning signs are not an effective way to manage the risk. They don't pass liability on to a visitor. And you won't be able to demonstrate signs altered visitor behaviour, and level of occupancy, so much the risk was reduced to an Acceptable or Tolerable level. Also, in the extremely unlikely event of someone being killed or injured. It'd be all too easy for a claimant to make a case you could've managed the risk better, by planting undergrowth, fencing the tree off, or pruning it.

- 10 **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**