



# What are potholes and how do potholes form on roads?

## Sealed road surfaces

A standard sealed road surface often includes an asphalt or bitumen pavement structure with a wearing surface, base, subbase, and a subgrade below the pavement.

## Unsealed road surfaces

Unsealed roads can be highly variable in structure. High quality unsealed roads are similar in structure to a sealed road, with a graded gravel wearing course in place of asphalt, whilst others can be dry weather tracks directly over the subgrade with no formal road structure.

Potholes on unsealed roads are usually a result of a poor or deteriorated road formation which does not allow sufficient water runoff.

## Potholes

Potholes are steep-sided or bowl-shaped cavities extending into layers below the wearing surface.

They are frequently caused by and/or accelerated by:

- deterioration of the road, which can occur from
  - a structural design that is inadequate for the traffic loading
  - a pavement that is older and fatigued (failure of the road surface commonly occurs in the wheel path)
  - poor quality road material and/or workmanship

- moisture related distress, which can occur from
  - water reaching underlying road materials softening/weakening the base and even washing out road materials
  - poor drainage, where if water can't drain away from the road, it can seep into the road through surface failures
  - extended periods of rainfall exposing road weaknesses.

Moisture related distress is the most frequent cause of potholes in South Australia and is especially problematic on roads that are already experiencing deterioration such as cracks and ruts, which can be indicators that the road is nearing the end of its design life.

## How are they repaired?

The two most common repair techniques involve using either cold mix asphalt or hot mix asphalt. Cold mix asphalt can be used for smaller repairs and is also often applied as a rapid, short-term measure until a longer-term repair can be undertaken that will usually include the use of hot mix asphalt, which is more durable. The repair technique used not only depends on the overall condition of the road, but also the weather conditions and the level of moisture present in the subgrade. Warmer and drier conditions are more favourable to complete effective repairs, as premature failure of repairs can occur if they are undertaken whilst the subgrade is too damp.



Where consistent road pavement failures are present on a length of road, a road reseal or road reconstruction may be required to rehabilitate a road rather than localised repair.

Typically, localised pavement failures are addressed through patching, which involves:

- squaring of the hole (vertical trimming of the edges)
- removing loose material
- applying a tack coat
- adding in asphalt mix to the hole
- smoothing and compacting of the mix
- drying and settling of the patched area.

### **What do I do if I encounter potholes when I am driving?**

Where drivers/riders are aware of poor road surface conditions or are using a road in lower visibility conditions, such as at night or in inclement weather, it is especially important to:

- reduce your speed
- keep a safe distance from the vehicle in front
- avoid suddenly swerving or leaving your lane to miss a pothole
- avoid driving over road surface defects where it is possible and safe to do so without impacting the safety of yourself or other road users.

### **How do I report potholes or other road surface defects?**

You can report to RAA's Report a Road website ([raa.com.au/reportaroad](http://raa.com.au/reportaroad)). The issue will be investigated before forwarding to the relevant road authority.

Is the road surface defect an urgent road safety issue?

- if yes, report the issue to the **Traffic Management Centre (1800 018 313)**.

### **Take note of the location**

Take note of location such as nearby streets, landmarks, direction of travel, or other details about the site, to assist with identifying the location. A photo of the defect can be useful, but only if there is a safe parking space and you can take photos from the verge. **Never stop in dangerous locations or walk onto the road to take photos.**

### **Is there any recourse for damage to my vehicle?**

Refer to your Comprehensive Car Insurance PDS\* at our website ([raa.com.au/insurance](http://raa.com.au/insurance)) or chat to an RAA Insurance expert on **8202 4567** to find out more.

Enquirers regarding recourse for damage to their vehicle are advised to contact either:

- the **Legal Services Commission (1300 366 424)** for legal concerns and enquiries
- the local Council (where a road maintained by that Council is involved)
- the Department for Infrastructure and Transport via the Traffic Management Centre (where a road maintained by state government is involved).

State-maintained roads/highways are managed by the Department for Infrastructure and Transport, local roads are managed by Councils, and carparks are usually the responsibility of the attached business/service or the centre management, for larger shopping centres.

### **We're here to help**

**Call our Road Safety team on 8202 4517 or email [roadsafety@raa.com.au](mailto:roadsafety@raa.com.au) [raa.com.au/roadsafety](http://raa.com.au/roadsafety)**

\*Comprehensive Car Insurance product is issued by RAA Insurance Ltd ABN 14 007 872 602. AFSL No. 232525. Limits apply. Consider the Product Disclosure Statement available from the RAA website when deciding whether to purchase this product.