

# Diabetes Management – Injectables

## What is Diabetes?

Diabetes is a chronic health condition marked by abnormally high levels of glucose (sugar) in the bloodstream.

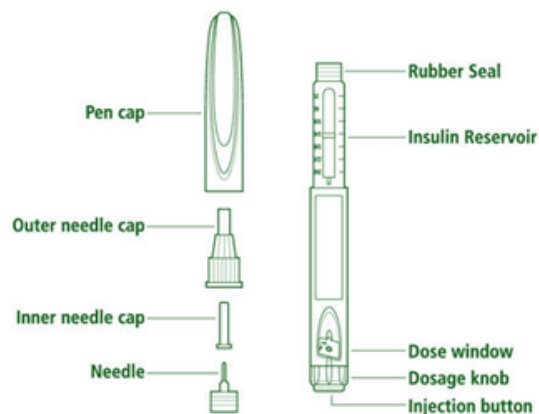
## How does it develop?

It develops when the pancreas cannot produce enough insulin - the hormone that moves sugar from the blood into cells for energy - or when the body cannot effectively use the insulin it makes. You can be diagnosed with diabetes at any age.

**1 in 15**  
adults in  
Australia  
have diabetes

**Males**  
are more  
likely to have  
diabetes than  
females

Over time, unmanaged high blood sugar can cause severe damage to the heart, kidneys, eyes, and nerves, as well as increasing the risk of infection and slowing wound healing.



## Type 1 Diabetes

The body's immune system mistakenly attacks and destroys the insulin-producing cells in the pancreas.

**10%**  
of diabetes cases in Australia  
are Type 1

Type 1 diabetes is managed with insulin therapy via injections or pumps.

## Type 2 Diabetes

The body either resists the effects of insulin or does not produce enough to maintain normal glucose (blood sugar) levels. The prevalence of Type 2 diabetes increases with age.

**1 in 6**  
Australians over 65 have Type 2 diabetes

Type 2 diabetes may initially be managed with lifestyle modifications and non-insulin medications, but insulin therapy may become necessary over time as pancreatic function declines and the disease progresses.

AUSTRALIAN TYPE 2 DIABETES GLYCAEMIC MANAGEMENT ALGORITHM

## There are three main types of insulin used to manage diabetes

### Bolus insulin

Also known as ultra-rapid, rapid, or short-acting insulin. Given with meals. Can also be used to lower blood glucose levels if they are too high (Correction bolus)

### Basal insulin

Also known as long-acting or intermediate-acting insulin

### Premixed insulin

A mix of both basal (long-acting) and bolus ultra short and short acting) insulin.

**Onset of action: 1-30 minutes**  
**Duration of Action: 3-5 hours**

Brand Names: Novorapid, Humalog, Actrapid, Humulin R, Fiasp.

**Onset of action: 1-6 hours**  
**Duration of Action: 12-36 hours**

Brand Names: Humulin NPH, Protaphane, Levemir, Optisuli, Toujeo

**Onset of action: 0.5-1 hour**  
**Duration of Action: 16-24 hours**

Brand Names: Humulin 30/70, NovoMix 30, Humalog Mix25, Humalog Mix50, Ryzodeg