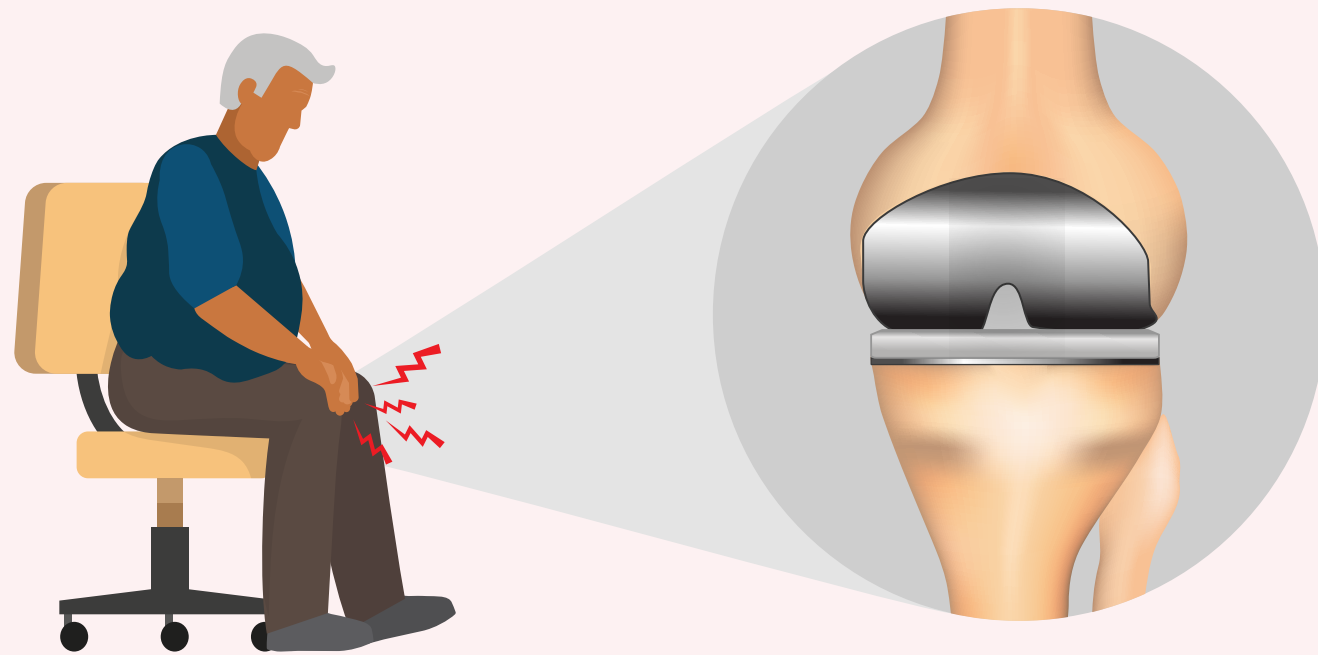


Risk of Revision Surgery Following Total Knee Arthroplasty in Obese Patients

Total knee arthroplasty (TKA) is a reliable treatment option for patients with knee osteoarthritis (OA), but the risk of adverse outcomes after TKA in obese patients is concerning

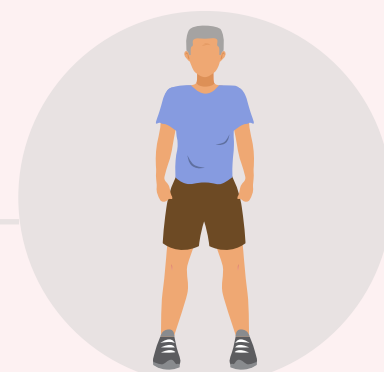


**Australian Orthopaedic Association
National Joint Replacement Registry data**

Rates of revision surgery after primary TKA compared between:



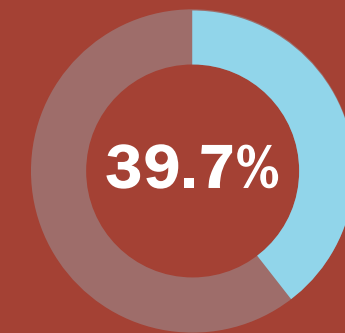
Obese patients



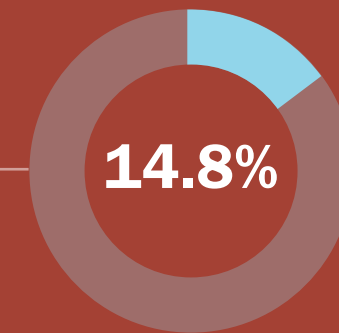
Non-obese patients

141,673 patients who underwent primary TKA → **2,655** revision surgeries

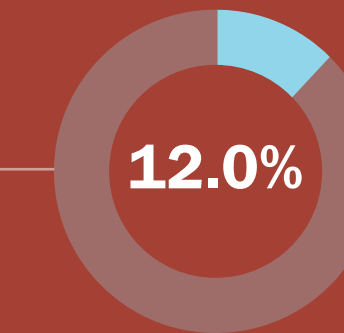
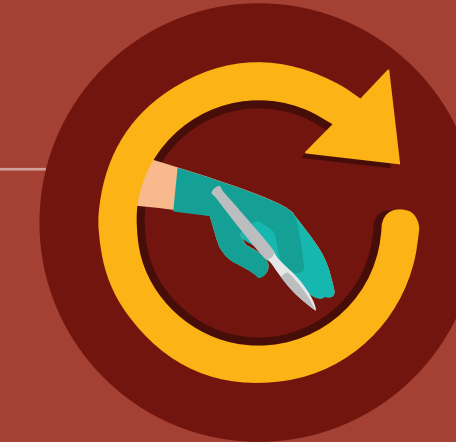
Causes of revision



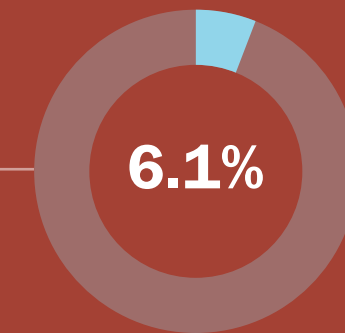
Infection



Loosening



Instability



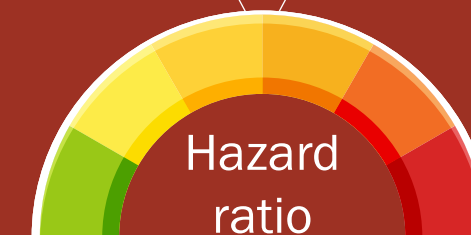
Pain

Risk of revision surgery compared to non-obese patients

**In Class I/II obese patients
(BMI = 30–39.99 kg/m²)**

All-cause
1.12

Due to infection
1.25



Hazard
ratio

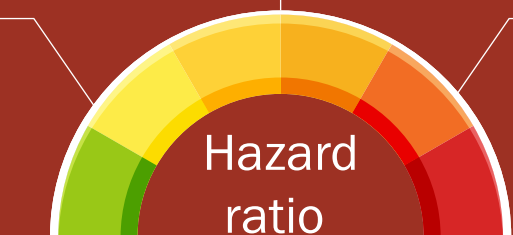
Higher risk of all-cause revision and
revision for infection

**In Class III obese patients
(BMI >40 kg/m²)**

Due to loosening
1.39

All-cause
(after 1-year)
1.30

Due to infection
(after 3 months)
1.72



Hazard
ratio

Added risk of revision due to loosening



Obese patients who undergo primary TKA to treat knee OA have a higher risk of revision surgery and should be counseled about the risks involved

A Prospective, Longitudinal Study of the Influence of Obesity on Total Knee Arthroplasty Revision Rate: Results from the Australian Orthopaedic Association National Joint Replacement Registry

Wall et al. (2022) | DOI: 10.2106/JBJS.21.01491

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