

The **DEVASTATING** Impact Of

Periprosthetic Joint Infection (PJI)



What is PJI?

PJI is one of the most common complications after total joint replacement, often resulting in prolonged hospitalization and considerable patient morbidity.¹

The five-year mortality rate for patients with PJI is higher than ⁶

Breast Cancer Melanoma Hodgkin's Lymphoma

What is PJI Costing Your Facility?

PJI is a significant economic burden to the overall health care system and considered the largest challenge in orthopedics today.²

PJI places major financial stress on the patient, the payer and healthcare systems.¹

**\$60,000 –
\$100,000**

cost per
PJI treatment¹

**\$1.62
billion**

annual PJI cost
projected by 2020²

What Causes PJI?

The aging population, pre-existing comorbidities such as diabetes and obesity, and antimicrobial resistance has led to an increase in generalized musculoskeletal infection, including PJI.¹ Changes in antimicrobial resistance has resulted in¹:

- Higher rates of treatment failure
- Longer hospitalizations
- Worse overall outcomes

Biofilms Contribute to Antimicrobial Resistance

Biofilms are made up of bacteria that produce an Extracellular Polymeric Substance (EPS) to shield themselves from both mechanical and chemical attack.

- Over 90% of all bacteria exist in biofilms⁴
- EPS shielded bacteria can be 1000x more resistant to antibiotics than planktonic bacteria⁷
- Periodic release of planktonic bacteria from biofilms have been linked to chronic relapsing infections⁸

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