

# **When to consider renal replacement therapy in pediatric sepsis?**

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# Scope

- Burden of AKI and sepsis induced-AKI (SAKI)
- Conceptual framework and targeted approach for AKI
- Pathogenesis of SAKI
- Renal replacement therapy in AKI and futures developments

# Age-related comparative yearly incidence of AKI

**0.56 cases/1,000 PPY**

**Mortality rate 10-61%**

**Sepsis growing by 8.7%/year**

**By pRIFLE, incidence up to**

**35.9-82% in PICU**

1.5

**Thai AKI-EPI study (AKI in ICU)**  
**Incidence 56.1%**  
**Mortality rate 41.9%**

# Sepsis-induced AKI (SAKI)

- Sepsis (contributing factor)→ AKI
- Sepsis accounted for 21.4% of AKI
- Mortality of 45% up to 77%
- SAKI increased in-hospital mortality, longer ICU and hospital stay when compared with non-SAKI