A GEORGE INSTITUTE
FACTSHEET



RESPOND: Resuscitation in Paediatric Sepsis using Hydrocortisone and Vitamin C

Nov 2026

The George Institute for Global Health

FACTS:

- Sepsis causes over 1 million child deaths annually worldwide, many within the first 48 hours, highlighting the urgent need for early intervention strategies.
- Up to 30% of children who survive sepsis experience long-term disability, including neurological damage and amputations.
- There is limited evidence for paediatric sepsis treatments beyond antibiotics and supportive care, with minimal improvement in outcomes over the past decade, highlighting the need for new treatment options.

PROJECT CYCLE:
2023 – 2026

PARTNERS:
The Children's Intensive Care Research Program (ChIRP), University of Queensland, Australia

The George Institute for Global Health, Australia

The George Institute for Global Health, India

SUPPORTERS:
Financial Markets Foundation for Children, Australia

National Health & Medical Research Council (NHMRC), Australia

PRINCIPAL INVESTIGATOR:
Dr Luregn Schlapbach

A/Prof Kristen Gibbons

Dr Sainath Raman

BACKGROUND:

- Paediatric sepsis is a life-threatening condition that can worsen quickly and requires urgent treatment.
- Current treatments focus mainly on infection control, with limited options to address the body's damaging inflammatory response early.
- Existing approaches are largely based on expert opinion rather than strong clinical evidence, leading to uncertainty in optimal care strategies and inconsistent patient outcomes across settings.
- There is an urgent need for safe, affordable therapies that can be administered early to improve recovery and reduce long-term complications for children with sepsis.

AIM:

- To find out whether early treatment with hydrocortisone and vitamin C can improve recovery for children with sepsis.
- To build stronger evidence for safe, low-cost treatments therapies that can be used early to improve outcomes in paediatric sepsis care.

METHODS:

- This study uses an open-label, randomised controlled trial design to compare early treatment with hydrocortisone and vitamin C against standard care for children with sepsis.
- It focuses on initiating treatment early in intensive care settings, unlike past studies conducted at later disease stages, to better influence progression and outcomes.
- The intervention uses widely available, low-cost drugs with established safety profiles, enabling practical implementation while systematically assessing impact on recovery and organ dysfunction.

IMPACT

- Findings could support early, low-cost interventions that improve survival and recovery in children with sepsis, especially in resource-limited healthcare settings.
- Evidence from this study may help standardise pediatric sepsis care, reducing variability in treatment practices and improving overall quality of care across hospitals.

CONTACT:

To learn about this project, its investigators or The George Institute please contact:

Tina Wall +61 410 411 983 OR
twall@georgeinstitute.org.au

THE GEORGE INSTITUTE FOR GLOBAL HEALTH:

We believe everyone has the right to a healthy life. The George Institute finds solutions to some of the world's biggest health problems, through high-quality, evidence-based research. By utilising our global footprint and local insights, our research findings can deliver real impact, particularly to those facing the most challenges, and we continue to advance our vision of global health equity.