

Infectious Diarrheal Diseases Unit (IDDU)

One Health Centre | National University–Sudan



The Infectious Diarrheal Diseases Unit (IDDU) is a national centre of excellence dedicated to addressing the critical burden of enteric pathogens in Sudan. By bridging the gap between clinical care, advanced diagnostics, and environmental health, we provide a transformative, integrated response to recurring epidemics and chronic health challenges.

The Challenge: Why the IDDU Matters

In Sudan, infectious diarrhoeal diseases—including Cholera and Acute Watery Diarrhoea (AWD)—are a leading cause of mortality among children under five, pregnant women, and displaced populations.

The convergence of prolonged conflict, deteriorating WASH infrastructure, and weak surveillance has created a critical gap in our national health security. The IDDU was

established to fill this gap, moving from fragmented responses to a coordinated, sustainable One Health strategy.

Our Goal & Strategic Objectives

Goal: To significantly reduce morbidity and mortality from infectious diarrhoeal diseases in Sudan through a holistic, integrated One Health approach.

- **Clinical Management:** Strengthening outbreak response and case management.
- **Advanced Diagnostics:** Establishing early-warning systems and robust laboratory capacity.
- **Actionable Research:** Conducting epidemiological studies to inform national policy.
- **Community Resilience:** Improving WASH interventions and public health awareness.



Core Activities & Services

The IDDU operates across seven pillars of excellence to ensure a 360-degree approach to disease control.

Pillar	Key Activities
Clinical Services	Specialist treatment units for Cholera/AWD, ORT corners, emergency mobile response teams, and antimicrobial stewardship.

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Research & Development	Epidemiological mapping, clinical trials for new protocols, and AMR monitoring.
Training & Education	Capacity building for doctors and nurses, postgraduate fellowships, and medical curriculum integration.
Community Outreach	Hygiene BCC (Behaviour Change Communication), school-based health programmes, and media advocacy.
Surveillance & GIS	Real-time disease monitoring, GIS hotspot mapping, and rapid outbreak investigation.
WASH & Environment	Water quality testing, food safety monitoring, and municipal authority collaboration.
Policy & Advocacy	Evidence-based recommendations for the Ministry of Health and global health partners.

The One Health Integration

We do not view diarrhoeal disease as a human health issue alone. Our unit holistically addresses the Human–Animal–Environment interface:

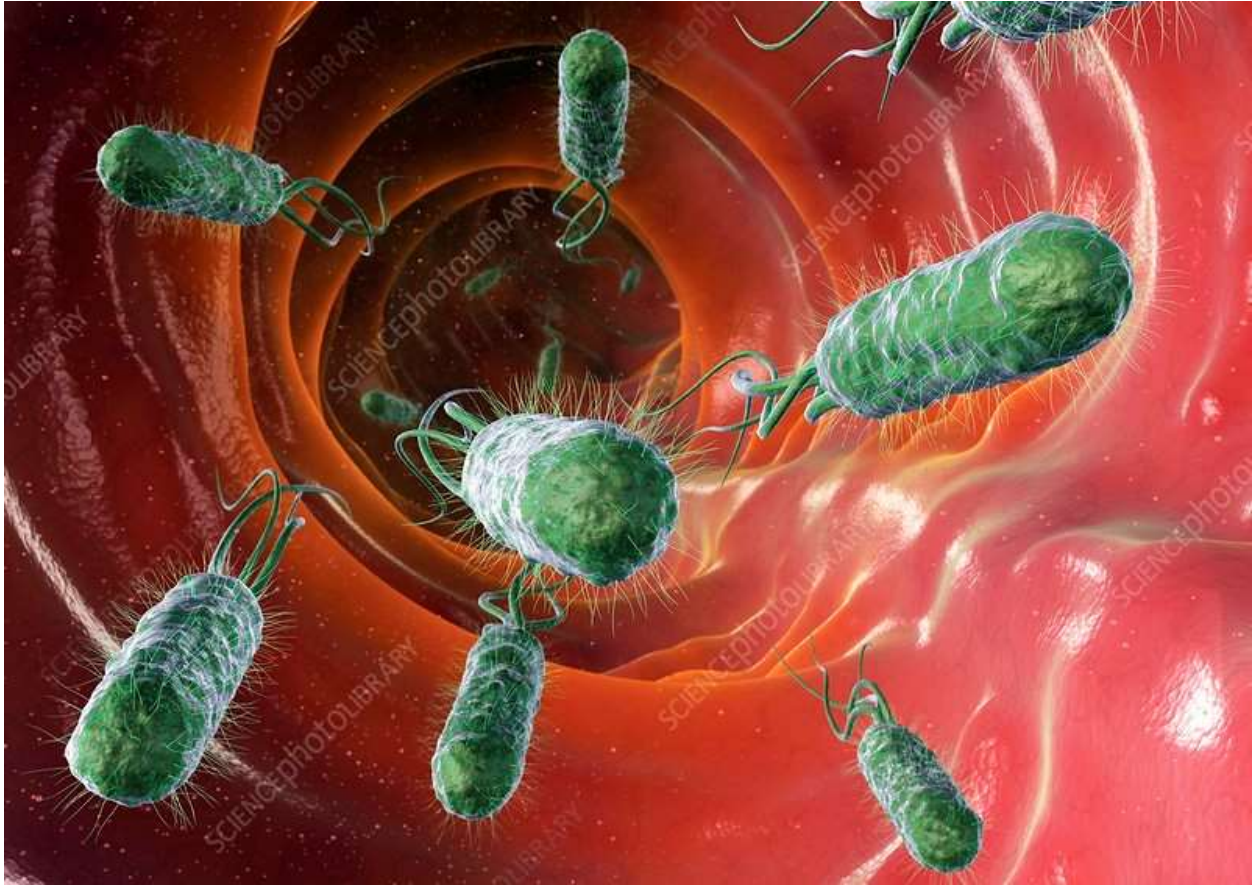
- **Human:** Standardised clinical care and vaccinations.
- **Animal:** Monitoring zoonotic enteric pathogens.
- **Environment:** Strengthening water systems and environmental sanitation.

Sustainability & Partnerships

The IDDU is designed for long-term impact. By embedding our protocols within the Ministry of Health and the National University system, we ensure that our interventions remain locally owned and scientifically rigorous.

Our Strategic Partners include:

- Government Ministries (Federal & State)
- International Organisations (WHO, NGOs)
- Global Health Security Agenda (GHSA) partners



Expected Impact

Our mission is defined by measurable outcomes that strengthen the resilience of Sudan's health system:

- **30–50% Reduction** in diarrhoeal disease mortality in target areas.
- **>50% Improvement** in outbreak response times.
- **National Excellence:** Establishment of a regional hub for training and research.

Our Team

Under the leadership of the Unit Director, our multidisciplinary team includes:

- **Specialists:** Experts in Infectious Diseases, Paediatrics, and Epidemiology.
- **Nursing Staff:** Specialised in acute diarrhoeal care and IPC.
- **Laboratory Staff:** Technicians skilled in advanced molecular diagnostics.

- **Public Health Officers:** Field experts in surveillance and community engagement.

