ENVIRONMENTAL HEALTH:
SUPPORTING WATER, SANITATION, AND HYGIENE (WASH) FOR ALL
Access to safe and reliable drinking water, basic sanitation, and positive hygiene practices are fundamental for the health and survival of all people and play a critical role in reducing risk of disease.

The consequences of poor access to safe water, sanitation and hygiene are wide reaching:

- **Severe health consequences**: Poor environmental health is linked to the transmission of infectious diseases including hepatitis E, cholera, and other diarrheal diseases. Diarrhea kills an estimated 801,000 children every year and remains a leading cause of death for children under 5.

- **Impacting nutrition**: Water-borne illnesses contribute to undernutrition in all forms – including acute malnutrition – which can have life-long implications on physical and cognitive growth and development.

- **Lost time**: Hours are wasted every day as people collect water and seek safe and private places to defecate. This is not only a burden physically – with people often traveling long distances for access – but also costs valuable time that could be spent at school, at work, at home, or doing other important activities.

- **Barriers to education**: Children lose learning time or drop out of school completely due to inadequate safe water and sanitation provision at home and in school.

- **Increased danger to women and girls**: Not only do women and girls bear the brunt of the burden of water collection, but inadequate sanitation is also more challenging for women and girls who experience menstruation, face greater risk of assault – especially when accessing at night – and have different gender norms, including around privacy.

Today, two billion people lack access to basic sanitation facilities such as toilets or latrines and 785 million people still use unsafe drinking water.

**BARRIERS TO ACCESS**

Across the fragile and conflict-affected settings where the IRC works, access to safe water and sanitation is often compromised by a myriad of factors including damaged infrastructure, lack of investment in maintenance, and overuse, especially in overcrowded refugee camps where poor sanitary conditions have led to outbreaks like cholera.

While demand for quality health care is often greatest during crises, disruptions to WASH services and infrastructure make it even more difficult to provide quality care. An analysis by the World Bank indicates that WASH services in health care facilities in sub-Saharan Africa are consistently poor across low- and middle-income countries and even lower in fragile states.

The realities can be grim. People living in fragile contexts are four times as likely to lack basic sanitation services and eight times as likely to lack basic drinking water services, than people living in more stable environments. On average, children under age 15 living in a conflict setting are nearly three times more likely to die from diseases linked to unsafe water and sanitation than from direct violence.

**HOW THE IRC IS RESPONDING**

The Environmental Health (EH) team at the IRC aims to protect people from Water, Sanitation and Hygiene (WASH) related diseases through the provision of adequate water supply, sanitation and the promotion of safe hygiene practices.

In acute emergencies, the IRC establishes emergency water, sanitation and hygiene promotion programs, ensuring that life-saving services can be initiated efficiently. For example, the IRC worked with local partners in Syria, providing water and sanitation facilities and services that are essential for life, personal safety and dignity.
As countries evolve from emergencies to rebuilding, the IRC works to build stronger community and government oversight on improved water, hygiene and sanitation services, and maintenance of systems. We also collaborate with communities on issues such as climate change and disaster risk management to ensure communities have the resources needed to survive in a changing world.

IRC’s EH programs are based on principles of human centered design, good engineering, evidence and public health, and conform to internationally recognized minimum standards of humanitarian assistance. IRC EH practitioners provide technical assistance to more than 30 country programs with a focus on:

- **Promoting safe hygiene practices:** The IRC promotes hygiene practices consistent with good health including hand washing, proper waste disposal, safe methods for managing water, and menstrual hygiene management – a key issue impacting adolescent girls’ ability to stay in school. In a typical year, the IRC’s hygiene promotion reaches over three million people through mass media and direct contact with communities. Hygiene promotion is proven to be one of the most effective and cost-efficient approaches to improving child health.

- **Ensuring access to essential water and sanitation services:** The IRC provides vulnerable communities with a range of essential environmental health services including water, sanitation, and handwashing facilities and supplies like soap. These aspects are collectively critical to supporting a community’s health and hygiene. In a year, the IRC provides more than five million people with access to safe water and improved sanitation, either through direct provision – including maintenance of rehabilitated or new water systems – or by providing them with the skills and resources to build their own facilities. This occurs at the community, household, and health facility levels.

**Our strategies for impact**

To deliver the best in-class EH programs, the IRC has a few core strategies:

- **Behavior change:** Improving knowledge leads to healthier practices but sustaining behavior change can be challenging. Using Behavior Change Communication (BCC), the IRC actively engages community members to identify what factors prevent or enable positive hygiene behaviors, and develops practical plans to influence the adoption of the desired practices. Through this, the IRC implements programs that are context appropriate; develops communication strategies that help address barriers and influencers of change; and creates learning materials that motivate behavior change using diverse methods from flyers and pamphlets, to, radio, TV, mobile phone messages, group sessions, and community led approaches, among others. IRC’s BCC programs work with communities, schools and health facilities through Community Led Total Sanitation, Community Health Clubs, Hygiene Campaigns, School Health Clubs, etc.

- **Community Engagement:** When designing a WASH intervention, the IRC first discusses key characteristics of existing water sources with the community, such as their seasonal reliability, water quality and potential yield. The IRC then works with the community to identify advantages, disadvantages and costs of water supply options. In remote areas of Northern Kenya and Afghanistan, for example, the IRC installed solar-powered water pumping systems to reduce operating costs where fuel costs are high. The IRC works with community groups to prioritize needs and design sustainable improvements to mitigate and reduce the impact of natural disasters. As part of this, the participation of women and other vulnerable groups – including persons with disabilities and minorities – is prioritized, promoting their inclusion in key positions while also providing the training and mentoring to elevate their role in water governance. The IRC also creates and trains water committees to promote local ownership and management, sets up community-based Disaster Risk Reduction Committees, and establishes community-based Early Warning Systems.
- **Strengthening institutions to sustain services:** Worldwide, the IRC's WASH programs are implemented in partnership with government and/or local civil society organizations, and activities are conducted to increase local ownership, build capacity, and improve overall sustainability of WASH services. This includes holding technical trainings for local government WASH officials, building their capacity to plan and manage critical operational and maintenance tasks, including the use of essential project management and technical tools that enable them to monitor and maintain progress. As part of this, the IRC works to ensure organizations have the resources they need and remain accountable and responsive to those they serve. Water user associations/water management committees are typically established at the community level, strengthened and supported in collaboration with local government or civil society actors with the purpose of ensuring that they have the knowledge, means and motivation to manage services long term. Likewise, hygiene committees, local hygiene promoters (or groups) are given the skills and tools to continue motivating their communities to practice appropriate behaviors.

- **Building the evidence base:** Through research and learning, the IRC is working to ensure that our interventions are evidence-based, cost-effective and sustainable. The IRC collaborated with Columbia University's Mailman School of Public Health, for example, to find ways to improve current approaches by aid actors to support menstrual hygiene management during emergencies. The research resulted in the development of the MHM in Emergencies Toolkit and the Menstrual Disposal, Waste Management & Laundering in Emergencies: A Compendium.

- **Emphasizing equity and inclusion:** The IRC works to ensure equitable access to essential WASH facilities, activities, and goods in order to prevent disease and increase personal safety and dignity. This includes developing specialized and participatory approaches that target particular groups, including vulnerable rural communities, disaster-impacted communities, epidemic-affected communities, pastoral communities, persons with disabilities, and other socially excluded minorities. With guidance from the IRC's Gender Equality Unit, our WASH programs integrate principles of gender equality and feminism throughout program design and implementation, as well as organizational culture, policies, and practices. Disability sensitive programming is mainstreamed throughout all levels of activities to ensure projects meet the water access and sanitation needs of disabled and elderly people. As part of a WASH and empowerment project in Pakistan, for example, the IRC specifically targets members of the transgender community in the design and uptake of suitable WASH interventions and skills.

**The expert team**

The IRC relies on the expertise of in-country staff, supported by in-house technical experts within the IRC Health Technical Unit ranging from engineers to behavior change communication specialists; the Governance Technical Unit; the Gender Equality Technical Unit; and the Research and Innovation team—all to ensure high-impact, sustainable, and cost-effective programming across the countries where we work.
THE IMPACT OF COVID-19 ON WASH

WASH services at health facilities and in communities are essential for limiting contamination, reducing transmission and protecting people’s overall health during any infectious disease outbreak like COVID-19. While water, sanitation and hygiene are the first line of defense against COVID-19, many communities and health facilities across humanitarian and fragile settings lack this infrastructure. Throughout the course of the pandemic, the IRC’s EH interventions have included:

- **WASH and Infection, Prevention and Control (IPC) at Health Care Facilities** – ensuring health care staff have the facilities, supplies and knowledge they need to keep themselves and their patients safe from communicable diseases while at health facilities.

- **Risk Communication and Community Engagement** – ensuring communities have two-way communications channels to receive key information about communicable diseases, to ask questions and to give feedback through those same channels.

- **Hygiene Promotion** – including sharing hygienic practices at individual, household and community levels, including frequent handwashing with water and soap (or alcohol sanitizer), and high standards of hygiene and cleaning.

- **Provision of basic hygiene supplies** (or cash/vouchers) – focused on supporting handwashing practices and disinfection of touch points.

IRC’S IMPACT IN 2020

- ~2.6 million people served by built or rehabilitated water supply.
- ~3.1 million individuals served with access to improved sanitation facilities.
- ~3.8 million people received direct hygiene promotion.
- 821 health facilities supported with WASH.