

National Center for Disaster Preparedness (NCDP)

Capabilities Statement

OVERVIEW

The National Center for Disaster Preparedness (NCDP), Columbia Climate School, Columbia University, is an academically based, interdisciplinary center focused on the capacity to prevent, respond to, and recover from disasters. NCDP's approach combines research, policy, education, and high-level advocacy to ensure that the best thinking — and best practices — become part of disaster preparedness and recovery systems. We are a private, not-for-profit, tax-exempt organization, categorized by the IRS as a 501(c)(3) higher education institution.

CORE CAPABILITIES

Education + Training

- Since its founding, NCDP has trained more than 100,000 learners through online, instructor-led, and hybrid programs.
- Provides professional training and education to disaster and emergency management personnel, governments, NGOs, and communities.
- Addresses training topics such as post-disaster economic and housing recovery, community sheltering and relocation assistance, pandemic preparedness and response, climate resilience, equity, and Tribal Nations' readiness. NCDP is currently conducting community engagement and risk communication trainings for Tribal Nations in Arizona, California, Montana, New Mexico, and Wisconsin.

Research

- Conducts multi-disciplinary research to improve understanding of disaster readiness, response, and recovery at levels from individuals and households to communities and governance systems.
- Examines system readiness, vulnerable populations, preparedness attitudes/behaviors, resiliency, and the complexities of population recovery after large-scale events such as hurricanes, wildfires, and socio-technological disasters.
- Produces data-driven whitepapers and reports for organizations, emphasizing the need for specialized programs and interventions.

 COLUMBIA CLIMATE SCHOOL
NATIONAL CENTER FOR DISASTER PREPAREDNESS

FOCUS AREAS
Through its innovative programs, the National Center for Disaster Preparedness (NCDP) focuses on:

**EDUCATION + TRAINING**
Since NCDP's founding in 2003, NCDP has provided professional training for more than 100,000 learners through web-based, instructor-led, and hybrid modalities.

ENHANCING SYSTEM READINESS
Disasters are complex events. Our capacity to respond to a disaster depends on the ability of response systems to work together. NCDP researches the dynamics of emergency preparedness and response systems, as well as the policies and practices in place.

**FOSTERING COMMUNITY PREPAREDNESS**
NCDP actively supports community-engaged programming by working with local government and area non-profit groups to improve citizen readiness and community preparedness, and increase awareness about disasters and other emergencies.

ANALYZE STRATEGIES TO IMPROVE DISASTER RESPONSE
Our research seeks to create a knowledge base that will guide whole communities, government, non-profits, and the private sector as they work to build—or rebuild—resilient communities.

**UNDERSTANDING POPULATIONS**
NCDP has focused attention on understanding what makes certain individuals and groups more at-risk and exploring the relationship between vulnerability and recovery.

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Policy + Practice

- Develops evidence-based policy guidance and best practices to improve federal, state, local, tribal, and territorial disaster management systems and preparedness frameworks.
- Supports planning, policy analysis, and practical solutions that shape how organizations and governments respond to disasters.

Community Engagement

- Works with local communities and organizations to increase awareness, preparedness, and equitable disaster outcomes.
- Provides technical assistance, drills/exercises, and planning guidance tailored to community needs.

Preparedness Tools + Technology

- Develops tools that support disaster risk analysis and preparedness planning (e.g., hazard risk mapping and vulnerability assessments).
- Understanding how AI can be used to support disaster management.

Advocacy + Communications

- Acts as a trusted source for rapid-response research and communication during disasters and public health emergencies, providing insights to media, policymakers, and the general public.

PAST PERFORMANCE

NCDP has over twenty years of demonstrated experience. Below are recent project highlights.

Emergency Preparedness and Training - NCDP has extensive experience in curriculum development and both synchronous and asynchronous training modalities.

- **Emergency Preparedness Training** - Training programs have been created for the whole community on climate literacy and equity, post-disaster economic and housing recovery, mass care community sheltering and relocation assistance, pandemic preparedness and response, Tribal Nations readiness and resilience, rural and Tribal Nations all-hazards resilience, and individual and household preparedness.
- **Direct Service Provider Training** - NCDP has partnered with the Cities for Financial Empowerment fund to create a direct service provider training that connects financial empowerment, disaster preparedness, and recovery.

Early Warning Systems and Hazard Analysis - NCDP has contributed to understanding early warning systems and to the development of multiple spatial data products to improve multi-sector planning and mitigation. Several recent projects include:

- **US Natural Hazards Climate Change Projections** - The NCDP U.S. Natural Hazards Climate Change Projections project provides an interactive map-based tool, with a downloadable dataset, to explore county-level future natural hazard projections for Wildfires, Tropical Cyclones (Hurricanes), Tornadoes, and Sea Level Rise under one or more climate change scenarios in the United States.

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- [US Natural Hazards Index](#) - The US Natural Hazards Index (NHI v2.0) helps visualize natural hazard data for fourteen hazard types in the United States and Puerto Rico (subject to data availability) at the census tract level.
- [Weather Forecasting for Early Anticipatory Action](#) - We help partners and collaborators to anticipate and act before extreme events occur. [Click here for a recent list of media](#) as well as [recent publications](#).

Resilient Communities - NCDP has significant experience working directly with communities to collaboratively improve preparedness and response planning and capacity-building. Recent projects have included:

- [Strengthening Capacities and Civic Participation for Climate-Resilient Communities in Chile](#) - NCDP is working with Columbia World Projects and three municipalities in Chile in addressing climate change by providing technical and planning support for the development and implementation of Local Climate Action Plans.
- [Rural Preparedness and Children](#) - The impacts of disasters on children in rural settings have been studied extensively internationally, but only limited rigorous research has been conducted in the United States. Through a grant from Save the Children, NCDP conducted a comprehensive literature review of issues pertaining to children in disasters in the rural United States, assembled a dataset of child well-being indicators, and developed a comprehensive localization study to understand pathways for locally-led disaster response in the same context.
- [Resilient Children / Resilient Communities](#) - The Resilient Children/Resilient Communities Initiative analyzed, recommended, and implemented procedures, training, and guidance to help build child-focused community resilience in the face of disasters in New York, Arkansas, North Carolina, and Puerto Rico. Outputs of this have been published in English and Spanish in the RCRC Toolbox.

Disaster Finance & Anticipatory Action – NCDP has developed multiple data products and processes to support adaptation planning and anticipatory action globally.

[Climate Risk Finance](#) - NCDP and the Center for Global Energy Policy have developed a [Climate Finance Vulnerability Index \(CliF-VI\)](#). The Climate Finance Vulnerability Index (CliF-VI) is designed to provide a comprehensive understanding of climate vulnerability for nation-states in order to improve the targeting and provision of climate change adaptation financing.

[Index Insurance and Index-based Risk Management](#) - NCDP's Financial Instruments Division has worked with over a dozen countries on hundreds of index contracts, with thousands of policies issued to farmers. The Financial Instruments Division also supports disaster risk management strategies through index-based tools. Building on our work on floods and hurricanes, national governments and non-governmental organizations are now developing climate/forecast/weather thresholds for action across several countries.

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Below is a partial list of current and past funders:

Government	Non-Profit	Public + Private Sector
<ul style="list-style-type: none"> Connecticut Department of Public Health NYC Department of Mental Health and Hygiene FEMA National Academies of Sciences, Engineering, and Mathematics National Academies of Sciences Gulf Research Program NASA NASA Jet Propulsion Laboratory National Science Foundation NOAA Adaptation Sciences Project US AID U.S. Centers for Disease Control and Prevention (CDC) U.S. Federal Emergency Management Agency (FEMA) 	<ul style="list-style-type: none"> Advanced Research for Climate Emergencies (ARC) Pennington Foundation Cher Cares Children's Health Fund Gates Foundation International Federation of Red Cross Red Crescent Societies One Acre Fund Rockefeller Foundation Save the Children Spencer Foundation Ukraine Children's Action Project (UCAP) UNICEF United Nations United Nations Development Program United Nations Office of Disaster Risk Reduction Vuslat Foundation World Food Programme (WFP) World Health Organization 	<ul style="list-style-type: none"> Alliance Bernstein (AB) Cities for Financial Empowerment (CFE) ComEd Entertainment Industry Fund Deloitte Global Alliance for Trade Facilitation GSK International Finance Corporation (IFC) Twilio

ORGANIZATIONAL NETWORK & CAPABILITIES

NCDP offers a wide range of technical skills and expertise applicable to a wide variety of projects. NCDP also collaborates with Columbia University faculty, centers, and departments to expand our organizational capacity. Recent collaborators include:

- Columbia Climate School
- Teachers College
- Data Science Institute
- Global Impact Lab
- Global Mental Health Lab (GMH)
- Mailman School of Public Health
- School of International and Public Affairs (SIPA)
- Center for Integrated Earth System Information (CIESIN)
- Office of Engagement and Impact
- NYC Preparedness and Recovery Institute (PRI)
- Columbia World Projects

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NCDP technical capabilities include, but are not limited to:

Staff Expertise
Qualitative, Quantitative, and Mixed and Multi-method studies
Data management and analysis
Online and field-based survey development, administration, and management
Geographic Information Systems (GIS) and spatial data analysis
Performance measure development
Community engagement and coalition building
Exercise design/evaluation (discussion-based and functional)
Instructional design
Community preparedness and resilience building
Program evaluation
Strategic communications design and impact evaluation
Social media campaigns
Knowledge management systems
Public-private partnerships
Strategic planning
Organizational Assets
Active relationships with other departments/centers at Columbia University.
Access to the Columbia University Institutional Review Board (IRB) for clinical and non-clinical studies
Live-stream webinars and events with video archive capability
Existing data sets from prior research projects
Online knowledge management tools, including course building, video embedding, and social media toolkits
Community relationships, particularly in the US Gulf Coast and Puerto Rico
Media relationships
Legislative relationships and advocacy resources
Columbia Academic Commons Research Repository

ADDITIONAL INFORMATION

For additional information, please visit <https://ncdp.columbia.edu/>. Questions or comments, please email us at ncdp@columbia.edu.