

Environment and Natural Resources Trust Fund

2025 Request for Proposal

General Information

Proposal ID: 2025-098

Proposal Title: Critical Preparedness and Outreach for Possible CWD Spillover

Project Manager Information

Name: Michael Osterholm Organization: U of MN - Center for Infectious Disease Research and Policy (CIDRAP) Office Telephone: (612) 626-6770 Email: mto@umn.edu

Project Basic Information

Project Summary: Protecting Minnesota's public, wildlife, and economic health from the significant threats of a chronic wasting disease spillover through proactive preparedness activities and multidisciplinary exercises with local, state, and world experts.

ENRTF Funds Requested: \$3,308,000

Proposed Project Completion: June 30, 2028

LCCMR Funding Category: Foundational Natural Resource Data and Information (A)

Project Location

What is the best scale for describing where your work will take place? Statewide

What is the best scale to describe the area impacted by your work? Statewide

When will the work impact occur?

During the Project and In the Future

Narrative

Describe the opportunity or problem your proposal seeks to address. Include any relevant background information.

Chronic wasting disease (CWD) is a fatal neurodegenerative disease of cervids that endangers Minnesota's deer, elk, and moose populations and associated economies (e.g., hunting, wildlife watching). It also poses a potential but real threat to Minnesota's public health and agricultural industries with the risk of disease spillover to humans or non-cervid production animals. To address these risks, the Center for Infectious Disease Research and Policy (CIDRAP) at the University of Minnesota has convened five working groups with 70 local, state, tribal, national, and international experts to develop comprehensive, authoritative guidance for a potential spillover incident. These groups focus on human, animal, environmental, and wildlife health, plus prion biology and diagnostics.

Emergent themes from ongoing contingency planning efforts, funded by the Minnesota Legislature in 2023, include the absence of coordinated collaboration across CWD field specialties and the critical need to improve risk communication among all stakeholders. A CWD spillover incident will create an overnight crisis for Minnesota, the country, and the world, with far-reaching implications for hunting, agriculture, trade, public health, and other sectors. Continued funds are needed for our proposed initiatives to bridge the gaps between rapidly evolving CWD research, advancements in diagnostic methods, and implementation of spillover preparedness.

What is your proposed solution to the problem or opportunity discussed above? Introduce us to the work you are seeking funding to do. You will be asked to expand on this proposed solution in Activities & Milestones.

The CIDRAP CWD Program, currently funded through June 2025, will publish an interim report summarizing key insights and recommendations that emerge from ongoing working group meetings. Taking into account the rapidly evolving status of CWD research, surveillance, and management, this report will identify critical knowledge gaps and outline a blueprint of action steps that organizations can consider for CWD spillover preparedness and response. With input from working group experts, this report will be the leading spillover-preparedness resource for agencies, laboratories, and research centers.

To translate the blueprint into action, we will disseminate our report findings widely across stakeholder groups. To do so, we will organize and facilitate a series of outreach meetings held in Minnesota, starting with a national-level tabletop exercise that brings together key state (Minnesota Departments of Health, Agriculture, Natural Resources, and the Pollution Control Agency) and federal agencies (CDC, NIH, USDA) that will be responsible for a CWD spillover response. Subsequent outreach will include statewide workshops, based on our previous contingency planning, to equip Minnesota-specific partners for a potential CWD spillover. CIDRAP also will continue its role as an authoritative information source, providing updates and education on scientific advancements through various media for a broad audience.

What are the specific project outcomes as they relate to the public purpose of protection, conservation, preservation, and enhancement of the state's natural resources?

CIDRAP and Minnesota partners will continue to be leaders in CWD research efforts. CIDRAP will maintain a living blueprint document for CWD spillover preparedness, regularly revising its content with up-to-date research findings. CIDRAP will continue to convene global experts to address risk management strategies for CWD spillover to promote maintenance of Minnesota resources.

The multidisciplinary, discussion-based exercises will provide practical opportunities for Minnesota agencies and organizations to implement preparedness guidance, helping safeguard the state's public health, hunting traditions, and agricultural resources. Implementing and exercising guidance will reinforce emergency management systems and protect the longevity of Minnesota's natural resources.

Activities and Milestones

Activity 1: Ongoing Contingency Planning: Expert Working Groups, Updates to Preparedness Guidance, and Incident Advisory Group

Activity Budget: \$1,101,888

Activity Description:

The CIDRAP CWD Program has convened 70 leading CWD experts to address critical questions and identify knowledge gaps, laying the groundwork for developing CWD spillover contingency plans. CIDRAP has uniquely assembled working groups focused on spillover risk, including the following disciplines: human medicine and public health, cervid and production animal health, prion biology and diagnostics, cervid carcass disposal and environmental impact, and wildlife health management. The resulting working group interim report will summarize findings and recommendations from contingency planning discussions, including a blueprint of critical next steps, that local, state, and federal agencies and sovereign tribal nations may use as a resource to prepare for CWD spillover to humans or non-cervid production animals. CIDRAP will regularly revise both components as research progresses in these rapidly evolving fields.

CIDRAP also will assemble an incident advisory group to support Minnesota (or any jurisdiction) during a CWD spillover incident. This group, possessing essential expertise, can convene within 1 day to aid rapid response activities by regulatory officials. Respecting the authority of regulatory agencies and tribal nations, the incident advisory group will be ready to actively support and advise responses upon request, particularly in the initial stages of a potential crisis.

Activity Milestones:

Description	Approximate
	Completion Date
Incident advisory group assembled, partner commitments established.	July 31, 2025
Coordinate and host regular workgroup meetings. Host additional meetings and recruit additional	June 30, 2028
experts as necessary.	
Revise guidance document as appropriate. Conduct ongoing prion science literature review relevant to	June 30, 2028
CWD spillover.	

Activity 2: CWD Spillover Preparedness National Tabletop Exercise and Minnesota Workshops

Activity Budget: \$1,223,224

Activity Description:

A critical component of developing preparedness plans is testing those plans. To validate CWD contingency planning recommendations (Activity 1), CIDRAP will host a national tabletop exercise (TTX) in Minnesota, bringing together key players to clarify roles and responsibilities during theoretical spillover scenarios. The exercise will support state and federal agencies, tribal nations, and partner organizations that hold statutory authority in Minnesota. CIDRAP is well positioned to facilitate the exercise, building on current CWD contingency planning activities and extensive experience facilitating previous infectious disease and bioterrorism preparedness exercises.

Following the TTX, CIDRAP will host four regional workshops throughout Minnesota. The workshops will strengthen local capacity and competency to address a CWD spillover incident by further disseminating information and identifying local needs. The workshop series will affect a larger geographic scale, including neighboring states and Canadian provinces, with the Minnesota design serving as a potential template for other jurisdictions.

After-action reports following each exercise and workshop will evaluate preparedness and assess effectiveness of CWD spillover contingency planning. Reports will identify general public, government, and scientific information needs, and

included recommended action steps will feed into the iterative process of updating the blueprint document for CWD spillover preparedness.

Activity Milestones:

Description	Approximate Completion Date
Design and plan national tabletop exercise (TTX) simulating CWD spillover and validating contingency planning recommendations.	February 28, 2026
Host and facilitate national TTX in Minnesota.	March 31, 2026
Conduct after-action review and prepare after-action report for TTX; based on results, prioritize regional workshops.	May 31, 2026
Design, plan, host, and evaluate four regional workshops throughout Minnesota (approximately one every 6 months).	June 30, 2028

Activity 3: CIDRAP CWD Program as a Central Source for Accurate Information and Spillover Preparedness Resources for Regulators, Researchers, Media, and Public

Activity Budget: \$982,888

Activity Description:

Minnesota has established itself as an international leader on CWD. CIDRAP is further cementing this leadership by adopting a One Health approach and integrating critical public health preparedness into CWD research efforts. Activity 3 will support ongoing efforts and establish CIDRAP as a central source of current, comprehensive, and authoritative information about CWD spillover preparedness and public health implications. Since November 2023, the CIDRAP CWD web page alone has surpassed 36,000 views from users in more than 10 countries.

Funds are needed to maintain the essential functions of the CIDRAP CWD Program, such as staffing, news publications, webinars and podcasts, and presentations at conferences and CWD-related meetings. Adding to the knowledge surrounding potential CWD spillover will further prepare stakeholders for such an emergency and may also be relevant for other wildlife diseases with zoonotic potential. CIDRAP will continue to develop communication, outreach, and education materials for multiple stakeholders (e.g., regulatory agencies, deer hunters, tribal nations, elected officials, scientific and medical communities, the media) so that recommendations from contingency planning efforts will be translated into action. Updates, including authoritative risk communication, will be published on CIDRAP's website and, as appropriate, in peer-reviewed journals.

Activity Milestones:

Description	Approximate Completion Date
Maintain current CIDRAP CWD Program staff; recruit and onboard additional personnel as needed.	June 30, 2028
Publish CIDRAP News articles, webinars, and other resources relevant to CWD and potential CWD spillover.	June 30, 2028
Publish open-access, peer-reviewed manuscripts relevant to CWD and potential CWD spillover.	June 30, 2028

Project Partners and Collaborators

Name	Organization	Role	Receiving Funds
Carlos Cruz	CIDRAP, University of Minnesota	Program Operations, CIDRAP	Yes
Cory Anderson	CIDRAP, University of Minnesota	Co-Director, CWD Program	Yes
Jamie Umber	CIDRAP, University of Minnesota	Co-Director, CWD Program	Yes
Leah Moat	CIDRAP, University of Minnesota	Program Manager, CWD Program	Yes
Clare Stoddart	CIDRAP, University of Minnesota	Researcher, CWD Program	Yes
Mary Van Beusekom	CIDRAP, University of Minnesota	News Editor/Writer, CWD Program	Yes
Colin Gillin	Oregon Department of Fish and Wildlife	Working Group Co-chair	No
Jason Bartz			Yes
Russ Mason	Michigan State University	Working Group Co-chair and Consultant	Yes
Shannon University of Bartelt-Hunt Nebraska- Lincoln		Working Group Co-chair	Yes
Brian Appleby	National Prion Disease Pathology Surveillance Center, Case Western Reserve University	Working Group Co-chair	Yes
Byron Caughey	Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases, National Institutes of Health	Working Group Co-chair	No
Debbie McKenzie	University of Alberta	Working Group Co-chair	Yes
Glenn Telling	Colorado State University	Working Group Co-chair	Yes

Sabine Gilch	University of Calgary	Working Group Co-chair	Yes
Lawrence	National	Working Group Co-chair	No
Schonberger	Center for		
	Emerging and		
	Zoonotic		
	Infectious		
	Diseases,		
	Centers for		
	Disease		
	Control and		
	Prevention		

Long-Term Implementation and Funding

Describe how the results will be implemented and how any ongoing effort will be funded. If not already addressed as part of the project, how will findings, results, and products developed be implemented after project completion? If additional work is needed, how will this work be funded?

Activities 1-2 describe our plans for implementing project results; we will disseminate findings generated from CIDRAP's interim report and create after-action reports with knowledge obtained from tabletop exercises and workshops. We will share contingency planning recommendations with local, state, federal, and tribal partners responsible for responding to a CWD spillover, as well as publish the outcomes in peer-reviewed scientific journals.

We plan to seek additional funding from sources such as the Minnesota legislature, CDC, NIH, and USDA following the LCCMR funding period to continue to protect Minnesota's natural resources and public health.

Project Manager and Organization Qualifications

Project Manager Name: Michael Osterholm

Job Title: Director, CIDRAP

Provide description of the project manager's qualifications to manage the proposed project.

Dr. Michael Osterholm is the director of CIDRAP; Regents Professor; McKnight Presidential Endowed Chair in Public Health; Distinguished Teaching Professor in the Division of Environmental Health Sciences, School of Public Health; professor in the Technological Leadership Institute, College of Science and Engineering; and adjunct professor in the Medical School, all at the University of Minnesota. A renowned public health leader, Dr. Osterholm is a frequent consultant to the WHO, NIH, FDA, DoD, and CDC on infectious disease preparedness, with extensive experience facilitating tabletop exercises after the 9/11 and anthrax attacks.

Recognizing CWD's spillover risk, Dr. Osterholm and colleagues published the first major paper on a potential spillover incident, "Chronic Wasting Disease in Cervids: Implications for Prion Transmission to Humans and Other Animal Species" (in mBio), detailing concerns and the need to improve public health measures to prepare for and mitigate such risk. In response to the overall absence of current, comprehensive, and authoritative information on this topic, Dr. Osterholm spearheaded the establishment of CIDRAP's CWD Response, Research and Policy Program in 2019.

Since its inception, this program has focused on the organization and coordination of cross-disciplinary leadership and international expertise to identify priority issues and provide up-to-date, reputable material to stakeholders. With support from the Minnesota legislature, CIDRAP's CWD program has grown to incorporate spillover contingency planning working groups, receiving critical input from leading national and international experts and leaders in areas such as wildlife health and management, conservation, agriculture, prion biology and diagnostics, human health, and beyond. No other center incorporates all these disciplines focused on CWD spillover risks, and the CDC features the CIDRAP CWD Resource Center on its list of CWD resources.

Organization: U of MN - Center for Infectious Disease Research and Policy (CIDRAP)

Organization Description:

CIDRAP is an academic center founded in 2001. CIDRAP works to prevent infectious disease through research and the translation of scientific information into real-world, practical applications, policies, and solutions. The central pillars of CIDRAP's work include consensus building, research, information synthesis, communication, interdisciplinary partnerships, and education and training. Distinct CIDRAP teams focus on antimicrobial resistance, influenza, COVID-19, and CWD. CIDRAP's CWD initiative started in 2019 with the formation of the CWD Resource Center. Since then, the program has grown to seven staff members dedicated to carrying out the ongoing contingency planning project, producing a range of digital media and maintaining CWD resources on the CIDRAP website.

Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineli gible	% Bene fits	# FTE	Class ified Staff?	\$ Amount
Personnel				<u> </u>				
Principal Investigator		Lead project & oversee all aspects of this project			37.1%	1.5		\$720,151
Scientist		Program co-director. Will review CWD-related literature, including key scientific publications and documents, and will contribute significantly to the research team.			37.1%	3		\$416,665
Veterinarian		Program co-director, overseeing all primary aspects of the project, coordination of internal CWD project teams' work & external SMEs.			37.1%	2.7		\$470,624
CWD Researcher		Summarized data, conducts analysis & research, prepares papers			33.5%	3		\$288,260
CWD Program Manager		Conduct research and analysis, logistics management			37.1%	3		\$326,754
New Reporter / Communication		Write CWD articles, manage website content, and support research proposals, reports, presentations, and public-facing documents			37.1%	3		\$401,764
Researcher		Summarized data, conducts analysis & research, prepares papers			33.5%	0.75		\$89,166
Operations		Support for the workshops and tabletops, overall program management, ensuring all deliverables are met.			37.1%	0.45		\$87,744
Program Specialist		Assist in communications and publications layout.			37.1%	0.45		\$53,245
Editorial Director		Provide overall editorial review and guidance for all CWD-related materials			37.1%	0.18		\$32,098
Graduate Research Assistant (2)		Perform literature reviews and collect other relevant written and online information			25.1%	1.5		\$132,150
							Sub Total	\$3,018,621
Contracts and Services								
Us Creative Works	Professional or Technical Service Contract	Web company offering website support that will work on enhancing on the CWD webpage				0.3		\$10,000

TBD	Professional	Collaborate and provide high level support and			0.1	5	\$35,000
	or Technical	guidance to Co-Directors related to chronic					
	Service	wasting disease contingency planning and related					
	Contract	issues, including reviewing of papers and attending					
		working group meetings.					
TBD	Professional	Collaborate and provide high level support and			0.1	5	\$40,000
	or Technical	guidance to Co-Directors related to chronic					
	Service	wasting disease contingency planning and related					
	Contract	issues, including reviewing of papers and attending					
		working group meetings.					
TBD	Professional	CWD Advisory Board Members: Provide guidance			1.2	2	\$48,000
	or Technical	by serving as cochairs of the groups, which					
	Service	specialize in wildlife health and management,					
	Contract	public health, human medicine, prion biology and					
		diagnostics, veterinary medicine, and agriculture					
		science.					
TBD	Professional	Tabletop Participant Costs; Funds are requested to				-	\$18,528
	or Technical	cover participant costs for workshop attendance.					. ,
	Service	This will include reimbursement for parking,					
	Contract	mileage and honoraria for 10 people for each full					
		day workshop. The funds are requested to meet					
		these approximate costs for 40 workshop					
		participants for 4 workshops (\$4,632 per					
		workshop)					
						Sub	\$151,528
						Total	<i><i>↓1</i><i>51</i>,5<i>2</i>0</i>
Equipment,							
Tools, and							
Supplies							
	Equipment	3 Laptop computers for program staff	Laptop computers will be utilized by	х			\$4,000
	-90.0.000		staff to analyze data, research				<i> </i>
			relevant topics, interact with				
			stakeholders, and create				
			communication materials.				
						Sub	ć1 000
						Total	\$4,000
Capital							
Expenditures							
						Sub	-
						Total	

Acquisitions and Stewardship						
					Sub Total	-
Travel In Minnesota						
	Other	Tabletop Participant Costs (In State)	Funds are requested to cover participant costs for tabletop attendance. This will include reimbursement for travel, parking, meals, for 40 people for each full day tabletop. The funds are requested to meet these approximate costs for 40 in-state tabletop participants for 1 tabletop			\$7,800
	Conference Registration Miles/ Meals/ Lodging	In-state travel related to workshops	In-state travel for travel for meetings and workshops research related to CWD planning project, as well as dissemination of results to Minnesota audience			\$12,000
					Sub Total	\$19,800
Travel Outside Minnesota						
	Other	Tabletop Participant Costs (Outside of State)	Funds are requested to cover participant costs for tabletop attendance. This will include reimbursement for travel, lodging, meals, and honoraria for 40 people for each full day tabletop. The funds are requested to meet these approximate costs for 40 out of state workshop participants for 1 tabletop	x		\$66,060
	Conference Registration Miles/ Meals/ Lodging	Conference Registration Miles/ Meals/ Lodging trips for CWD staff to a national professional society meeting, includes airfare, registration, lodging and meals	Present project results to scientific peers and obtain feedback			\$29,000
	Conference Registration Miles/ Meals/ Lodging	Conference Registration Miles/ Meals/ Lodging trips for CWD researcher to a national professional conferences, includes airfare, registration, lodging and meals	Attend conferences to stay informed of the latest CWD updates and disseminate results			\$8,000

					Sub Total	\$103,060
Printing and Publication						
	Publication	We envision at least 3 publications as a result of the proposed project (~\$2,415 each)	Dissemination of the results to the public and professional / scientific community.			\$7,241
					Sub Total	\$7,241
Other Expenses						
		Tabletop Location Rental Fees	Funds are requested to cover room rentals and associated fees to host 1 in-person tabletop			\$750
		Workshop Location Rental Fees (4)	Funds are requested to cover room rentals and associated fees to host 4 in-person workshops (\$750/workshop)			\$3,000
					Sub Total	\$3,750
					Grand Total	\$3,308,000

Classified Staff or Generally Ineligible Expenses

Category/Name	Subcategory or Type	Description	Justification Ineligible Expense or Classified Staff Request
Equipment, Tools, and Supplies		3 Laptop computers for program staff	A total of \$4,000 is requested in the first year for purchase of 3 laptop computers. These funds are for computers needed to do extensive word processing, substantial literature research, data analysis, and facilitate communications among research project personnel.
Travel Outside Minnesota	Other	Tabletop Participant Costs (Outside of State)	To effectively translate the working blueprint into action, we must disseminate our report findings widely across stakeholder groups. To do so, we will organize and direct a national-level tabletop exercise that brings together key Minnesota (Departments of Health, Agriculture, Natural Resources, and the Pollution Control Agency) and federal (CDC, NIH, USDA) agencies that would be involved in a CWD spillover event response.

Non ENRTF Funds

Category	Specific Source	Use	Status	Amount
State				
			State Sub	-
			Total	
Non-State				
			Non State	-
			Sub Total	
			Funds	-
			Total	

Total Project Cost: \$3,308,000

This amount accurately reflects total project cost?

Yes

Attachments

Required Attachments

Visual Component File: <u>83f808b2-216.pdf</u>

Alternate Text for Visual Component

Visual component of the project 'Critical Preparedness and Outreach for Possible CWD Spillover' by CIDRAP. A cyclical graphic displays steps: 1) sourcing information, 2) creating educational materials and hosting meetings, 3) updating guidance, and 4) ongoing outreach. CIDRAP will publish after-action reports and peer-reviewed articles to document progress and insights....

Supplemental Attachments

Capital Project Questionnaire, Budget Supplements, Support Letter, Photos, Media, Other

Title	File
UMN FY23 Uniform Guidance Audit Report / Most recent Audit	<u>b223728d-39a.pdf</u>
FY23 Annual Financial Report	71c05bde-7e1.pdf
UMN SPA Approval Letter	1af416df-30a.docx
Letter of Support from Minnesota Pollution Control Agency	88bab96c-e07.pdf
Letter of Support from Minnesota Department of Natural	ffabc80a-05b.pdf
Resources	

Administrative Use

Does your project include restoration or acquisition of land rights?

No

Does your project have potential for royalties, copyrights, patents, sale of products and assets, or revenue generation?

No

Do you understand and acknowledge IP and revenue-return and sharing requirements in 116P.10?

N/A

Do you wish to request reinvestment of any revenues into your project instead of returning revenue to the ENRTF? N/A

Does your project include original, hypothesis-driven research?

No

Does the organization have a fiscal agent for this project?

Yes, Sponsored Projects Administration

Does your project include the pre-design, design, construction, or renovation of a building, trail, campground, or other fixed capital asset costing \$10,000 or more or large-scale stream or wetland restoration?

No

Do you propose using an appropriation from the Environment and Natural Resources Trust Fund to conduct a project that provides children's services (as defined in Minnesota Statutes section 299C.61 Subd.7 as "the provision of care,

treatment, education, training, instruction, or recreation to children")?

No

Provide the name(s) and organization(s) of additional individuals assisting in the completion of this proposal:

University of Minnesota, Center for Infectious Disease Research and Policy - Michael Osterholm, Carlos Cruz, Cory Anderson, Jamie Umber, Leah Moat, Clare Stoddart, Mary Van Beusekom and Penny Harris