

GC# 9400413

Topic 4 PROTECT: Protecting First Responders and Medical Professionals from Inadvertent Exposure to Toxic Opioid Levels

THE OPPORTUNITY:

The Ohio Opioid Technology Challenge is a three-phase prize competition that seeks to accelerate the development and deployment of innovative technology solutions that address the opioid crisis through addiction prevention and treatment, and overdose avoidance and response.

The Challenge Phase consists of four Challenge Topics that address specific unmet needs or concerns related to opioid use, abuse and exposure. This Topic seeks solutions that **protect first responders and medical professionals from inadvertent exposure to toxic opioid levels**.

The Challenge Phase will conclude by awarding up to twelve (12) \$200,000 prizes across the four Topics. Prize Recipients of the Challenge Phase will be eligible to compete in the final, Product Phase of the Challenge with prizes of \$1 million.

Submitters must be (i) registered to do business and in good standing in the State of Ohio, or (ii) partnered with an In-State Entity. For purposes of the Challenge Phase, an In-state Entity is an entity that has a substantial presence in Ohio (see ORC 184.10).

THE TIMELINE:

Challenge Phase Entry – Due by July 11, 2018 at 5:00 PM EDT

Prize Recipients announced September 2018

Visit www.opioidtechchallenge.com to see the other Challenge Topics, see official contest Rules, and submit an entry.

QUESTIONS: Contact the Solution Provider Help Desk

Email: phd@ninesigma.com

Phone: +1-216-283-3901

The logo for the State of Ohio, featuring a red outline of the state and the word "Ohio" in a bold, red, sans-serif font.

Opioid Technology Challenge

NINESIGMA PROGRAM MANAGER:

Kevin Andrews, Ph.D.

TOPIC DESCRIPTION

NineSigma, on behalf of the **State of Ohio** seeks responses which offer novel solutions to **protect first responders and medical professionals from inadvertent exposure to toxic opioid levels**.

Responses should be solutions, already in development, focused specifically on the Topic. Responses could include but are not limited to: novel personal protective devices, medical prophylactics, or portable detection equipment.

BACKGROUND

First responders arriving at the scene of a suspected drug overdose, law enforcement officers searching an area for illicit drugs, or medical professionals performing overdose reversal treatment, are often at risk of being exposed to toxic substances such as heroin, fentanyl, carfentanil or other synthetic and non-synthetic

opioids. Often these first responders have no way of quickly identifying the presence of dangerous substances, or any means to quickly and effectively protect themselves and others.

This Topic seeks solutions to assess a scene or patient to determine whether there is risk of exposure to toxic substances and/or act to protect themselves and others.

MINIMUM REQUIREMENTS FOR ALL CHALLENGE TOPICS:

- Your solution must use technology as a component of your approach:
 - Sensors, diagnostics, medical devices, pharmaceuticals, and/or health information technology
 - Software, but only if in conjunction with one of the technologies mentioned above
- You must already be working on your approach, have proof of concept, and have compelling data to support the effectiveness of your approach.
- You must have a clear plan and path forward to get your technology ready for broad deployment or implementation.
- Your approach must be able to be implemented in the United States of America (e.g. it should be likely to receive regulatory approval) and you must be able to demonstrate your approach in conjunction with an Ohio-based entity.

APPROACHES THAT DO NOT QUALIFY

- Approaches that are strictly at early concept stage of development
- Any solution that requires a change in current law, policy, or regulation
- Clinical treatment protocols not associated with a new technology development
- Alternative pain management therapies
- Predictive analytics to inform public policy
- Programs for direct delivery of social or clinical point of care services that do not have a significant technology component
- Education and public awareness programs
- Professional training programs

See Section 8 of the [Official Rules](#) for further detail on other ineligible approaches.

GENERAL EVALUATION CRITERIA FOR ALL CHALLENGE TOPICS:

Responses should consider:

- How your approach aligns with Key Attributes for the Topic for which you are submitting an Entry
- Technology maturity and time to market
 - For similar approaches, preference will be given to the one that is more mature and/or that has a shorter time to market
- Potential for broad deployment or implementation
- Size/scope of audience impacted (“market size”)
- Robustness
- Effectiveness

KEY ATTRIBUTES FOR TOPIC 4 PROTECT:

Your approach should:

- Prevent, minimize, or counteract exposure to opiates
- Be fast-acting (preferably in 1-60 seconds)
- Be simple to use
- Be robust for field deployment
- Require minimal space, (e.g., be portable for use in a first responder vehicle)
- Have a unit cost that enables widespread deployment

- In the case of opiate detection equipment:
 - Detects presence of legal and illicit opioids and mixtures thereof
 - Preferably able to: discriminate between several opioids, enable detection of related substances, and detect trace amounts
 - Preferably minimizes exposure of person conducting the test (e.g., by non-contact detection)
 - Is not susceptible to interference from other common agents
 - Has low occurrence of false events

POSSIBLE APPROACHES:

Included but not limited to:

- Novel personal protective equipment
- Medical prophylactics
- Portable diagnostic/screening equipment
- Portable or permanent placement detection devices

HOW TO SUBMIT

You must complete and submit the online response form by July 11, 2018 at 5:00 PM EDT.

Questions in the response form will ask you to provide:	Page Limit
A non-confidential abstract (for public disclosure) in which you summarize your approach and how it addresses prevention, treatment, overdose avoidance, and/or overdose response	1
A more detailed (preferably non-confidential) description of your approach and its underlying technology. Trade Secrets can be identified in limited circumstances (see section 12 of Official Rules for more details).	3
An explanation of how your approach meets the Key Attributes	1
An estimate of the impact on the opioid crisis—how many people your approach could help	1
Rationale of why your approach may be better or more advanced than similar or competing strategies	1
A summary of efforts to date and current state of readiness, with evidence and proof of concept. Evidence could include, for example: <ul style="list-style-type: none"> ○ Results of clinical trials ○ Animal studies ○ Product beta testing ○ Peer reviewed lab results As appropriate	5
A summary of the steps, resources, and time required to advance your solution to be ready for broad deployment or implementation <ul style="list-style-type: none"> ○ Explain what you will accomplish during the Product Phase (September 2018-July 2019), if awarded in the Challenge Phase. Please discuss how you plan to demonstrate your solution. ○ Explain what you will accomplish Post Challenge, if awarded in the Product Phase. Please explain how you will collaborate with Ohio entities or otherwise be present in Ohio. 	4
Description of you and your team	2
Video demonstration [You may also include a video. If you submit a video, it must be in one of the following formats: (1) provide a link to a password protected Vimeo video; (2) provide a link to an unlisted YouTube video]	
Uploaded supporting documents (limit of 3, max of 10 MB)	

If you require assistance to submit your response, please contact the Provider Help Desk (phd@ninesigma.com).

ABOUT THIS CHALLENGE

By submitting a response, you agree to the [Official Rules](#), which include the following requirements:

- You agree to the submission terms described in the response form.
- You agree that your submission does not contain any confidential information (except for information correctly identified as trade secret).
- You are registered to do business and in good standing in the State of Ohio or partnered with an In-State Entity.
- You acknowledge that sponsor reserves the sole and absolute right and discretion to distribute awards as stated in the contest.
- To be considered for awards or recognition, submissions must be written in English.