

NIH CHEMM Chemical Toxicities
Outreach Plan

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**NIH CHEMM Chemical Toxidromes
Outreach Plan**

Prepared on behalf of
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**NIH CHEMM Chemical Toxidromes
Outreach Plan**

Contents

1	INTRODUCTION	1
2	PLAN OVERVIEW	1
3	TASKS	2
3.1	TASK 1: IDENTIFY STAKEHOLDER GROUPS	2
3.2	TASK 2: IDENTIFY KEY STAKEHOLDER GROUPS	2
3.3	TASK 3: IDENTIFY AND CHARACTERIZE PRIMARY OUTREACH CHANNELS	3
3.4	TASK 4: DEVELOP OUTREACH MESSAGES	3
3.5	TASK 5: DEVELOP OUTREACH OBJECTIVES AND METRICS	4
3.6	TASK 6: IDENTIFY PREFERRED OUTREACH CHANNELS FOR STAKEHOLDER GROUPS	4
3.7	TASK 7: DEVELOP AND EXECUTE A TACTICAL PLAN FOR ALL STAKEHOLDER GROUPS	4
4	SEQUENCE OF STEPS	5
5	ABBREVIATIONS AND ACRONYMS	5
6	REFERENCES	6

NIH CHEMM Chemical Toxidromes Outreach Plan

1 INTRODUCTION

A common language to categorize clinical manifestations of toxic chemical exposures is essential for preparing emergency responders and hospital first receivers to provide appropriate medical care to victims of mass casualty events stemming from industrial chemical releases and terrorist attacks. When the identity of the chemical is unknown, first responders need a tool to rapidly evaluate victims and identify the best course of treatment. Military and civilian emergency response communities use a “toxic syndrome” (toxidrome) approach when information on chemical exposures is limited.

Toxidromes can be defined by a unique set of clinical observations, typically assessed via vital signs, mental status, pupil size, mucous membrane irritation, and lung and skin examinations. Because communication in a crisis requires terms that can quickly and accurately convey the condition of patients, toxidrome names and definitions are designed to be readily understood and remembered.

The toxidromes described in this plan are those used in the National Institutes of Health (NIH) / National Library of Medicine (NLM) Chemical Hazards Emergency Medical Management (CHEMM) system. They are proposed as the foundation for a consistent lexicon that, if adopted widely, can improve response to mass exposure incidents.

This document is an outreach plan whose goal is to raise widespread awareness and encourage use of the toxidromes throughout the stakeholder community. It is intended to be a living plan. It will be modified based on experience during its implementation.

This plan will be formally managed through a change management process.

2 PLAN OVERVIEW

The goal of this plan is to lead to engagement, awareness, acceptance, and use of the CHEMM chemical toxidromes lexicon by the stakeholder community. The approach will:

- Be evolutionary rather than revolutionary
- Target acceptance through grassroots consensus rather than regulatory approval
- Use a marketing strategy that sells the concept rather than an information strategy that simply produces awareness
- Target key stakeholder groups whose acceptance will help win over the rest of the stakeholder community

The plan:

- Identifies the tasks planned for achieving the outreach goals
- Presents a schedule for the completion of the tasks

NIH CHEMM Chemical Toxidromes Outreach Plan

NLM will implement the plan, with input and advice from:

- The CHEMM Mental Models Research Report (Kovacs, et al., 2017)
- Other sources in the literature
- The NIH Office of Communications and Public Information
- Others within NLM
- Collaborators, advisors and contractors

Task summaries appear in the following sections.

3 TASKS

3.1 Task 1: Identify Stakeholder Groups

NLM will identify the full range of stakeholder groups that can benefit from or apply the chemical toxidrome concept.

Stakeholder groups will include, but not be limited to:

- First receivers
- First responders
- Incident management organizations
- Medical management, second receivers, and support organizations, including:
 - Clinicians
 - Hospitals
 - Mortuaries
 - Pharmacists
 - Insurance companies
- Emergency planning and preparedness organizations
- Medical planning and preparedness organizations
- Training organizations and academic and research institutions
- Professional and trade organizations
- The media
- The public

3.2 Task 2: Identify Key Stakeholder Groups

NLM will identify key stakeholder groups that will be targeted for initial outreach activities. These groups will act as thought leaders and early adopters, leading the way for the rest of the stakeholder community.

NIH CHEMM Chemical Toxidromes Outreach Plan

Because of their direct roles in operational application of the chemical toxidromes during response as well as their status as thought leaders, key stakeholder groups will be chosen from the medical community.

Key stakeholder groups may include, but not be limited to:

- First receivers
- First responders
- Medical management, second receivers, and support organizations
- Medical planning and preparedness organizations
- Medical training organizations
- Professional and trade organizations

3.3 Task 3: Identify and Characterize Primary Outreach Channels

NLM will identify and characterize the primary outreach channels that will be used in the plan.

Primary outreach channels will include, but not be limited to:

- Social media outlets
- NIH Office of Communications and Public Information
- NIH / NLM resources
- Partner organizations
- Expert workshops
- Conferences and trade organization meetings
- Professional and trade organizations outlets
- Publications
- Media resources

3.4 Task 4: Develop Outreach Messages

NLM will develop the outreach messages to be delivered to all stakeholder groups. The messages will be applied across all outreach activities, ensuring common, consistent communications and most effective impact.

Messages will include, but not be limited to:

- The value proposition, explaining why this will help them save lives and succeed at their mission
- Why it is better and easier than what they use now
- How it works and how it is used

3.5 Task 5: Develop Outreach Objectives and Metrics

NLM will develop outreach objectives and establish metrics to measure the performance of the outreach plan. The objectives and metrics will be used to evaluate progress and make mid-course corrections to the plan as well as to evaluate overall success of the plan at completion. The objectives and metrics will be developed using the guiding principles of:

- Specific and measurable
- Identified for each stakeholder group

Objectives and metrics will include, but not be limited to:

- **Publicization:** Messages are published/presented in 80% of targeted publications and professional meetings
- **Awareness:** At least 30% of ER doctors report awareness of lexicon, based on a survey of membership by selected professional organization
- **Acceptance:** At least 30% of targeted EMT organizations have used training materials in shift change or other training sessions, based on a survey by selected professional organization

3.6 Task 6: Identify Preferred Outreach Channels for Stakeholder Groups

NLM will identify the outreach channels that will produce the greatest impact for the least cost or effort for each stakeholder group (e.g., specific conferences and publications). A matrix mapping stakeholder groups to outreach channel and venue will be developed to guide plan implementation.

3.7 Task 7: Develop and Execute a Tactical Plan for All Stakeholder Groups

NLM will develop a comprehensive tactical plan that addresses how to reach all stakeholder groups. It may also focus on outreach channels if the outreach channel matrix indicates this approach would be more effective.

The plan will define a marketing campaign for each stakeholder group that will help produce engagement, awareness, acceptance and use of the CHEMM chemical toxidromes lexicon.

It will:

- Include work breakdown structures and schedules
- Identify the key messages to be communicated to the stakeholder group, using the preferred channels for that group

NIH CHEMM Chemical Toxidromes Outreach Plan

- Be executed against a defined budget and schedule
- Be evaluated against the identified objectives and metrics

Once the plan is underway and tuned for key stakeholder groups, NLM will implement it for the other stakeholder groups.

4 SEQUENCE OF STEPS

The sequence of steps for this plan, each needing approximately three or more months, is summarized in the following table.

Component	Notes
1. Identify stakeholder groups	Expand list in this plan
2. Identify key stakeholder groups	Expand list in this plan
3. Identify and characterize primary outreach channels	Expand list in this plan
4. Develop outreach messages	Expand list in this plan
5. Develop outreach objectives and metrics	Expand list in this plan
6. Identify preferred outreach channels for each stakeholder group	Based on results of previous tasks
7. Develop and execute tactical plan for all stakeholder groups	

5 ABBREVIATIONS AND ACRONYMS

CHEMM	Chemical Hazards Emergency Medical Management
NIH	National Institutes of Health
NLM	National Library of Medicine

**NIH CHEMM Chemical Toxidromes
Outreach Plan**

6 REFERENCES

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