Emergency Preparedness and Response Manual for State and Territorial Oral Health Programs

ASSOCIATION OF STATE AND TERRITORIAL DENTAL DIRECTORS

Developed in 2010 & Updated in 2021

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Where oral health lives

Foreword

Purpose

The development of the first Standard Operating Manual for *Emergency Preparedness and Response for State Oral Health Programs 2010* was in response to interest following U.S. domestic natural catastrophes and the increased need for coordinated emergency response among the dental community and the Federal, State, and Local Emergency Response systems. The Association of State and Territorial Dental Directors' (ASTDD) goal was to educate state dental directors, staff, and collaborative partners to improve public health crisis preparedness and response capabilities for state oral health programs.

This resource highlighted the essential operations and relationships that should be in place to enable effective recovery from a crisis and advise the state's oral health community, state health agency officials and public health administrators in the development and operation of oral health emergency preparedness and response at the state level. The manual also stresses the importance of personal preparedness as the basis for all preparedness and response efforts.

The Manual was reviewed and amended in 2021 in response to the Covid-19 pandemic. The ASTDD goal for this update is to assure sections are included that relate to epidemic and pandemic response. Note that use of the term "state" in the manual also applies to DC and US jurisdictions/territories. The term local also refers to regional entities.

Overview of Sections

1. **Overview of a Public Health Crisis** provides a broad overview of the crisis preparedness and response planning in America and promotes the need for public responsibility for population-based, oral health integration into the current Emergency Response System.

2. **Preparing for Public Health Crisis** focuses on the role of the state oral health program and essential crisis preparedness action steps including pre-crisis mitigation and preparedness, response and recovery planning.

3. **Appendices** provide worksheets and other tools to help you develop an Emergency Preparedness and Response Plan.

   A. **Self-Assessment for Emergency Preparedness and Response** is intended to assess the ability of a state oral health program to prepare and respond to emergency situations.

   B. **Checklist of Essential Documents** provides a list of documents you will need to develop or gather to prepare your Continuity of Operations Plan.

   C. **Key Stakeholders in Preparedness Planning Worksheet** provides a working list of stakeholders that are essential partners for planning and implementing a pre-crisis mitigation, preparedness, response, and recovery plan.

   D. **Preparing a Continuity of Operations Plan (COOP)** provides an overview for identifying processes needed to maintain functionality of the Oral Health Program in a crisis. Guides on identifying essential program functions, succession of leadership, delegation of authority, and communications are provided.

   E. **Personal & Pandemic Preparedness** is essential for safety and health.

   F. **Pack-and-Go** provides templates and checklists for vital records, standard operation

procedures, and federal guidance that might be needed to set up an alternate site of operation for use in preparing the COOP.

G. **Office Inventory** provides a template for office equipment to expedite recovery and insurance claims for replacement of office equipment, computer hardware, and computer software for use in preparing the COOP.

H. **Resource Request Form (RRF) for Federal Assistance** is the form needed for federal assistance requests. Inclusion in the appendices allows for easy access when federal assistance is being requested by the oral health program.

I. **Glossary--Definitions of Terms & Acronyms** provides information to navigate through nomenclature often unfamiliar tohealth workers untrained in federal emergency response.

J. **Resources** provides a list of resources and web links to assist the state dental director and ASTDD Associate Members with up-to-date information on an ever-changing emergency response environment.

Additional Notes

- Key points are highlighted throughout the document in **blue** boxes. The body of the document provides additional information and guidance on the key points.

- Case examples and lessons learned are highlighted in **purple** boxes. The cases are used to expand on key points or provide examples of lessons learned.

- Hyperlinks to pertinent websites throughout the document may change over time. Please search the related organization or agency to find the updated version when the hyperlink will not open.

It is our sincere hope that this document will provide an impetus for dental directors and state oral health programs to forge meaningful social networks with the goal of emergency preparedness and to provide a basis for disaster mitigation, preparedness, response, and recovery of delivery of dental care services and dental public health services.

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The Manual and all appendices are available on the [ASTDD Emergency Preparedness and Response webpage](#).

TABLE OF CONTENTS

I. Overview of a Public Health Crisis

Is your oral health program ready for an emergency crisis? Do you have an emergency preparedness and response plan? Prior to reading this Manual, you might want to review **Appendix A** and complete the Emergency Preparedness Assessment. The assessment will help you determine your oral health program's status related to preparedness and response and serve as a guide for starting your study. This section provides a broad overview of crisis preparedness and response planning in America and promotes the need for population-based, oral health integration into the current Emergency Response system.

Defining Public Health Crisis

The impact of major disasters such as hurricanes, tornados, flooding, blackouts that last for several days, epidemics that last for months, even years, and man-made events underscore the importance of having knowledgeable personnel, well-organized response operations, and effective communications to respond to any population-level crisis event. Public Health Emergency Preparedness (PHEP) is the capability of the public health and health care systems, communities, and individuals, to prevent, protect against, quickly respond to, and recover from health emergencies, particularly those whose scale, timing, or unpredictability threatens to overwhelm routine capabilities.

(CITATION– *Conceptualizing and Defining Public Health Emergency Preparedness. Nelson et al. Am J Public Health.2007; 97: S9-S11*).

A public health crisis may result from a physical, chemical, biological or radiation hazard that affects a population.

For example, flood, communicable disease, hurricane, tsunami, earthquake, typhoon, chemical spill, and bioterrorism attack are all potential hazards. The public health crisis is defined by the actual health consequences for the affected population in response to the hazard. Crisis preparedness involves a coordinated and continuous process of planning and implementation to limit the extent of death and disability within the affected population.

Essential public health crisis preparedness activities include:

- Acquiring all necessary emergency response training to understand federal, state, and local emergency response operations.
- Developing good working relationships with key stakeholders: all public and private organizations that would be involved in emergency response efforts.
- Development of an Emergency Preparedness and Response Plan that includes continuity of operations for the oral health program.
- Assessment of private and public dental service delivery systems and service areas.
- Assuring the provision of emergency dental treatment and disease prevention.
- Conducting disease surveillance activities for early detection of disease outbreaks or to characterize the nature of a disease epidemic.
- Facilitating the return to customary modes for healthcare delivery through close integration with local, state, and federal entities.

The entire public health infrastructure, including dental public health, represents the capacities and resources that enable the provision of responsive public health services.

Federal and State Roles – An Overview

Public Health Crisis and Dental Public Health

In 2005, Hurricane Katrina vividly demonstrated the shortcomings of the existing emergency preparedness planning at the national, state, and local levels. The lessons learned in the aftermath of this storm show that a devastating hazardous event would rapidly overwhelm all routine capabilities of the entire public health infrastructure. Therefore, it is important to consider the special skills and knowledge that the dental public health community can bring to public health response in close coordination with other key stakeholders. The incapacitated and overwhelmed private dental care system that occurred in the aftermath ofHurricane Katrina demonstrates the need for the provision of emergency dental treatment and oral disease prevention as an essential component of public health crisis response and therefore, preparedness. Again, more than a decade after Hurricane Katrina, the coronavirusdisease 2019 (COVID-19) devastated countries across the globe. Provision of dental care all but ceased save that of emergency treatment until key stakeholders determined policies andprocedures to assure safety measures for dental staff and patients.

Federal and state entities both play roles in emergency preparedness. The Department of Homeland Security (DHS) has the overall federal responsibility under the Homeland Security Act of 2002 for coordinating national emergency preparedness. In December 2006, the Congress passed the Pandemic and All-Hazards Preparedness Act (PAHPA). PAHPA designated the Secretary of Health and Human Services as the lead official for all federal public health and medical responses to public health emergencies. The PAHPA as well as other federal and state policies and executive orders are continually revised and updated by government officials.

The Department of Health and Human Services (DHHS) is the United States government's principal agency for protecting the health of all Americans and providing essential human services, especially for those who are least able to help themselves. The Assistant Secretary for Preparedness and Response (ASPR) is the principal advisor to the Secretary of Health and Human Services on matters relating to public health and medical emergencies, whether resulting from acts of nature, accidents, or bioterrorism. The ASPR coordinates activities between DHHS, the Homeland Security Council, the National Security Council, other Federal Departments and Agencies, as well as state, local and tribal public health and medical groups.

> Under the federal plan for responding to emergencies, states have responsibility for producing emergency preparedness plans in coordination with regional and local entities, and both the Department of Homeland Security and Department of Health and Human Services are responsible for supporting those efforts.

(Source: GAO. States Are Planning for Medical Surge, but Could Benefit from Shared Guidancefor Allocating Scarce Medical Resources)

Background

In 2003, President Bush issued a Presidential Directive: Homeland-Security-Presidential-Directive-5 to the Secretary of the Department of Homeland Security to develop and administer a single national incident management system. The National Incident Management System (NIMS) provides a systematic, proactive approach to guide agencies at all levels of government, organizations, and the private sector to work seamlessly to prevent, protect, respond, recover, and mitigate the effects of incidents, regardless of cause, size, location, or complexity, to reduce the loss of life and property and harm to the environment.

NIMS is:

> **The National Incident Management System (NIMS)** provides a consistent nationwide template to enable all government, private sector, and nongovernmental organizations to work together during a domestic crisis.

- A comprehensive, nationwide, systematic approach to incident management, including the Incident Command System, Multiagency Coordination Systems, and Public Information
- A set of preparedness concepts and principles for all hazards
- Essential principles for a common operating picture and interoperability of communications and information management
- Standardized resource management procedures that enable coordination among different jurisdictions or organizations
- Scalable, so it may be used for all incidents (from day-to-day to large-scale)
- A dynamic system that promotes ongoing management and maintenance.

NIMS is based on the premise that utilization of a common incident management framework will give emergency management/response personnel a flexible and standardized system for emergency management and incident response activities. The NIMS Resource Center website provides comprehensive information, training, and additional resources to provide guidance on the component parts and implementation of the National Incident Management System.

The development of a National Response Framework (NRF) was mandated by the Homeland Security Act of 2002 and Homeland Security Presidential Directive-5. The framework was completed in January 2005 and revised after Hurricane Katrina. The NRF is an all-hazards plan that provides the framework for federal interaction with state, tribal, and local governments; the private sector; and non-governmental organizations (NGOs) for prevention, preparedness, response, and recovery activities.

> The *National Response Framework* **(NRF)** is a guide that details how the nation conducts all-hazards response–from the smallest incident to the largest catastrophe. This document establishes a comprehensive, national, all-hazards approach to domestic incident response. The Framework identifies the key response principles, as well as the roles and structures that organize national response. It describes how communities, states, the Federal Government and private-sector and nongovernmental partners apply these principles for a coordinated, effective national response. In addition, it describes special circumstances where the Federal Government exercises a larger role, including incidents where federal interests are involved and catastrophic incidents where a state would require significant federal support. It lays the groundwork for first responders, decision-makers and supporting entities to provide a unified national response.

In addition to the National Response Framework (NRF) core document, Annexes and Guides provide additional concept of operations, procedures and structures for achieving response directives for all partners in fulfilling their roles under the NRF (Annex is another term used for Appendix):

- Emergency Support Function (ESF) Annexes identify federal resources and capabilities that are most frequently needed in a national response (e.g., transportation, firefighting, mass care).

- Support Annexes describe essential supporting aspects that are common to all incidents (e.g., financial management, volunteer and donations management, private- sector coordination).

- Incident Annexes address how we respond to seven broad categories or types of incidents (e.g., biological, nuclear/radiological, cyber, mass evacuation).

- Partner Guides provide ready references describing key roles and actions for local, tribal, state, federal, and private-sector response partners.

The NRF Resource Center website provides comprehensive information, references, and training on the core document, annexes, and partner guides.

The NRF uses NIMS to establish a framework for coordination among federal, state, tribal, and local governmental, and private sector organizations. The NRF is built on the NIMS template, which provides a consistent doctrinal framework for incident management at all jurisdictional levels regardless of the cause, size, or complexity. NIMS is used for all events and incidents; the NRF is activated only for designated events or incidents. NIMS coordinates the response structure at emergencies and significant special events; the NRF governs the resources used during and after the designated event or incident.

Incident Command System (ICS)

During a crisis, local government officials assume and maintain leadership for emergency management. Because of differences between the structures of the many state, federal, and other agencies involved in response and recovery efforts, a standardized system for communication, command, and control is required. The ICS is a hierarchical structure that assures a cooperative response by multiple agencies to organize and coordinate response activities without compromising the decision-making authority of local command. ICS ensures that the most pressing needs are met, and that precious resources are used without duplicationor waste. As a result of the ICS, your community, county, city, region, territory or state will have a communications network; for example, the Chicago, Illinois Health Alert Network (HAN) provides the opportunity to sign up for alerts and to learn more about the HAN.

The primary role of ICS is to establish planning and management functions for respondingpartners to work in a coordinated and systematic approach. These functions can include:

- using common terminology,

- integrating communication media,

- creating a unified command structure,

- coordinating resource management and allocation, and planning.

Below is a graphic that illustrates the relationship between the National Incident Management System and the National Response Framework.

Relationship: NIMS and NRP

NIMS

- Aligns command, control, organization structure, terminology, communication protocols, and resources/resource-typing
- Used for all incidents
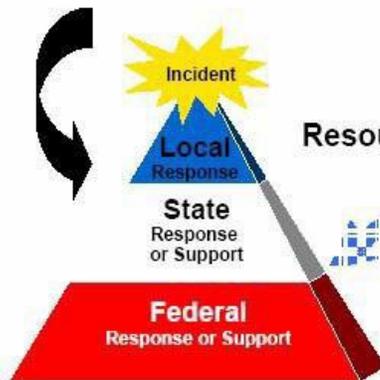
Knowledge

Abilities

Resources

Incident

Local Response

State Response or Support

Federal Response or Support

National Response Plan

Homeland Security
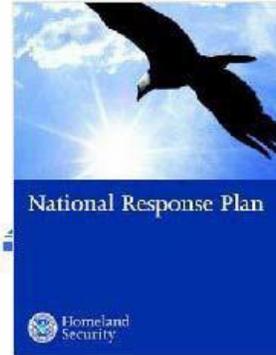
NRP

- Integrates and applies Federal knowledge, abilities, and resources before, during, and after incidents
- Activated for Incidents of National Significance

II. Preparing for a Public Health Crisis

This section focuses on the roles of state oral health programs and Essential Crisis Preparedness Action Steps including mitigation, preparedness, response, and recovery planning.

Roles of the Oral Health Program

State oral health programs have a responsibility to develop an Emergency Preparedness and Response Plan including a plan for maintaining operations to ensure the public's oral health and the delivery of dental care services.

> It is imperative that state oral health programs understand the federal emergency response system and stay current with any changes, establish good relationships with state emergency operations staff, and develop a workable Emergency Preparedness and Response Plan that includes a Continuity of Operations Plan (COOP) for their own program, and assurance for the delivery of dental care services and dental public health.

Public health workers should learn the basic concepts of NIMS and acquire effective crisis management techniques. Preparedness should begin well in advance of any potential incident. The Emergency Management Institute (EMI) serves as the national focal point for the development and delivery of emergency management training. This training enhances the capabilities of the federal, state, and local government, volunteer organizations, and the private sector to minimize the impact of disasters on the American public. EMI curricula, including the Independent Study Program (ISP) courses are structured to meet the needs of this diverse audience with an emphasis on how the various elements work together in emergencies to save lives and protect property.

The Centers for Disease Control and Prevention (CDC) is a pre-eminent resource for epidemic/pandemic crisis event preparedness and response. Information related to the relevant disease that is provided by the CDC is continually updated and should be shared through the state oral health program. All key state and local stakeholders should be notified regularly for the CDC information on risk and transmission as well as disease trends, case counts, deaths and populations most at risk. During the 2020 pandemic the CDC Zombie Apocalypse Campaign that began as a tongue-in-cheek campaign to engage new audiences with preparedness messages proved to be an effective platform to reach and engage a wide variety of audiences on all hazards preparedness via "zombie preparedness." Specific Guidance for Dental Settings including infection prevention and control, Personal Protective Equipment (PPE), and school-based sealant programs is available as state oral health programs develop their Emergency Preparedness and Response Plans and build partnerships and coalitions as a leader in state government.

> In advance of an emergency, dental directors should anticipate the potential risks to their programs, staff and the public during a catastrophic event. Emergency management planning provides the opportunity to develop strategies to reduce or eliminate these risks and decide what will be done before, during, and after a catastrophic event. Dental directors should also incorporate their leadership skills and expertise as a component of public health crisis preparedness response. While a lack of dental treatment providers may not manifest immediately, the provision of emergency dental treatment and disease prevention within the affected communities should be a priority of the oral health program emergency response activity.

State dental directors have an opportunity to lead efforts with their state emergency preparedness leaders along with other key dental stakeholders. (*See Appendix C for Key Stakeholders Planning*). State dental directors should develop strategies to prevent and reduce the detrimental impact of a crisis. Dental directors have the opportunity to assist in critical areas of extensive preparedness planning: 1) Basic knowledge of the federal and state emergency response system, 2) Training needs for oral health program staff, 3) Identification of risks and hazards, 4) Collaboration and partnerships with dental and dental public health organizations as well as other key stakeholders, 5) An Emergency Preparedness and Response Plan that includes continuity of oral health program operations and for public and private dental care systems.

Thoughts from Russell Dunkel, DDS, Wisconsin state dental director:

"It has been imperative to assimilate all the knowledge possible to provide leadership, guidance and education to the healthcare community and the public at large. In dentistry, we have historically tended to work in our own little silos and the experiences of the pandemic have strengthened my beliefs that we cannot continue to function in this manner any longer. I have had an even greater opportunity than before towork with a larger number of diverse, highly educated, extremely passionate group[s] of individuals who areextremely committed to the work we are doing."

Essential Crisis Preparedness Action Steps

Planning for a public crisis includes four essential preparedness action steps:

1. **MITIGATION**
2. **PREPAREDNESS**
3. **RESPONSE**
4. **RECOVERY**

These essential preparedness action steps should be used to develop a State Oral Health Program Emergency Preparedness and Response Plan. No plan should be executed without consideration for equity in marginalized, vulnerable and underserved communities.

An emergency preparedness and response plan is recommended to anticipate the potential loss of basic resources like water, electricity, gas, and telephones. Therefore, it is essential that personal, family, and personnel preparedness be emphasized as an integral part of the state oral health emergency preparedness and response plan. Emergency preparedness kits can be assembled that contain essential supplies including the Occupational Safety and Health Administration (OSHA) recommended personal-protective-equipment (PPE), flashlights, fresh batteries, battery-powered radio, basicmedical aid supplies, and nonperishable foods and drinking water to last several days. Use written checklists for important preparedness activities. (*See Appendix E & F for personal preparedness response planning resources and checklists*).

Reminder checklists of the important steps to take before, during and after a disaster should be kept in

a handy location as a crisis can happen quickly and without warning. A listing of local evacuation routes and procedures should be included with the checklists. The location of emergency shelters and back-up suppliers for vital resources such as gasoline and water should be identified. Employees and family members should share contact information including cell phone numbers, email addresses, and a location where they plan to stay during and after an emergency crisis. Provision for working remotely should be facilitated and tested. Planning and rehearsing to ensure reliable modes of communication is essential.

> *A lesson learned from Hurricane Katrina is how traditional modes of communication failed, as well as cell phone service. Text messaging proved to be the most reliable means of public communication in the affected areas.*

The State Oral Health Program Emergency Preparedness and Response Plan should define the roles and responsibilities of personnel, identify key actions, and establish a timeline that will be implemented during each phase of a crisis.

> *During the COVID-19 pandemic crisis many Rhode Island Department of Health employees were re-assigned to conduct contact tracing. The state dental director, Dr. Samuel Zwetchkenbaum, was deployed from his usual work then deactivated and eventually redeployed. He was told that regular duties were mostly suspended and most of his time should be on COVID work. Dr. Zwetchkenbaum said the experience connected him more positively with Rhode Island dentists, adding that he hoped the relationships built would extend to future work on oral health problems, including addressing access to care for vulnerable populations.*

> *"During that time, I was also deployed to the Health Department's Health Operations Center. I worked between three and four days a week as a contact tracer from March to November. In fact, all members of our Office of Oral Health team were involved in the response in some capacity, each with one or two days a week to dedicate to essential functions (e.g., community water fluoridation operations, grant monitoring and documentation, staffing). In November I was promoted to contact tracing shift lead; I now work three days a week overseeing a contact tracing team (our response is made up of three teams, or "bridges"). I now consistently have two days a week dedicated to the essential programmatic functions." Robin Miller, VT state dental director.*

The table on the following page provides examples of the essential preparedness action steps in emergency preparedness and response planning.

Essential Crisis Preparedness Action Steps in Planning

	Personal Plan (You, Your Family, and Staff)	Continuity of Operations (State Oral Health Program)	State Public Health Assistance Coordination Emergency Response	Federal Public Health Assistance Coordination
Mitigation	Anticipate the worst (i.e., physical risks)	Relocate at-risk equipment; digitize files for data recovery; renovate to protect	Identify emergency preparedness leaders and key stakeholders within local and state agencies. Identify and assess community-based dental care capacity	Transition from paper to EMR (electronic medical records)
	Know the evacuation routes and locate shelters	Identify and rank urgency of essential program functions	Review and develop procedures & policies: essential services, license portability, scope of practice, teledentistry, Medicaid reimbursement	Identify liability protection and portability of practice restrictions
Preparedness	Use lists of what you need during a crisis event and prepare "go-kits"	ID process for rapid notification of key personnel, orders of succession and delegation of authority	Train oral health program staff in emergency response; test and practice response plans	Organize and train volunteer dental care response teams
	Stockpile food and water; obtain prescription refills; install back-up generator	Plan for continuity of essential program services and communications	Assure partnerships and collaboration with stakeholders and emergency system leaders	Assure access to dental supplies and PPE (Tracker)
Response	Evacuate; seek adequate shelter	Implement essential functions to achieve appropriate operations recovery time	Assist with state response activities; liaison and communicate with key stakeholders and partners	Activate emergent outreach personnel, resources and guidance
Recovery	Monitor recovery needs and resources	Monitor recovery needs and resources	Monitor transition to pre-emergency levels and self-sustainability	Monitor recovery needs and resources

1. MITIGATION

MITIGATION IS THE FIRST PHASE OF AN EMERGENCY PREPAREDNESS AND RESPONSE PLAN. MITIGATION IS USED TO PREDICT THE IMPLICATIONS OF POTENTIAL HAZARDS TO LIFE AND PROPERTY AND TO IMPLEMENT ACTIONS TO REDUCE OR ELIMINATE SUCH RISKS.

State Oral Health Program Mitigation

Many crisis situations strike without warning and with no time to prepare. A State Oral Health Program Emergency Preparedness and Response Plan is an opportunity to identify potential hazards that can be eliminated or reduced to decrease the impact to the oral health program. State dental directors should ask:

- What are the potential hazards to the state oral health program?
  For example, are the essential records, documents, facilities and equipment located in flood-prone areas? Do you know what kind of emergencies might affect your program? Do you have back-up plans for those operations? Are policies and procedures in place that will assure access to oral health care throughout a crisis? Is dentistry an essential service? Is teledentistry used and reimbursed by Medicaid? Are the dental and dental hygiene workforce maximized for action through license portability and scope of practice rules and regulations?

- What can I do to mitigate these risks?

The dental director should meet with state emergency response personnel to understand the potential risks and determine what the program can do to mitigate these risks. Comprehensive mitigation planning should also anticipate and prepare for the risks posed by environmental health effects and communicable disease outbreaks. Public health officials should anticipate the environmental impact from damages to the dental care delivery infrastructure and make recommendations to mitigate the impact.

More thoughts from Russell Dunkel, DDS, Wisconsin state dental director:

"Pre-COVID we were already dealing with a vast number of social and health inequities, access to dental care being no exception. Post-COVID, dental offices/clinics had to change their way of practicing and scheduling and, as a result, the Medicaid and uninsured population suffered even greater barriers to accessing dental care. With all these barriers to health care, especially for the under-resourced and vulnerable populations, during a pandemic is definitely not the time to pause or remove a proven safe and cost-effective method for reducing dental decay. Community water fluoridation may be the only dental service many individuals receive."

Long Term Mitigation

Federal law, specifically [Robert T. Stafford Disaster Relief and Emergency Assistance Act Section 404](#) permits the federal government to provide mitigation support in the aftermath of a disaster. After a disaster declaration has been made, the Federal Emergency Management Agency (FEMA) is authorized to provide grants to states and local governments to implement long-term hazard mitigation measures. These grants may be used to elevate flood prone structures, retrofit structures to minimize damage in future disasters, and make building code improvements during post-disaster reconstruction.

Hazardous Materials Mitigation

Chemical substances, which if released or misused, can pose a threat to the environment or health. Many types of materials used in the healthcare industry including dental materials may impact the environment. Below is one example of how a natural disaster such as flooding may cause an unintended release of hazardous chemicals into the environment.

In the aftermath of Hurricane Katrina, 14 hospitals and three federal medical facilities in the lower six counties of Mississippi were damaged and eleven hospitals in the New Orleans area were flood-bound. More than 85 dental offices were partially or completely destroyed in the Mississippi Gulf Coast counties and many dental offices in the metro New Orleans area were flooded. Many of these health facilities contained potentially hazardous materials (e.g., radioactive x-ray equipment, organic solvents, and mercury in un-triturated amalgam capsules) that were submerged in water for weeks or lost in the Gulf of Mexico. Anticipating such occurrences would have provided the opportunity to minimize the environmental impact such asprotocols for environmentally friendly storage of hazardous chemicals used in dental practice.

Communications Mitigation

Identifying a communications plan is essential to mitigating the loss of life and property prior to or during a disaster. ASTDD provides a Communication Plan Template for a Goal-Specific Project or Document and Year at a Glance Template. This ASTDD tool helps you plan communication strategies, timelines, evaluation methods, etc. around a specific goal or document and can be adapted for use with emergency preparedness. For instance, many crisis events impact public water systems and require boil orders until the water is deemed potable once more. A mechanism to communicate instructions quickly with dental facilities outlining safe dental practices during a boil order should be readily available when needed.

The example on the next page illustrates the importance of planning back-up and contingency modes of communication. Additionally, public health and dental leadership should consider preparing pre-scripted messages for staff, stakeholders and the community indicating where and when additional information and resources will be made available.

Prior to 1998, students at the University of Southern Mississippi (USM) were largely dependent upon "word of mouth" information when tornadoes threatened the campus. According to USM Chief of Security, the university recognized the need for a campus-wide tornado warning system when several alerts failed to reach a considerable portion of the 16,000 enrolled students.

"The critical need is for people outside to go inside," Mr. Hopkins said. "There is an emergency plan in effect in each building with designated safety areas." The University Police dispatch office manages the system. University officials say the system operates similar to a radio or wireless system. "If a tornado warning is issued for our area, the University Police dispatcher calls the Emergency Management District to confirm the tornado is a threat to our campus. At that point, we set the alarm off," Mr. Hopkins explained. The most noticeable feature of the new system is its prominent position on top of a campus building. The radio-controlled warning system has two components: 1) an alarm characterized by Westminster Chimes, and 2) a voice system that announces, "A tornado warning has been issued for the Hattiesburg area. Please seek shelter."

The Federal Emergency Management Agency contributed $21,902 of the $29,202 cost to install the warning system through its Hazard Mitigation Grant Program (HMGP), which is administered by the Mississippi Emergency Management Agency. Following a major disaster declaration, the HMGP funds up to 75 percent of the eligible costs of a project that will reduce or eliminate damages from future natural hazard events. "Students are acquainted with the system during risk management orientation. Each residence hall gets a copy of the Emergency Response Manual," Mr. Hopkins noted. During Hurricane Katrina (2005), approximately 1,800 students remained sheltered on USM's campus reflecting the improved communication afforded by mitigation practice.

Often during disasters and emergencies, lines of communication are compromised or fail completely due to equipment or infrastructure failure, overwhelming system capacity, or insufficient planning. Dissemination of accurate and timely information and appropriate communication messages are essential to minimize the impact of the event.

(Adapted from FEMA Best Practices)

2.   PREPAREDNESS

PREPAREDNESS PLANS HELP STATE ORAL HEALTH PROGRAMS TO RESPOND TO THE CRISIS AND TO RESTORE THE PROGRAM AS QUICKLY AS POSSIBLE BY:

- **DEVELOPING, MAINTAINING AND TESTING AN ORAL HEALTH RESPONSE PLAN**
- **DELINEATING ESSENTIAL FUNCTIONS AND PRIORITIES**
- **PREPARING A TIMELINE**
- **IDENTIFYING PERSONNEL AND RESOURCES THAT WILL BE REQUIRED**
- **USING SKILLS AND EXPERTISE AS A COMPONENT OF PUBLIC HEALTH TO ENSURE THE PROVISION OF EMERGENCY DENTAL TREATMENT AND DISEASE PREVENTION WITHIN THE AFFECTEDCOMMUNITIES.**

As part of the Emergency Preparedness and Response Plan, a **Continuity of Operations Plan (COOP)** should be developed in collaboration with state emergency preparedness programs. The COOP establishes a process to continue essential program functions across a wide range of emergencies, including denial of services due to damage to facilities, destruction of equipment and other systems failures.

Continuity of Operations Plan (COOP)

Within the State Oral Health Program Emergency Preparedness and Response Plan, dental directors should develop a COOP by determining the criticality of essential functions for the state oral health program. For example, dental directors should consider the critical time for resuming water fluoride testing and reporting in fluoridated communities (i.e., within 24 hours, 7 days, 14 days, etc.). In local catastrophic events that may affect the central office and not the rest of the state, people may demand that public health services resume in a timely manner (i.e., school-based dental sealant programs). Dental directors may use the COOP process to plan the administrative priority to sustain the state's dental public health infrastructure as needed.

To anticipate workforce issues in the aftermath of a disaster, the COOP should address a temporary relocation of oral health program staff. The temporary relocation plan should include office staff and staff who provide direct services. Dental directors may want to develop an agreement with the state dental board (or equivalent) to use their offices as this may assist in getting direct services re-established more quickly. *(See Appendix D for COOP templates).*

Dental directors should assure access to counseling for staff people should they require support because of emotional distress related to the crisis. Substance Abuse and Mental Health Services Administration, DHHS hosts a 24/7, 365-day-a-year Disaster Distress Helpline providing crisis counseling.

Dental directors may also use the COOP process to develop "dental emergency priorities" that will support access by citizens to urgent dental care as a basic need, such as with access to clean water, food, shelter, and medical care.

To communicate the need for dental emergency priorities to emergency operations leadership, dental directors should identify the health implications when the dental care infrastructure is partially or completely affected in a crisis, and its impact on access to dental care at the local level. This knowledge will help directors guide emergency management leadership to plan both short-term and long-term strategies to re-establish access to essential dental services through the preparedness plan.

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The COVID-19 pandemic made the biggest change to the Missouri Oral Health Program when schools closed, essentially shutting down the state's largest oral health program that provided screening and fluoride varnish to students. On a personal level, the pandemic forced Dr. Dane to be more flexible with his time, allowing for COVID-19 related meetings, after-hours phone calls and the COVID-19 hotline. Dr. Dane became more sensitive to the potential risks for his family and office staff. "Having information helps reduce the anxiety but there is a lot of concern."

Assessment of the Population's Need for Dental Services

Dental directors should plan and implement assessment methods to determine the population's need for dental services throughout a crisis. This assessment would include a current spatial analysis of all known public and private dental delivery care systems, the workforce, and target populations as well as community prevention programs and their coverage areas.

State oral health programs should participate in occupational health monitoring systems and recommend collection measures in syndromic surveillance systems for future events. Oral health programs may be able to plan and develop a mechanism for rapid needs assessment that includes measures of oral disease prevalence.

Population data may be useful in assessing key variables for consideration in guiding and tailoring health education and communication efforts to ensure diverse audiences and vulnerable populations receive critical public health messages that are accessible, understandable, and timely. The CDC Public Health Professionals Gateway provides a compilation of various web-based resources of data and benchmarks for community-level indicators that have been benchmarked within states or among peers. This data gateway can serve as a valuable tool when responding to public health emergency events at the state, tribal, and local levels. It provides access to websites yielding data and indicator analyses providing descriptive information on demographic and socioeconomic characteristics; they can be used to monitor progress and determine whether actions have the desired effect. They also characterize important parts of health status and health determinants such as behavior, social and physical environments, and healthcare use.

GIS Mapping of Dental Practice Locations with Vulnerable Populations

Some states have used Geographic Information System (GIS) mapping technology to document the distribution of affected dental care facilities and to communicate effectively with decision makers. Mapping also can be used to demonstrate the impact of crisis events based on where community-based oral health programs and public health dental clinics are located, which may be useful for long-range planning of access to services for vulnerable populations. States may have GIS capability through Emergency Operation Command (EOC) mechanisms and should develop agreements to use this technology when feasible. In states where this is not possible, alternate suggestions include the use of GIS experts at academic research institutions or health centers.

The University of Mississippi School of Dentistry used an ArcView GIS data server to prepare maps of dental practice locations, and to perform data queries using web access. For example, the location of offices in areas with high unemployment rates and/or communities that are particularly vulnerable to the availability of acute services helped to provide an assessment of areas needing support services.

Access to Emergent and Urgent Oral Health Care

Public health officials should anticipate and propose strategies to prevent oral disease at check-in shelters for long-term events and implement protocols for palliative or definitive care in the event of acute dental emergencies. Focus should be placed on people who are most vulnerable and priority populations. In 2020, Colorado's dental safety-net stepped up with innovation and compassion to ensure residents received the care and services they needed and to avoid a parallel pandemic of unchecked oral disease. Dental Safety Net Promising Practices

Dental directors should work with emergency management personnel to provide procedural guidance on access to preventive and acute dental services at shelters to mitigate serious problems for persons who have urgent or acute oral or maxillofacial needs. State oral health programs should identify staff training needs, scope of services that can be delivered in shelters, and the supplies and equipment that will be needed.

Dental directors should determine what local responders will require in knowledge and skills training and competency to prepare them to identify and manage oral/dental/maxillofacial emergencies.

To mitigate post-traumatic oral health concerns, it may be necessary to have on-site teams available as first responders with the knowledge and ability to respond to acute dental pain and infection. Protocols and standing orders for first responders to manage acute oral pain or maxillofacial/dental trauma should be developed. Cross-training and credentialing of first responders and health department personnel must be adequately addressed in advance of an emergency.

Emergency planning personnel may also consider arranging memoranda of agreements with local dental professionals to provide emergent dental coverage for persons at local special needs shelters during a crisis event. Although dental professionals will also need to evacuate the affected areas, they may be willing and able to assist their community as volunteers or emergency first responders.

Assisting with Disease Prevention in Affected Communities

Dental Directors should participate in activities that assist in disease prevention in the affected communities. These activities might include:
- Identifying resources to support special needs shelters
- Participating in state medical assistance teams
- Developing mutual aid agreements
- Consulting with the state legal department regarding licensure and credentialing of volunteer oral health professionals, Dental Emergency Responders
- Work with coalitions/partners to enact legislation to include dentists and dental hygienists as those who can give vaccinations in your jurisdiction
- Encouraging health professionals to participate in volunteer registries and response organizations
- Identifying high-risk population groups for COVID-19 that should be priorities to receive vaccines and promoting getting vaccines to those groups.

"Recently, since COVID vaccine roll out, I have switched gears in efforts to help gain support for vaccines. I recently learned past healthcare systems had a low Health Care Provider (HCP) vaccine compliance rate. Some HCPs who are sitting on the vaccine fence can be influenced not only by vaccine education but by role models who share their honest 'firsthand' post vaccine experiences with others. I suspect many reading this note could also become a vaccine role model for a friend/coworker/family member by simply sharing your honest and heartfelt post vaccine experiences, like what we might call a social influencer nowadays. So, for me, after reading what moves HCPs and their staff to get vaccinated, I simply applied tools right out of the pages of vaccine science to help encourage more people and HCPs to get vaccinated. I'm sure most oral health professionals would agree that telling someone to do something does not equate to compliance--same with vaccine compliance. Recently I sought to motivate and monitor vaccine compliance using feedback/ dashboard percentages for HCPs and staff (again--a page out of vaccine science). This is a visual cue using a team vs team challenge concept. No one wants to let down their team. I'm waiting now to learn how that initiative is working.

On the home front, I have recruited 20 women so far over age 65 who got their 1st vaccine and who have sworn to help share their post vaccine experiences with others. Just last night 4 out of 20 vaccinated ladies told me their social influencing efforts to move people from their vaccine hesitant fence is working! They were so proud to share this with me. They were all so animated!! For me, it's like 'pay it forward' kind of thing. Makes me so happy. I would encourage all dental public health professionals to join in using similar positive efforts to increase vaccine compliance at work and at home. I hope my story here helps inspire others to join in. We need all hands-on-deck. The more the merrier, and of course, then a healthier nation!"

Kim Herremans, RDH MS, Executive Director, Greater Tampa Bay Oral Health Coalition

Identifying Resources to Support Special Needs Shelters

Another focus for preparedness planning is a responsibility for identifying resources that will be needed to support regional special needs shelters. Dental directors should work in conjunction with their state Essential Support Function-8 (shelter) planning personnel to identify oral health resources that will be needed in special needs shelters. People who evacuate to special needs shelters are typically individuals who require assistance such those living in assisted living or long-term care facilities, frail senior citizens or those with debilitating chronic diseases and conditions who are unable to travel long distances during evacuation. Many of these individuals will forget to bring personal hygiene supplies to the shelter, and some may forget to bring their prescription medication. Dental directors should also work to prepare and determine what protocols should be implemented in special needs shelters and during the Response phase of a public health crisis event (i.e., protocols for nurses to assist a patient with an acute dental abscess or protocols for repairing or replacing lost dentures).

Non-special needs shelters are in most cases managed by the Red Cross or non-profit organizations. While your health agency may not be directly involved in these operations, the oral health program may be involved in supplying basic supplies such as toothbrushes and toothpaste. Dental directors can provide a list of required supplies (i.e., toothbrushes, toothpaste, and denture adhesive) that should be stocked and ready for habitants at shelters in preparation for crisis events.

State Medical Assistance Teams

Anticipating the need for long-term support during response and recovery, states have developed State Medical Assistance Teams (SMAT) to ensure that citizens have access to medical care before, during or after catastrophic crisis events.

> A SMAT plan coordinates responders to provide surge capacity for the provision of medical personnel, equipment, and supplies for triage, treatment, tracking and transport of patients.

Teams are comprised primarily of emergency response personnel capable of providing pre-hospital emergency care and patient decontamination. States have also implemented a process to sign-up new volunteers using the Emergency System for the Advance Registration of Volunteer Health Professionals (ESAR-VHP). Dental directors should work with state dental associations and primary care associations to encourage dental professionals to participate in these programs.

Mutual Aid Agreements

> Support agreements, also called Mutual Aid Agreements, should be negotiated in advance of a crisis so that written agreements and contact protocols can be developed. Mutual aid agreements provide the means for one jurisdiction to provide resources or other support to another jurisdiction during an incident.

To facilitate the timely delivery of assistance during incidents, state public health agencies are encouraged to enter into agreements with health departments in other states or private-sector and nongovernmental organizations. Dental directors should plan in advance for multi-jurisdictional issues, such as out-of-state volunteer credentialing and inter-state resource sharing (i.e., mobile dental vans).

For example, mutual aid agreements may include personnel agreements between two state oral health programs to assure key personnel resources during a crisis response. Mutual aid agreements are typically negotiated by the director of emergency preparedness for the state health agency and should include all relevant program areas.

The Emergency Management Assistance Compact (EMAC) (EMAC) is a congressionally ratified organization that provides form and structure to interstate mutual aid. The EMAC is a basic principle of "neighbor helping neighbor" in time of emergency. EMAC is intended to provide mutual aid to a state, from an assisting state, that can quickly and effectively respond while providing credentialed, certified, or sworn resources that have the necessary liability and insurance protection, as if they were responding within their own state. Through EMAC, a disaster-impacted state can request and receive assistance from other member states quickly and efficiently, resolving two key issues upfront: liability and reimbursement. For example, the states of DE, FL, IL, KS, KY, NC, NE, NY, NM, and MN have provided assistance to IA, IN, and MO in response to flooding in the Midwest. The scope of the response has so far allowed state officials and EMAC A-Team leaders to obtain resources from neighboring and other targeted states, thus limiting the need for nationwide broadcasts or appeals for assistance.

Maintaining or restoring communication with partners and implementing core collaborations is required in the event of a crisis. State oral health programs should develop a memorandum of understanding with the respective state dental licensure board to share primary office, satellite office and home addresses on a periodic basis. These memoranda should also detail in advance how collaborations can help assess and inform public emergency management directors about the impact of a catastrophe on the disruption of access to acute dental care services for the affected populations. For example, state dental licensure boards should be ready and able to provide contact information for all primary and satellite dental care facilities and their practitioners.

> *"In a pandemic crisis, creating a safe environment to prevent virus transmission in the dental setting is key because of the importance of preventive dental visits and daily home care to avoid dental problems. There is a need to communicate updated information to the dental community as well as to the public. New information is constantly emerging. Working closely with several branches within the California Department of Public Health, the California Dental Association, local health departments and other partners, the state oral health program participated in developing tools, training and resources to implement the recommendations for preventing transmission of SARS-CoV-2 in dental settings."* Dr. Jay Kumar, California State Dental Director.

Legal Considerations

Dental directors should contact their health agency's legal department to obtain direction regarding state law pertaining to volunteer credentialing and liability concerns during a public health crisis. Both the federal Coronavirus Aid, Relief, and Economic Security (CARES) act and WI state lawprovided liability protection to volunteer health care providers. The CARES act protection lasts for the duration of the federal public health emergency (PHE). The state protections apply "during a state of emergency." The CARES act preemptsstate law, so volunteers are covered for the duration of the federal PHE.

Legal concerns such as tort coverage for volunteers to assure coverage or exemption for professional liability should be identified and addressed through the planning process. Federalization of volunteers is another option based on the availability of authorized federal personnel to perform this responsibility.

Volunteers are needed for all aspects of crisis response. Dental professionals can offer their skills as organizers and volunteers in efforts other than dentistry: filling sand bags, delivering and distributing food and water. We care.

Role of the Medical Reserve Corps

The Medical Reserve Corps (MRC) was founded after President Bush's 2002 State of the Union Address, in which he asked all Americans to volunteer in support of their country. The MRC is a partner program of Citizen Corps, a national network of volunteers dedicated to ensuring hometown security. Citizen Corps, along with the Corporation for National and Community Service and the Peace Corps, are all part of the President's USA Freedom Corps, which promotes volunteerism and service throughout the nation.

Medical Reserve Corps units are community-based and function as a way to locally organize and utilize volunteers—medical professionals and others—who want to donate their time and expertise to promote healthy living throughout the year and to prepare for and respond to emergencies. MRC volunteers supplement existing local emergency and public health resources.

MRC volunteers include medical and public health professionals such as physicians, nurses, pharmacists, dentists, dental hygienists, veterinarians, and epidemiologists. Other community

members such as interpreters, chaplains, office workers, and legal advisors can fill other vital support positions. Most MRC units are coordinated through the Emergency Preparedness Department and coordinate their preparedness efforts with public health officials. The responsibilities of MRC volunteers vary depending on the nature of the needs in the community. MRC volunteers can assist during emergencies as well as non-emergent public initiatives and ongoing community health outreach and education efforts.

The Emergency System for Advance Registration of Volunteer Health Professionals (ESAR-VHP) and Medical Reserve Corps Coordination

In the event of a large-scale public health emergency, the need for surge capacity of health and medical systems would be critical. The Emergency System for Advance Registration of Volunteer Health Professionals (ESAR-VHP) and Medical Reserve Corps coordination program allows public health officials to register health professionals, apply emergency credentialing standards, and allow for the verification of the identity, credentials and qualifications of prospective volunteers.

The Kentucky Health Emergency Listing of Professionals for Surge (K HELPS) Program and Medical Reserve Corps Coordination

The K HELPS program is the state-based Emergency System for Advance Registration of Volunteer Professionals (ESAR-VHP) used to register medical professionals interested in volunteering to offer assistance during public health emergencies or disasters. In the event of a large-scale public health emergency, the need for surge capacity of health and medical systems is critical. The K HELPS program allowed public health officials to register health professionals, apply emergency credentialing standards and allow for the verification of the identity, credentials and qualifications of prospective volunteers.

The K HELPS program was designed to complement existing local MRC programs. The K HELPS and local MRC units work together, creating efficiencies for both programs. A volunteer can register with K HELPS online and choose the local MRC unit associated with the volunteer's geographical area. The K HELPS system will verify credentials of the volunteer and notify the local health department to complete the approval process. The local MRC unit will provide an orientation, offer training, and issue an identification badge for the volunteer. The K HELPS system alerts volunteers by either email, telephone call, or both. Local MRC units also have administrative rights to alert and activate volunteers when needed.

The system was designed to allow volunteers to get involved at any level. No training was required to be approved at the first level in the MRC group. Volunteers are afforded the opportunity to take online training or participate in regional disaster drills and exercises. By 2010, Kentucky's goal was to have 5,000 volunteers credentialed, trained, and ready to respond to any public health emergency or disaster.

(Source: https://ky.readyop.com/contact/register/71 Or visit the ky.covid19.gov

Exercises and Drills

An essential part of preparedness planning is to build awareness, educate and train personnel, and testprocedures and plans. The goal for testing a preparedness plan is to see if the assumptions, assignments, and other details would be effective during a public health crisis event. Testing the plan through use of periodic exercises and drills helps you to:

- Discover any planning weaknesses
- Reveal resource needs
- Improve coordination
- Clarify roles and responsibilities
- Improve individual performance
- Improve readiness for a real emergency.

Lessons learned through exercises and drills provide a valuable basis for modifying your preparedness plan to ensure practices that will help to save lives and limit property damage.

3. RESPONSE

DISASTERS ALWAYS OCCUR AT THE LOCAL LEVEL. THE CITIZENS IN THE AREA WHERE THE CRISIS EVENT OCCURS AND THEIR LOCAL GOVERNMENTS AND VOLUNTARY AGENCIES ARE THE FIRST TO HAVE TO COPE WITH THE EVENT.

FEMA Training

Preparedness planning culminates with a response to a crisis that addresses the needs of the community in coping with the crisis and enhances the recovery process. Response starts locally with the immediate community providing emergency assistance. For the state oral health program, response begins with implementing the program Emergency Preparedness and Response Plan, assessing health implications when the dental care infrastructure is affected, assisting with disease prevention in affected communities, and assisting local and state emergency management agencies in determining the capacity of local resources in responding to the oral health needs of the affected population.

> *"My responsibilities as the state dental director changed quite drastically during the COVID-19 pandemic. In March 2020 I assisted with the development of Vermont's COVID-19 dental response team. This team consisted of representatives from the VT State Dental Society, VT Department of Health, VT Board of Dental Examiners, and the State Emergency Operations Center. We communicated on an almost daily basis working to establish an emergency dental network of practices that were able to safely treat dental emergencies." Robin Miller, VT State Dental Director*

Mutual aid compacts may be activated. When local communities or jurisdictions cannot meet incident response resource needs with their own resources or with help available from other local jurisdictions, they may ask state agencies for assistance. The local community is responsible for notifying the State Emergency Management Agency (EMA) and keeping the EMA informed of the local situation and events. States have significant resources of their own, including the state EMA, homeland security agencies, state police, health agencies, transportation agencies, incident management teams, state medical assistance teams (SMAT), victim identification and mortuary teams,and the National Guard. If additional resources are required, the state may request assistance from other states through interstate mutual aid and assistance agreements such as the Emergency Management Assistance Compact (EMAC).

Emergency events (public health or any other type) that affect one or more communities may necessitate a rapid State of Emergency Declaration. The Governor is the lead for declaring a state of emergency. The state health officer or his/her deputy, as well as the director of the state's EMA, can petition the governor for an emergency declaration. The process for executing this function is informal, usually via phone call. Proclaiming a state of emergency by the Governor activates the State Disaster Preparedness Plan, provides for the use of state assistance or resources, and begins the process for requesting federal assistance.

When an incident occurs that exceeds or is anticipated to exceed local, tribal, or state resources, the Governor can request federal assistance. Requests can include a request for an "emergency" or "major disaster declaration" under the Robert T. Stafford Disaster Relief and Emergency Assistance Act. FEMA is the Federal agency that coordinates the activation and implementation of the Federal Response Framework with the deployment of the necessary Emergency Support Functions (ESF), response teams, and other needed resources.

Federal support to states and local jurisdictions takes many forms. The most widely known authority under which assistance is provided for major incidents is the Stafford Act. The Stafford Act authorizes the President to provide financial and other assistance to state and local governments, certain private nonprofit organizations, and individuals to support response, recovery, and mitigation efforts following Presidential emergency or major disaster declarations. https://www.fema.gov/pdf/emergency/nrf/nrf-stafford.pdf

The following chart summarizes Stafford Act support to States.
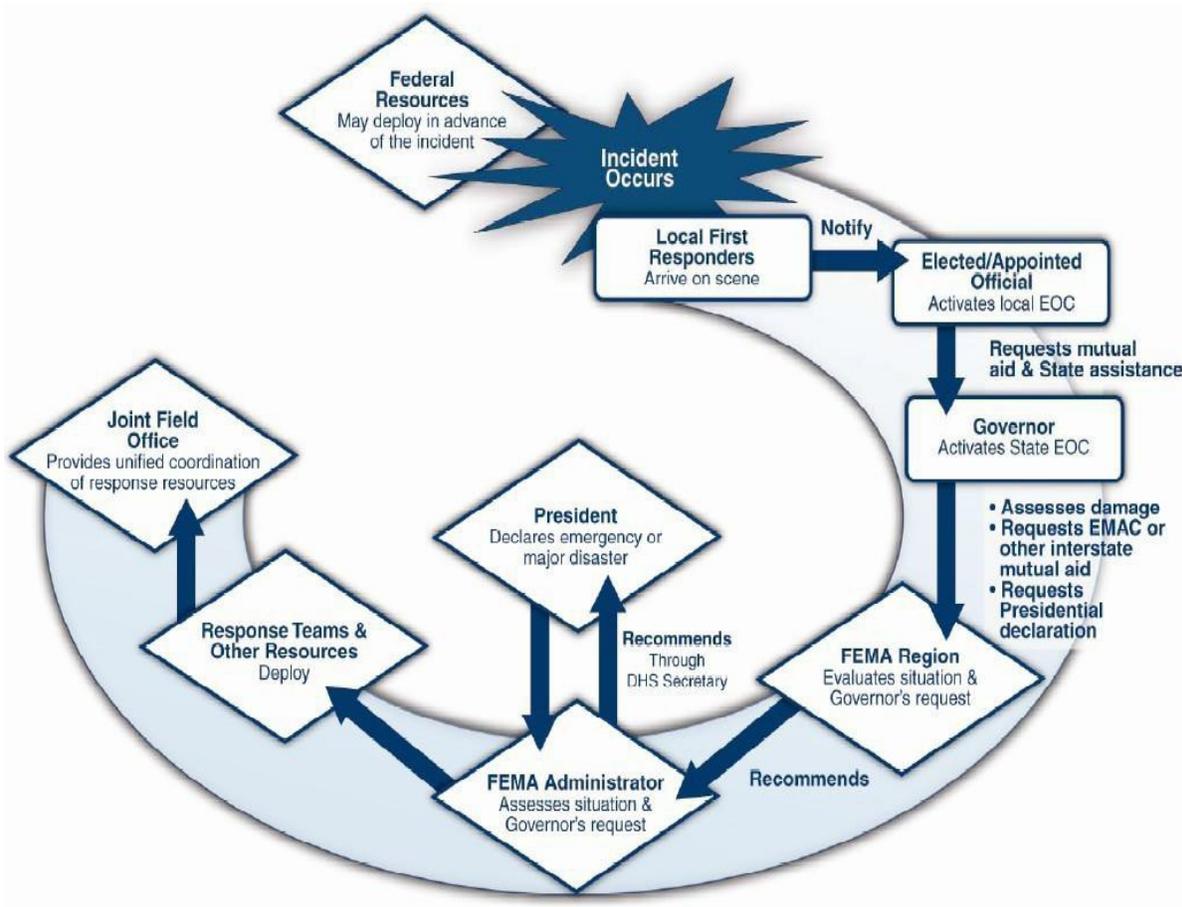
Oral Health Program Coordination with Federal Assistance

> Of importance to state dental directors is ESF #8, which provides coordinated federal assistance to supplement state, tribal, and local resources in response to public health and medical care needs for potential or actual Incidents of National Significance and/or during a developing potential health and medical situation.

In the aftermath of a crisis, a community may be without access to health care, may lack adequate sanitation and hygiene, and require mass fatality management to minimize the social and psychological impact and the spread of disease. The National Response Framework Emergency Support Function ESF#8 provides the essential functions for public health and medical services.

Department of Health and Human Services and ESF #8

The Department of Health and Human Services (DHHS) is the ESF #8 coordinator and primary agency. As the ESF #8 primary agency, DHHS leads the federal effort to provide public health and medical assistance to the affected area through the Incident Response Coordinating Team (IRCT) usually based at the main FEMA Joint Field Operations headquarters site established within the state.

DHHS also authorizes the deployment of personnel (U.S. Public Health Service Commissioned Corps, National Disaster Medical System (NDMS), Federal Civil Service, and civilian volunteers) to address public health, medical, and veterinary needs and support response operations. These personnel assets assist to provide and coordinate public health and medical support, patient evacuation, and logistic requirements with other primary and supporting departments, agencies, and governments throughout the incident. DHHS also evaluates requests for the deployment or redeployment of other DHHS assets, the Strategic National Stockpile (SNS), and Federal Medical Stations based upon relevant threat information and demonstrated need. In response to requests for federal public health and medical assistance, the state health department serves as the primary organization to activate and coordinate public health, medical, and veterinary personnel, equipment, PPE (CDC National Institute for Occupational Safety and Health) and supplies at the state level.

DHHS, in coordination with the Department of Homeland Security (DHS), mobilizes and deploys ESF #8 personnel to support national or regional teams to assess and meet public health and medical needs during an emergency declaration. These assessments may include an assessment of health care system capacity in the affected communities and surveillance to monitor the health of the general population and special needs populations. Federal ESF-8 personnel will assist in monitoring injury and disease patterns, potential disease outbreaks, blood and blood product (e.g., plasma) safety, and blood supply levels. They will also provide technical assistance and consultations on disease and injury prevention and precautions.

In the aftermath of Hurricane Katrina, the state dental directors in the affected states were viewed as the "go-to" persons in government to identify need, organize volunteers and outreach services, and inform the medical and emergency personnel regarding oral health. Dental directors may also be contacted for mobilizing and distributing donated oral health supplies.

> Directors will need to conduct a rapid statewide needs assessment to identify where resources are lacking and direct the distribution of these resources to where they are needed. As we saw a scarcity of PPE and other material during COVID-19, it is imperative to have a reliable means of communication for supply chain sources and resources.

Initiating Assistance through a [Resource Request Form (010-0-7)](#) (RRF)

> Emergency dental care services can be coordinated only when the local emergency management personnel have demonstrated a need for this care and initiate a formal request for this assistance through a Resource Request Form (RRF).

The RRF defines who, what, when, where and how much is needed. Knowledge of these factors will help the state dental director discuss activities and data requirements to better inform incident command personnel and initiate requests for oral health services support and personnel. It is important to note that states and ESF agencies use the RRF and all official requests should be made to FEMA via the RRF. Lessons learned from Hurricane Katrina indicate there are some essential questions that should be asked to help justify and support the assistance relief request. Examples of these questions are:

- Do you have a list of dentists who are available (and willing) to provide care both on a local and federal level?
- Do you have an indication of their training or skill levels?
- Do you know how to reach them and/or your staff during a crisis?

The RRF and subsequent federal assistance is supported and allocated through a tasking from FEMA to DHHS called a Mission Assignment (MA). The Mission Assignment is used by FEMA in support of a Stafford Act declaration and it orders immediate, short-term emergency response assistance. The MA commits funding with a specified source and can be issued both pre- and post-declaration. *(See Appendix H – RRF for Federal Assistance)*

Additional Resources -- The National Disaster Medical System (NDMS)

The National Disaster Medical System (NDMS) is a federally coordinated system that augments the nation's medical response capability. The overall purpose of the NDMS is to supplement an integrated national medical response capability for assisting state and local authorities in dealing with the medical impacts of major peacetime disasters and to provide support to the military and the Department of Veterans Affairs medical systems in caring for casualties evacuated back to the U.S. from overseas armed conventional conflicts.

The National Response Framework utilizes the National Disaster Medical System (NDMS), as part of the Department of Health and Human Services, Office of Preparedness and Response, under Emergency Support Function #8 (ESF #8), Health and Medical Services, to support federal agencies in the management and coordination of the federal medical response to major emergencies and federally declared disasters.

NDMS is a series of scalable capabilities such that any one or more assets may be engaged or employed. In some situations, DHHS assets and personnel may be pre-positioned in anticipation of a crisis (i.e., hurricane).

The NDMS assets include the following teams:

- **Disaster Medical Assistance Teams (DMATs)** provide medical care until other resources can be mobilized or the situation is resolved. DMATs deploy to disaster sites with sufficient supplies and equipment for a 72-hour deployment. In addition to the standard DMATs, there are highly specialized DMATs, including burn teams, pediatric teams, crush medicine team, and international medical/surgical teams.

- **National Medical Response Teams (NMRTs)** are equipped and trained to provide medical care for victims of weapons of a mass destruction incident.

- **Disaster Mortuary Operational Response Teams (DMORTs)** provide victim identification and mortuary services. One specialized team responds to incidents involving weapons of mass destruction. The DMORTs may use one of FEMA's two Disaster Portable Morgue Units (DPMUs) that are deployed to disaster sites. The DPMU contains a complete morgue, with designated workstations and prepackaged supplies.

- The **Family Assistance Center Team** works in conjunction with the DMORT, the American Red Cross, and other agencies or private companies involved in an incident. The team collects victim information and conducts death notifications.

- **Disaster Mental Health Teams** provide counseling and other assistance to the DMAT and DMORT teams serving at an incident. Rescue and recovery workers often face special emotional challenges.

- **National Veterinary Response Teams (NVRTs)** assess the medical needs of animals affected by a disaster or event. In addition to medical treatment of animals, NVRTs are also involved in disease surveillance, food and water quality assurance, and animal decontamination.

- **National Nurse Response Teams (NNRTs)** are activated in any scenario that overwhelms the nation's supply of nurses. The NNRTs are comprised of approximately 200 civilian nurses.

- **National Pharmacy Response Teams (NPRTs)** are located in each of the 10 DHHS federal regions. The NPRTs are used to assist in mass prophylaxis or the vaccination of hundreds of thousands,or even millions, of Americans.

> *Putting pharmacists on Rapid Response Teams brings a level of expertise that can be invaluable in an urgent situation," says Frank Federico, RPh, an Institute for Healthcare Improvement Director. "Having a pharmacist on the scene can save time and expedite appropriate treatment. This is an example of the way in which pharmacists' roles are changing, evolving from professionals merely responsible for dispensing medication to important members of clinical teams with valuable therapeutic expertise. This shift reflects a greater focus by regulatory and accreditation agencies, as well as organizations such as IHI, on reducing preventable complications and harm to patients, much of which involves medication safety."*

Presently, the NDMS *does not* include a Dental Health Response Team as an essential function, although historically the DMAT has had U.S. Public Health Service Commissioned Corps dentists who have deployed with the team. Therefore, as demonstrated in the aftermath of September 11 and Hurricane Katrina, state oral health program personnel have an essential function to: 1) identify the impact of a crisis on the dental care infrastructure, 2) determine the impact on service capacity, and 3) initiate an RRF to obtain the required support personnel, equipment, and supplies to provide emergency dental care for the affected population.

Additionally, dental directors may be requested to assist the appropriate authorities in the tracking and documenting of human remains and associated personal effects as well as locating relevant dental records and information. ESF #8 can provide such support to dental directors as requested after the disaster declaration is made. Some states may have assets, such as state response teams that can be activated to respond to specific tasks such as victim identification in mass disaster/mass fatality events.

> ### *Kentucky DMORT Response*
> *In the State of Kentucky, there is a formal Dental Response Team that is activated by the Office of the State Medical Examiner. This response team is led by a credentialed forensic odontologist and is staffed with dental professionals who have had training and are experienced in mass disaster/ mass fatality events. This team's preparation supports the deployment of a completely portable equipment package that allows digital collection of antemortem and postmortem data even in remote locations.*

4. RECOVERY

RECOVERY OCCURS IN PHASES. AS A COMMUNITY REBUILDS DURING RECOVERY, DENTAL DIRECTORS SHOULD DETERMINE THE NEED TO SUSTAIN ALL ORAL HEALTH RESPONSE ACTIVITIES THAT HAVE BEEN ACTIVATED AND CREATE AN APPROPRIATE TIMELINE TO TERMINATE THESE TEMPORARY OPERATIONS AND TRANSITION CARE BACK TO THE COMMUNITY PROVIDERS.

"Both personally and professionally the pandemic made me realize that I'm a lot more flexible than I thought I was. It also confirmed my decision to dedicate my professional life to public health. I think as a nation, we have a greater appreciation for the importance of public health infrastructure and science after going through this experience. It has also really highlighted the inequity of our society and given us an opportunity to thoughtfully approach the vaccine distribution in a targeted and equitable way." Robin Miller, VT State Dental Director

How do you measure where you are in the transition? How do you know when to pull out of a community–when it is ready to handle problems locally? What are the vital signs of recovery that you could track to assist with decision-making? Economic tension between the emergency response component and the recovery of the local private sector should be anticipated in advance. Talking points to address such concerns should be communicated during the mitigation and planning phase of the response plan.

There are two primary activities during the recovery phase:

1. Assess and reassess the recovery status. Proposed vital signs for recovery include:
   - Number of providers willing/able to see patients
   - Number of restored functional dental offices
   - Number of available appointments
   - Number of providers participating in Medicaid
   - Number of pharmacies
   - Availability of public transportation (buses, etc.)
   - Availability of housing and local unemployment rates.

The Office of the Governor may continue to extend emergency declarations for a considerable period of time, which permits the continuation of most essential functions based on determination of need and capacity.

2. Collaborate with stakeholders, communities and partners. Encourage long-term planning for future crisis events. The lessons learned in the aftermath of a crisis are unique and priceless opportunities to plan effectively for the next crisis.

Dental directors should re-evaluate their Emergency Preparedness and Response Plan including the Continuity of Operations Plans (COOP) and work closely with their emergency preparedness director to modify these plans accordingly.

An after-action report should be written to document lessons learned from the crisis operations and to make recommendations to improve future operations.

Long-term Recovery – Understanding Community Resilience

Homeland Security Presidential Directive 21(HSPD-21): Public Health and Medical Preparedness Community defines resilienceas: *Where local civic leaders, citizens, and families are educated regarding threats and are empowered to mitigate their own risk, where they are practiced in responding to events, where they have social networks to fall back upon, and where they have familiarity with local public health and medical systems, there will be community resilience that will significantly attenuate the requirement for additional assistance.*

Crisis causes collective trauma and a loss of communality for those affected, meaning that loved ones and neighbors may lose a familiar and reliable part of their everyday environment. There is extensive literature on the social and behavioral impact of crisis and devastation on the psyche of people in communities. Yet eventually, all communities should heal and begin work to rebuild what was lost.

Dental directors should understand the concept of community resilience. As oral health leaders, dental directors may participate in the process of inquiry and discovery that is necessary to plan and contribute to the rebuilding of the affected communities. For example, the state oral health program should participate in planning for the needs of community-based oral health programs as they return to operations and rebuild their community. State oral health programs can provide leadership and guidance to estimate the oral health care needs and capacity for care and determine what resources and program assurance should be provided during the recovery phase.

For the long-term, dental directors can maintain focus and support for public health, health equity, prevention and early intervention to assure oral health and overall health for constituents.

Routine Dental Care May Prevent Severe COVID-19 Complications, Study Finds

Successful control of periodontal inflammation can be beneficial to the lungs and potentially decrease severity and risk of COVID-19 respiratory problems, according to "The Mouth-COVID Connection: IL-6 Levels in Periodontal Disease — Potential Role in COVID-19-Related Respiratory Complications" by Shervin Molayem, DDS, and Carla Cruvinel Pontes, DDS, PhD. They examined the link between periodontal disease and COVID-19-related respiratory complications. Their findings suggest that dental professionals may need to focus on preventing underlying conditions such as periodontitis that promote systemic inflammation. Oral bacteria can affect lung function, thereby increasing the risk of pneumonia and potentially COVID-19-related pulmonary complications. Focusing on prevention would not only improve patients' overall health but could decrease the need for intensive care and mechanical ventilation of COVID-19 patients, the study authors write.

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