

# Integrating Behavioral And Public Health In Extreme Events: Problems, Priorities, And Potential

*Disaster Preparedness, Response, and Recovery:  
Linking Behavioral Health with Public Health  
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*Or...*

**Brian Flynn's 60 Minute  
Guide To Courtship,  
Marriage, Children, And  
Growing Old Together**

# “Haven’t We Met Somewhere Before?”

- We started out together
- Sometimes, even though we lived in the same house, we never interacted
- For a variety of reasons, our systems separated
  - Advocacy
  - Mind/body split

# “Well, At Least We Have Being Orphans In Common.”

- For a variety of reasons, including stigma, behavioral health has had second class status in the health structures and priorities
- For decades, public health has been neglected as the exotic (“sexy”?) health care priorities have had the funding and policy spotlight

**“I Feel We Have Known Each  
Other For Years.  
We Have So Much In  
Common”**

# Mental Health: A Report Of The Surgeon General (1999)

- Mental health is fundamental to health
- Mental disorders are real health conditions
- The efficacy of mental health treatments is well documented
- “In the United States, mental health programs, like general health programs, are rooted in a *population based public health model.*”

**“There’s no greater mental health issue facing us as a nation than the effect of terrorism and war.”**

ADM Richard Carmona  
US Surgeon General, 2003

**“One of the most serious failings in civil defense planning involves the psychological consequences of reactions among survivors, emergency workers, and the public in the aftermath of such an attack has not been given high priority in contingency plans.”**

J. D. Simon, *International Journal of Emergency Mental Health*, 1999

# Haddon Matrix

	<b>Agent:</b> <b>Malaria</b>	<b>Vector:</b> <b>Mosquito</b>	<b>Population:</b> <b>Person</b>
<b>Pre</b>			
<b>During</b>			
<b>Post</b>			

# Psychological and Behavioral Intervention Matrix (WTC)

	<b>Agent: Blast/Terror</b>	<b>Vector: Terrorist/Plane</b>	<b>Population: Person</b>
<b>Pre</b>	-Modify Building design	-Airport Screening	<b>Preparedness Behaviors</b> -Risk Assessment -Information/plan.
<b>During</b>	-Sprinkler system -Firefighter Response	-Harden Cockpit doors -Passenger active coping	<b>Disaster Behaviors:</b> -Escape/Rescue -Evacuation
<b>Post</b>	-Emergency Response System	-Justice system	<b>Response/Recovery Behaviors</b> -Specific Rx's -Screening -Parent-Teacher Ed

# Psychological and Behavioral Intervention Matrix (Bio)

	<b>Agent: Anthrax/Terror</b>	<b>Vector: Terrorist/Mail</b>	<b>Population: Person</b>
<b>Pre</b>	-Premedication -Vaccination	-Airport Screening	<b>Preparedness Behaviors:</b> -Participation in Vaccination -Information/plan.
<b>During</b>	-Air detection sys		
<b>Post</b>	-Specific medication rx -Supportive rx -Masks/Cover	-Security -Detectors	<b>Disaster Behaviors:</b> -Quarantine -Evacuation -Grief Leadership
	-Rehabilitation	-Justice system	<b>Response/Recovery Behaviors:</b> -Help seeking -Specific Rx's

**“So, Ya’ Wanna  
Get Married Or  
What?”  
(Shotgun or  
Voluntary?)**



# ...Probably We Should

- A variety of influences are forcing us together
- We share values, history, models of approach and intervention, and more
- Now that we are adults, it really *is* time we realize that our future is together

**Plus, many don't understand either of us  
or give a damn if we get together or  
not...**



# Why Behavioral Health and Public Health Must Be Integrated (Married?)

**It is a matter of national security...**

**Without health there is no happiness..**  
**(Thomas Jefferson)**

**Without happiness there can be no  
hope...**

**Without hope there can be no nation**  
**(IOM 2003/Ursano, 2003)**

# The Goal of Terrorism...

Induce Terror in the Nation  
(Ursano)

# Psychological Goals of Terrorism

- Erode sense of national security
- Disrupt the continuity of society
- Destroy “social capital”
  - Morale
  - Cohesion
  - Shared values

# Terrorism

**Opens the fault lines, the  
potential cracks, in our society**

**Racial/ethnic**

**Economic**

**Religious**

**(Ursano)**

# Aside From Being The Purpose Of Terrorism, Why Is Behavioral Health In The Midst Of A Crisis Important?

It is not  
what you may think!

## Quote:

**“I understand and empathize with your concerns about mental health in an overwhelming public health emergency.**

**However, the issues I have to deal with, and the decisions I have to make, in the first twenty-four hours are life and death issues.**

**The mental health concerns, while important, do not rise to that level of importance.”**

*Source: Public Health Official, CDC conference, January 2004*



## Contrary to stereotype:

Behavioral health *in the midst of crisis* is not primarily concerned with identifying disorders or managing feelings.

Feelings are of concern to the extent that they influence individual or collective behavior.

Example:

Agitated/disruptive behavior can have a contagion effect in a confined and tense environment

# **Primary function of behavioral health *in the midst of crisis:***

**To favorably influence  
optimal, healthy, functional  
individual and collective  
*behavior***

# Key Behaviors...

What should I do?

- Seek/not seek medical care?
- Eat food/not eat food?
- Stay away from other people?
- Evacuate/shelter in place?

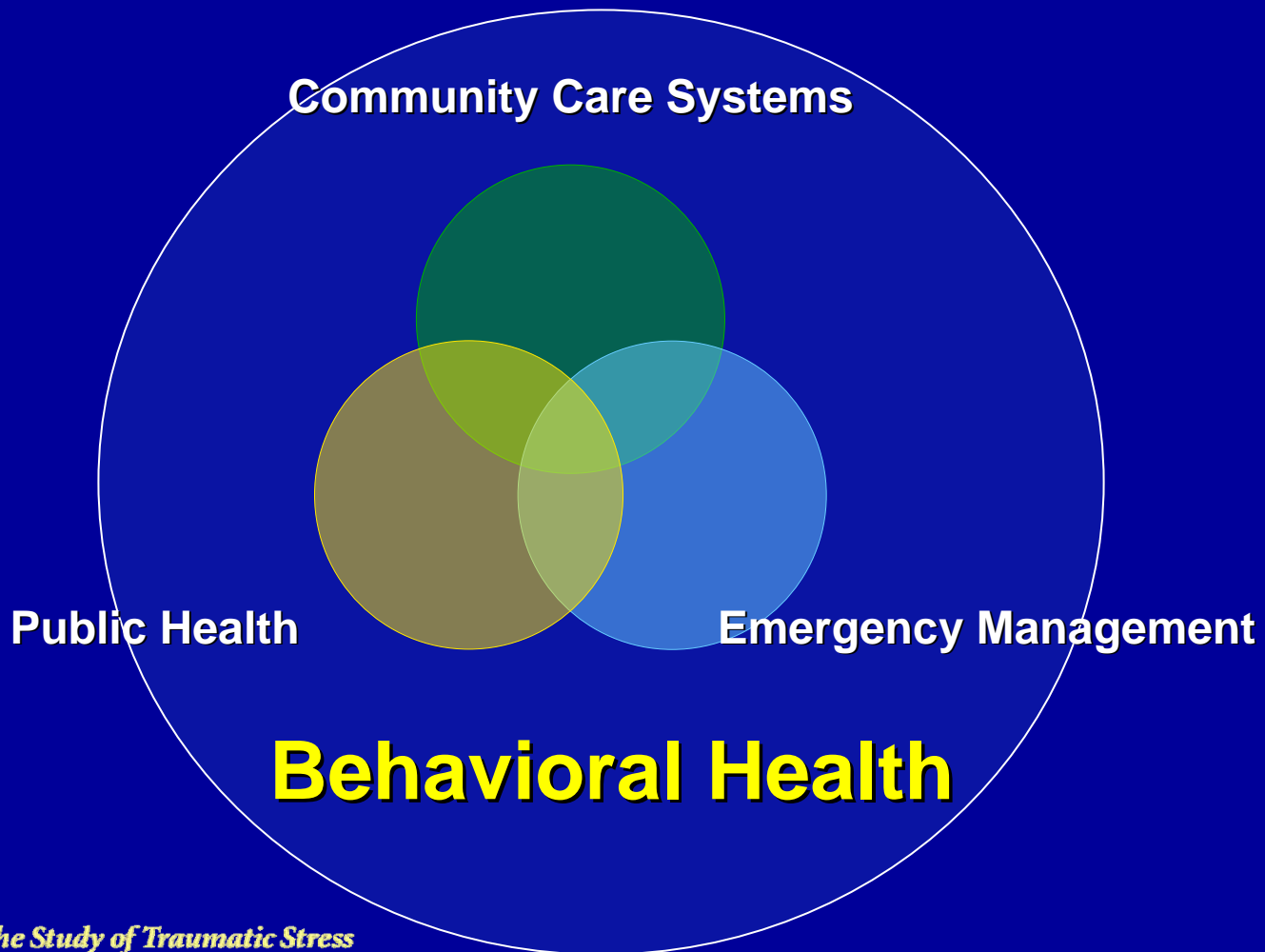
# Take Home Message:

These are  
life and death issues.

# Fostering Healthy Behavior Is Important At Every Stage:

- Mitigation
- Preparedness
- Response
- Recovery

# Behavioral Health In Preparedness And Response

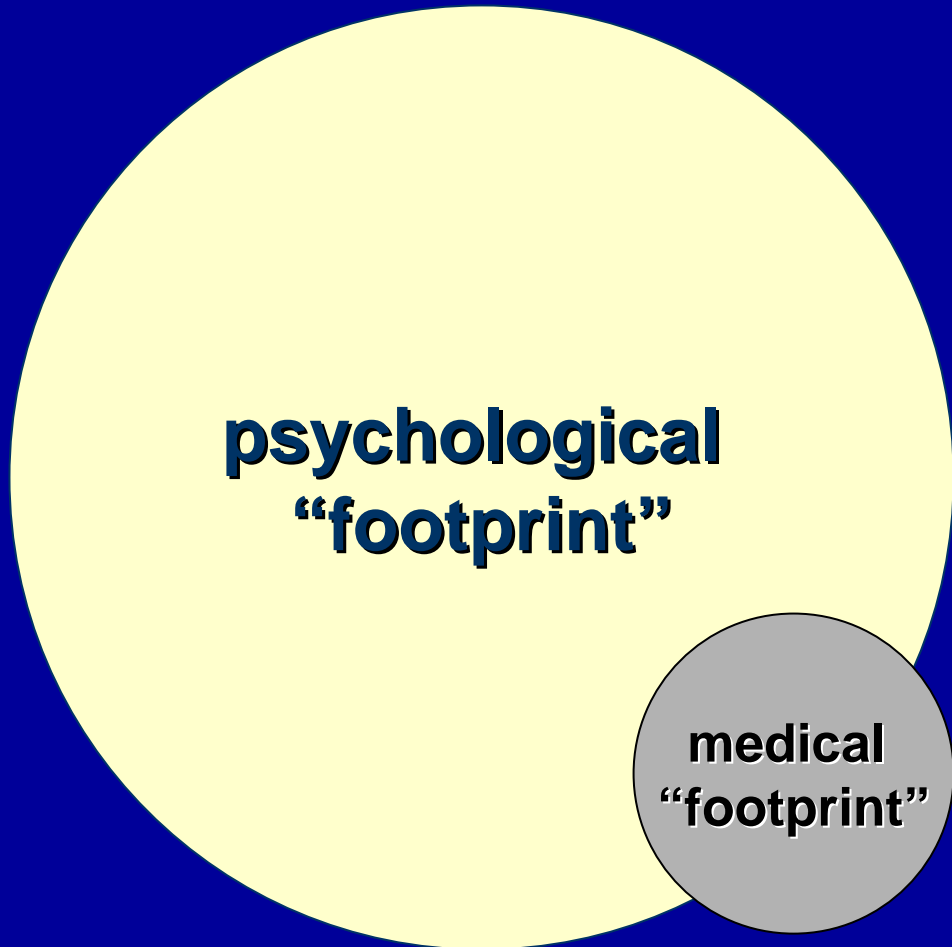


# The Bottom Line...

Preventing, mitigating,  
and managing **terror**  
is the key to  
undermining the power  
and impact of terrorism.

# Why Behavioral Health?

- The size of the **psychological “footprint”** exceeds the size of the **medical “footprint”** — often by a factor of 10 or more



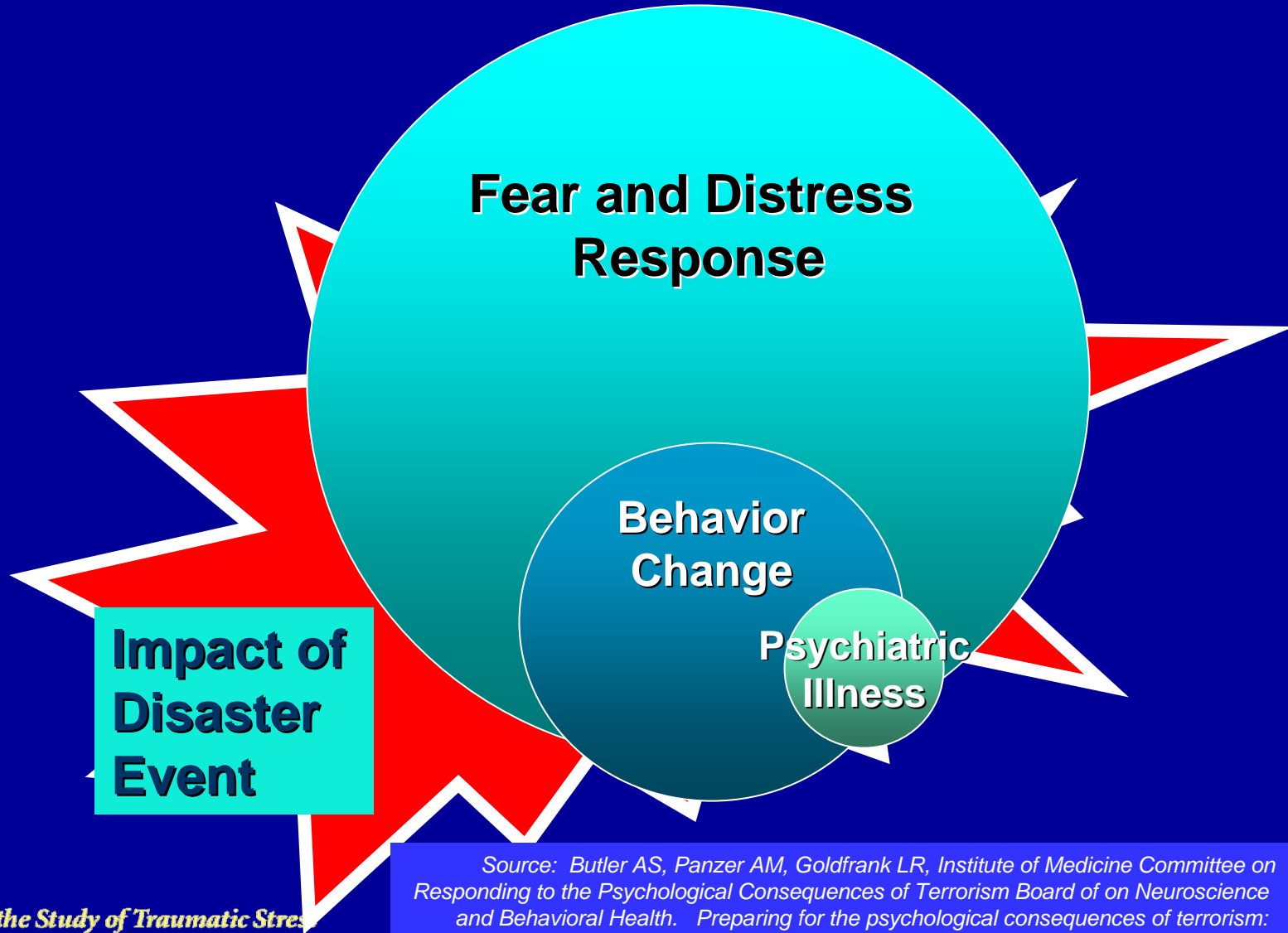


# Readiness for Disaster Behavioral Health Response

Type of Disaster	Level of Preparedness
Natural Disasters	High
Human-Generated Disasters (non-terrorist)	Moderate
Conventional Terrorism	Low
WMD Terrorism/ Pan Flu	Unprepared



# Psychosocial Consequences in Disasters



# Fear and Distress

Individual and Collective...

- Emotional impact
- Cognitive impact
- Physiological impact
- Spiritual impact
- Social impact

# Behavior Change

- Increased smoking
- Increased alcohol use
- Reduced mobility
  - Fear of flying
  - Fear of travel
  - Sticking close to home
- Adverse economic consequences that increase psychological distress

# Model of Economic Decisions & Behaviors

## Psychological & Behavioral

### Mediators (Individual & Aggregate)

Belief in exposure to toxic agent  
Optimism  
Threat/ Safety perception  
Fear of leaving home  
Psychological distance from attack  
Critical event (e.g., news report)  
Distress symptoms

## Attack Characteristics

Weapon type (CBRNE)  
Phase of attack (pre, during, post)  
Target (individual, child, urban, rural)  
Attack pattern (single, repeated, continuous)  
Hoax  
Contamination

Number of casualties

## Economic Decisions & Behaviors

Gasoline purchase  
Work absence (for childcare)  
House purchase  
Medical visits  
Savings  
Insurance  
Investment  
Food avoidance  
Vaccination avoidance  
Travel

Economic Costs

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(Ursano)

# Types of Psychiatric Disorders

- Post Traumatic Stress Disorder (PTSD)
- Acute Stress Disorder (ASD)
- Major Depressive Disorder
- Anxiety
- Complicated grief
- Psychosis
- Bipolar disorder
- Disorders due to medical conditions

# Should We Have A Pre-nup?

- Only if it helps identify what we each bring to the relationship
- The reality is, annulment and divorce is increasingly impossible as a result of government requirement

**I think we are really stuck with each other  
(but let's not act that way)!**

# “Establishing Interdependence”

- The best relationships are based upon the interdependence/integration of individual contributions, celebration of differential contributions, and compensation for the others weaknesses
- Focus on collaboration, not competition
- Reducing inequities in funding and perceived importance

# **“We Must Get/Stay Together For The Sake Of The Children”**

1. Without BH and PH being in a functioning and growing relationship, the public’s health will suffer
2. Together we can prevent and reduce fear, distress, and illness
3. Together we can promote and protect health

# ...The Impact

- The public's health and behavioral health are inextricably linked
- Terrorism causes mental disorders
- Terrorism exacerbates existing mental health problems
- Impaired people do not make good judgments and choices about their health

## ...The Impact

- Terrorism disrupts and compromises the systems upon which people with both health and mental disorders depend
- To the extent that adverse mental and public health sequelae disrupt and destabilize, ***terrorism is successful***

# “Maybe Polygamy Ain’t So Bad!”

This can’t be an exclusive relationship...

- Emergency management
- Schools
- Health care
- Law enforcement
- Others

# **Growing Old Together: 7 Ways to Make the Marriage Work**



# They Are...

1. Public Policy
2. System Development
3. System Integration
4. Individual/Family/Community Preparedness
5. Expand and Apply the Science
6. Become Active in Primary Prevention
7. Find Our Common Ground

# 1. Public Policy

- Educate policy makers and implementers regarding the importance of including mental health in preparedness, response, and recovery
- Educate policy makers and implementers about the interdependent relationship between behavioral health and public health
- Advocate for focus and resources for this topic
- Demand integration of effort *at all levels* of government

## 2. System Development

- Become educated on what behavioral health and public health plans include and do not include
- Assess system readiness to respond to and meet behavioral health needs during and following extreme events
- Insist upon, and assist in, preparedness efforts
- Assure a focus during preparedness, response, and recovery phases

# System Development

- Advocate for human and fiscal resources to get the job done
- Assure that real psychological content is included in drills and exercises
- Continue to evaluate response based on drills, exercises, and actual experience
- Expand behavioral health/public health relationships beyond emergencies and disasters

## 3. System Integration

- Become aware of what is occurring in multiple systems
- Advocate to reduce/eliminate “stove piping”
- Key system integration points
  - Behavioral Health
  - Public Health
  - Health Care
  - Emergency Management
  - Education
  - Law Enforcement
  - Business

## 4. Promote Individual/Family/ Community Preparedness

- Take responsibility for personal and family preparedness
- Factor worker/responder stress into preparedness and response
- Promote neighborhood preparedness
- Use the many resources that have already been developed (Red Cross, FEMA, etc.)
- Learn from each other (this afternoon's presentations)

# 5. Expand and Apply the Science

- Advocate for expanded research in several areas
  - Medical/Public Health/Behavioral Health interaction
  - Risk and protective factors
  - Interventions (individual and collective)
  - Short and long term consequences
  - Special populations
- Advocate for broader methodological acceptance

# Expand and Apply the Science

- Assure that current and emerging research is implemented in practice
- Challenge:
  - Most health & behavioral health providers are not trained in this topic
  - Some providers mistake normal disaster related stress as an exacerbation of one's preexisting mental disorder, jump too fast to a psychiatric dx
  - Providers trained to look for and expect strength, resilience, recovery, and *health* benefit all

# 6. Become Active in Primary Prevention

*A natural for behavioral/public health collaboration...*

- Architecture
- Product design
- Building and community evacuation planning
- Community building/strengthening
- Family strengthening
- Personal and family preparedness
- Health and mental health promotion

## 7. Find Our Common Ground

- Reduce competition and territorial behavior between behavioral health/public health/others (it really *is* a matter of education and political will...not resources)
- To the extent possible, speak with one voice
- Remember that disasters and terrorism cause health and mental disorders
- Promote dialogue and shared goals among consumers/providers/families/policy makers

# Find Our Common Ground

- System integration benefits all (public health, behavioral health, law enforcement, schools, hospitals, etc.), even *without* disasters
- A behavioral/public health systems that function well in an emergency benefits all.
- Social support and cohesion is a psychological protective factor and promotes the public's health.

# Find Our Common Ground

- Disaster preparedness, response, and recovery represents a unique opportunity to reduce stigma and has positive public health impact.
- How we deal with psychosocial consequences of terrorism (including threat) can strengthen or weaken our:
  - Behavioral health
  - The public's health
  - Social systems
  - National security



**Without health there is no happiness..**

**(Thomas Jefferson)**

**Without happiness there can be no hope...**

**Without hope there can be no nation**

**I am confident that, together:**

We will find ways to protect, and preserve the  
public's health

We will find hope through our fear and pain

We will emerge as stronger people...  
and a stronger nation

We will ...in fact...grow old together

