

Mental Health and Nuclear and Radiologic Emergencies

What to expect, surveillance, triage and coordinating care

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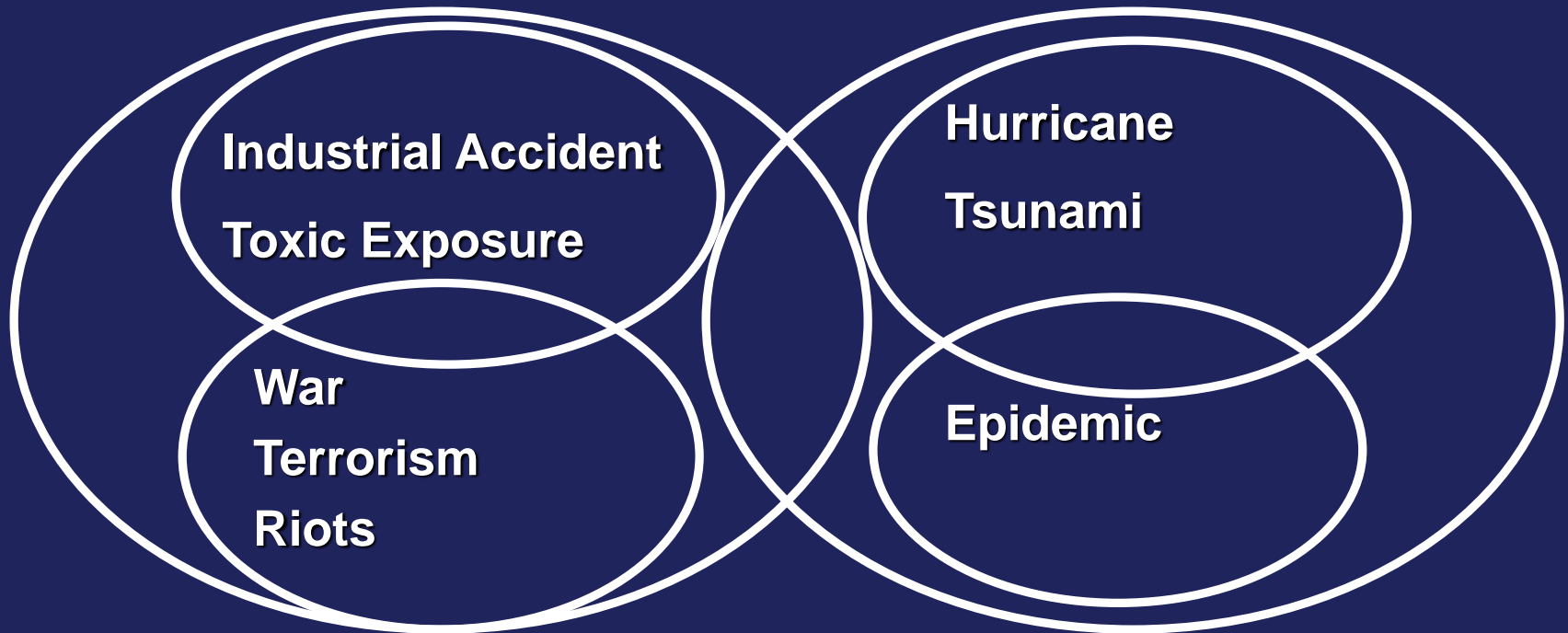
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Disasters and Terrorism

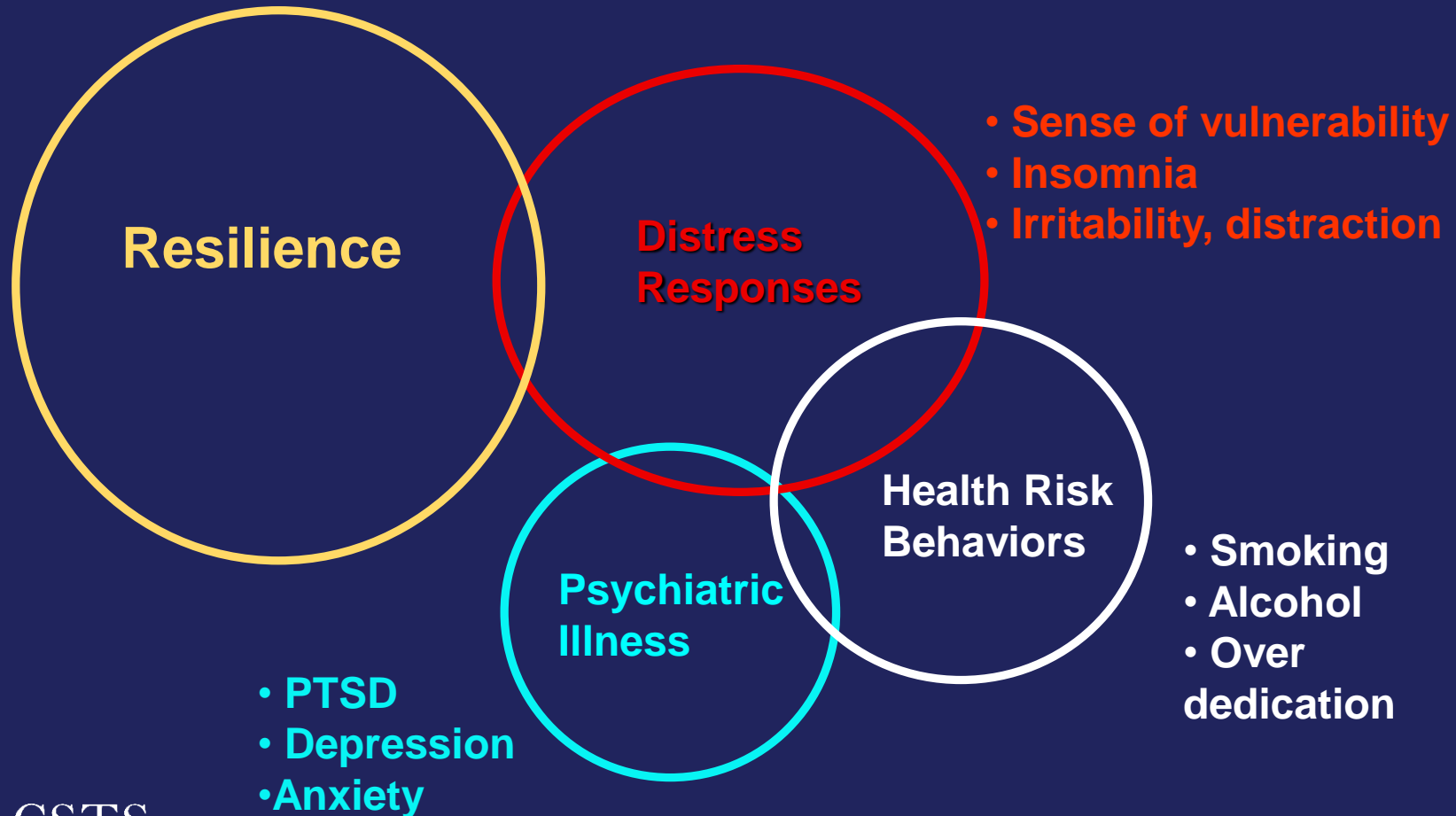
Human Made

Natural



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Mental Health Responses to Trauma, Disasters and Public Health Emergencies



Surveillance for what, when and where

- Yes available screens
- Where and who ?
- Who shows up for care?
- Sustaining responders
- Community sustainment
- Risk Communication/Education/Leadership will relate to behavioral casualties and care seeking
- Families, communities, belief in exposure and “caring” will relate to distress and distress behaviors

Psychiatric Outcomes in Rescue Workers

	ASD	PTSD	DEP.	Alcohol Use Disorder	Any Disorder
• Sioux City*	26%	17%	22%		40.5%
• Oklahoma City**		13%	12%	25%	38%
• Bushfire***		13%	9%		

* Fullerton et al., AJP, 2004 (ASD 1 wk; PTSD, Dep. 13 mos.)

** North et al. 2002 (N=176; 34 mos. Dep. Is approximate) 47% had lifetime alcohol abuse/dependence. 54% with PTSD had another disorder.

*** McFarlane & Papay, 1992 (42 mos.)

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Estimated Mental Health Needs in NY State after Sept 11

Expos Group (pop)	% PTSD	# Cases	% Seek	# Trt
WTC (162,715)	25%	41,562	50 %	20,615
Manhattan (919,000)	10%	91,900	28 %	20,586
All 5 NYC Bur. (6.92 mil)	5%	346,328	28 %	77,577
Surr. 10 cnties(4.8mil)	1%	48,000	28 %	10,752
TOTAL	4.5 %	527,790	24.5%	129,530

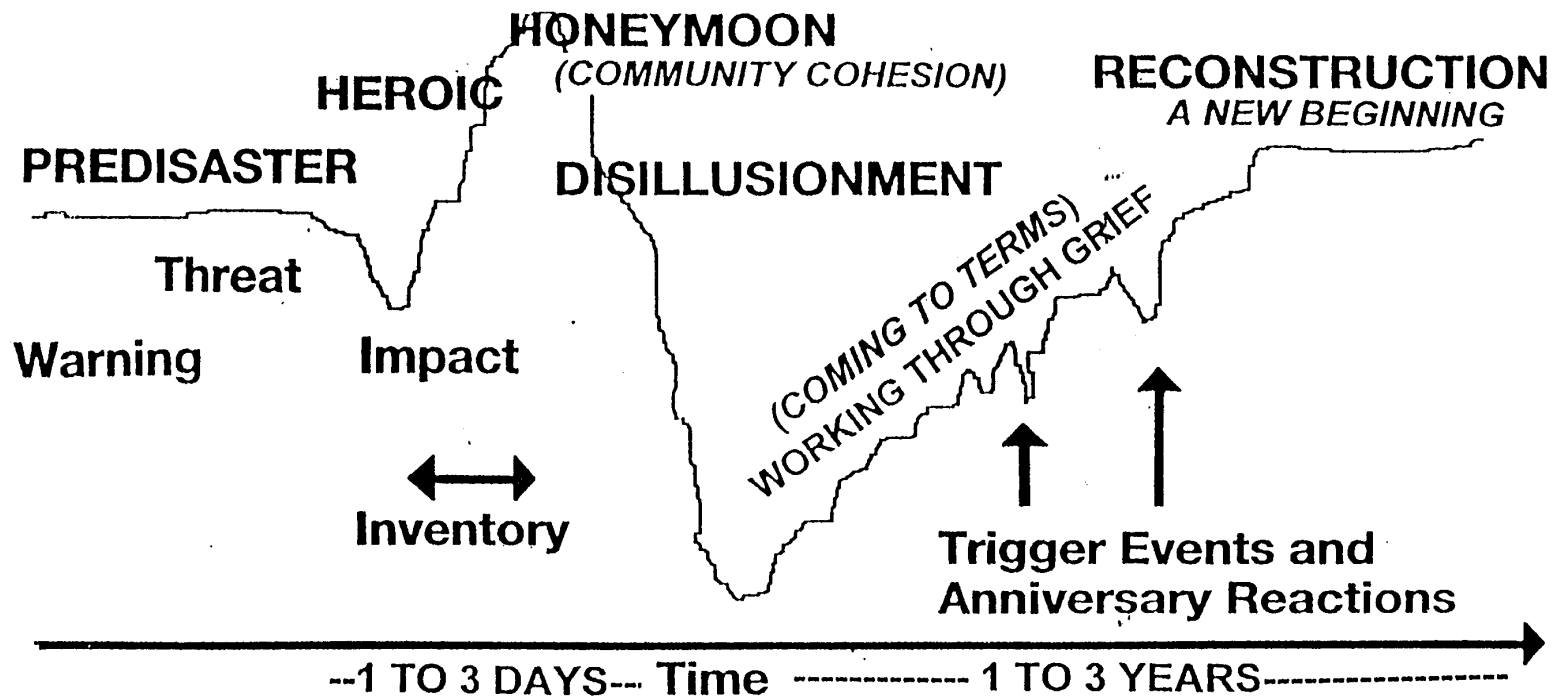
Psychosocial Responses to Trauma and Disaster

- Resilience/altruism
- Horror
- Anger
- NOT Panic
- Fear
- Sleep problems
- Increased Alcohol and Smoking Use
- Grief
- Anger at government
- Blaming
- Scapegoating
- Social isolation
- Demoralization
- Loss of faith in social institutions
- Paranoia

Somatic Symptoms

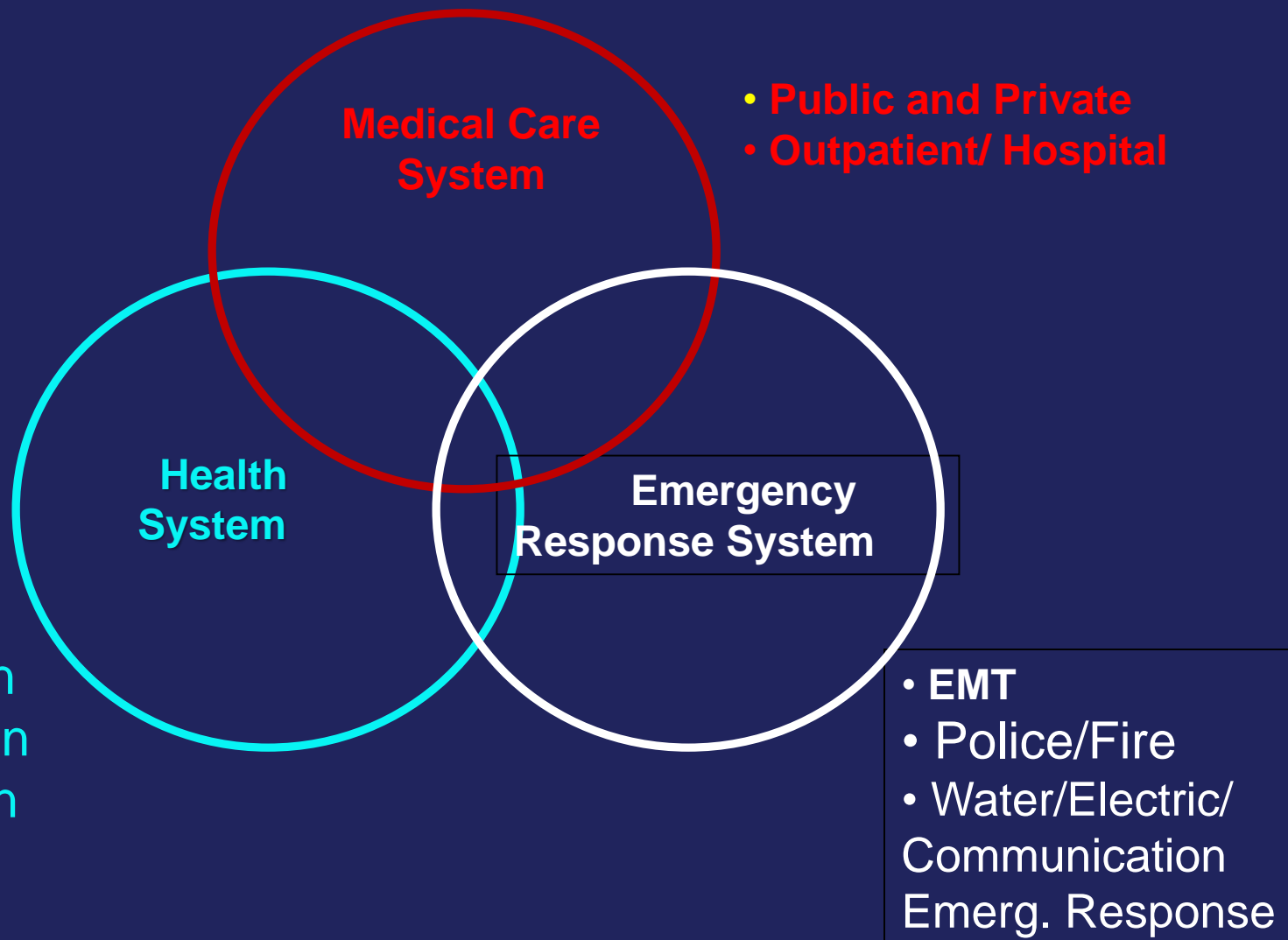
- Frequently increased following all disasters
- Can be an expression of anxiety or depression and leads to health care seeking
- Ionizing Radiation Events -those expecting illness
- MUPS or MIPS

Phases of Disaster



The Public's Health

(the health system of care)



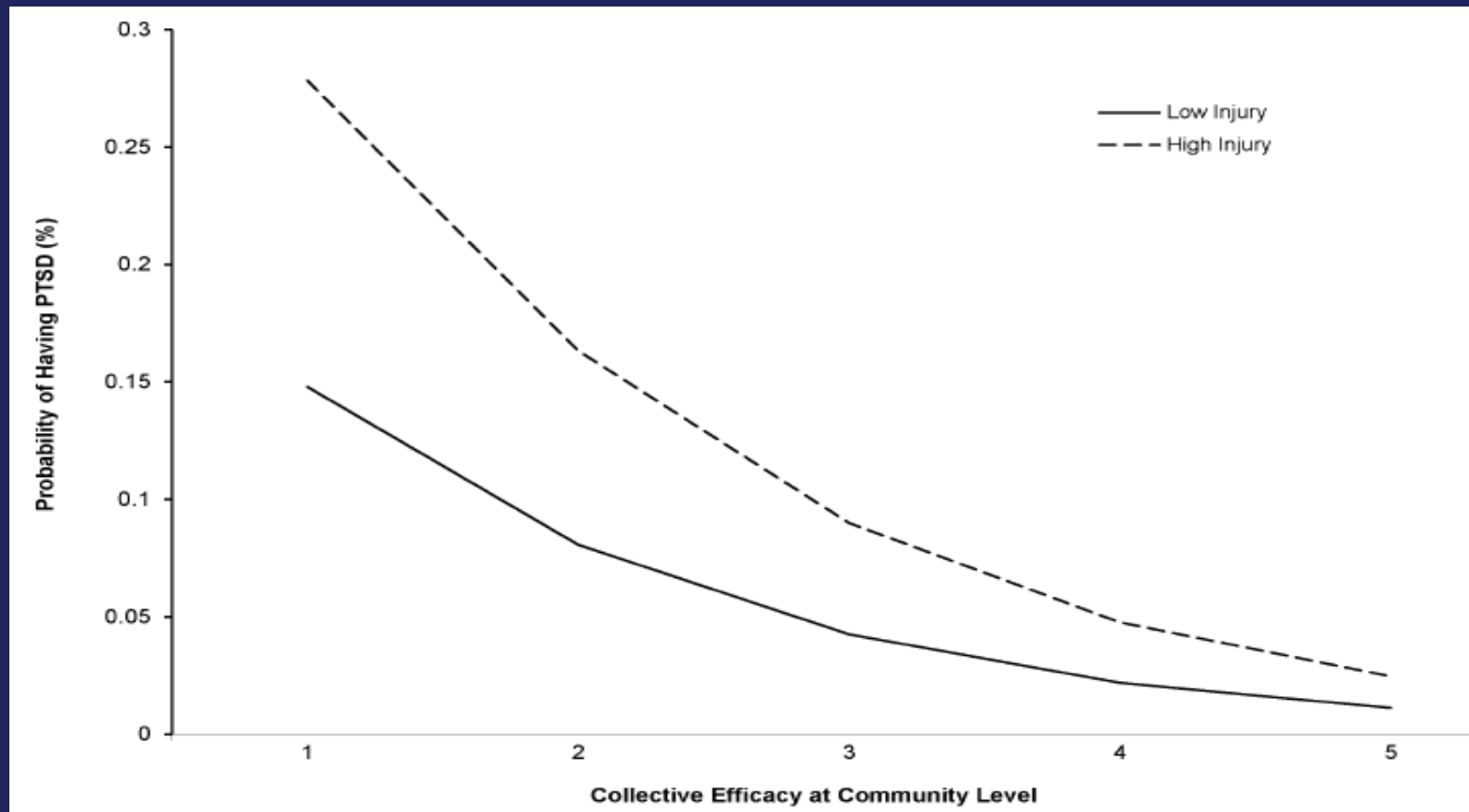
- **Protection**
- **Prevention**
- **Promotion**

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Loss of Access to Routine Medical Care and Home Care

- Hurricane Andrew: 1000 Physician Offices, 4 Mental Health Facilities, 11 pharmacies, 7 Convalescent Homes, 2 Dialysis Units, 38 Assisted-living Facilities
- Home Health Care: Nursing, Oxygen, suction, IV antibiotics, medication, ventilation, chemotherapy
- Therefore, chronic medical conditions worsen and care is sought at already overburdened hospitals

So What else helps? Collective Efficacy & Probability of PTSD



Summary Key Concepts

For enhancing community mental health and for establishing conditions for screening, surveillance and recovery:

- Public Participation Models for establishing policies for screening, surveillance and recovery
- Risk Perception rather than stochastic or deterministic risk
- Acceptability to community may be different from “low” or “practically none”
- Adaptive Capacity – creative capabilities when faced with reduced or limited resources