Addressing Vulnerable Populations' Challenges through System Preparedness

Today's Presenters

- Dr. Adewale Troutman

- Dr. Robert Tabler

- Mr. Patrick Gardner

Vulnerability

Dr. Troutman

Objectives

- Explain the importance of system preparedness prior to an event or incident.

- Discuss the various approaches to gain situational awareness of system readiness and to identify gaps and points of failure in these systems prior to an event or incident.

- Review possible solutions to address gaps in system readiness.

Competencies

Competencies addressed in today's presentation include:

1.1 - Solve problems under emergency conditions.

1.3 - Facilitate collaboration with internal and external emergency response partners.

1.4 - Maintain situational awareness.

Competencies

Competencies addressed in today's presentation include:

3.1 - Contribute expertise to a community Hazard Vulnerability Analysis (HVA).

3.2 - Contribute expertise to the development of emergency plans.

3.3 - Participate in improving the organization's capacities (including, but not limited to programs, plans, policies, laws and workforce training).

Vulnerability

- More than two dozen definitions
- To what?
- Ghettos
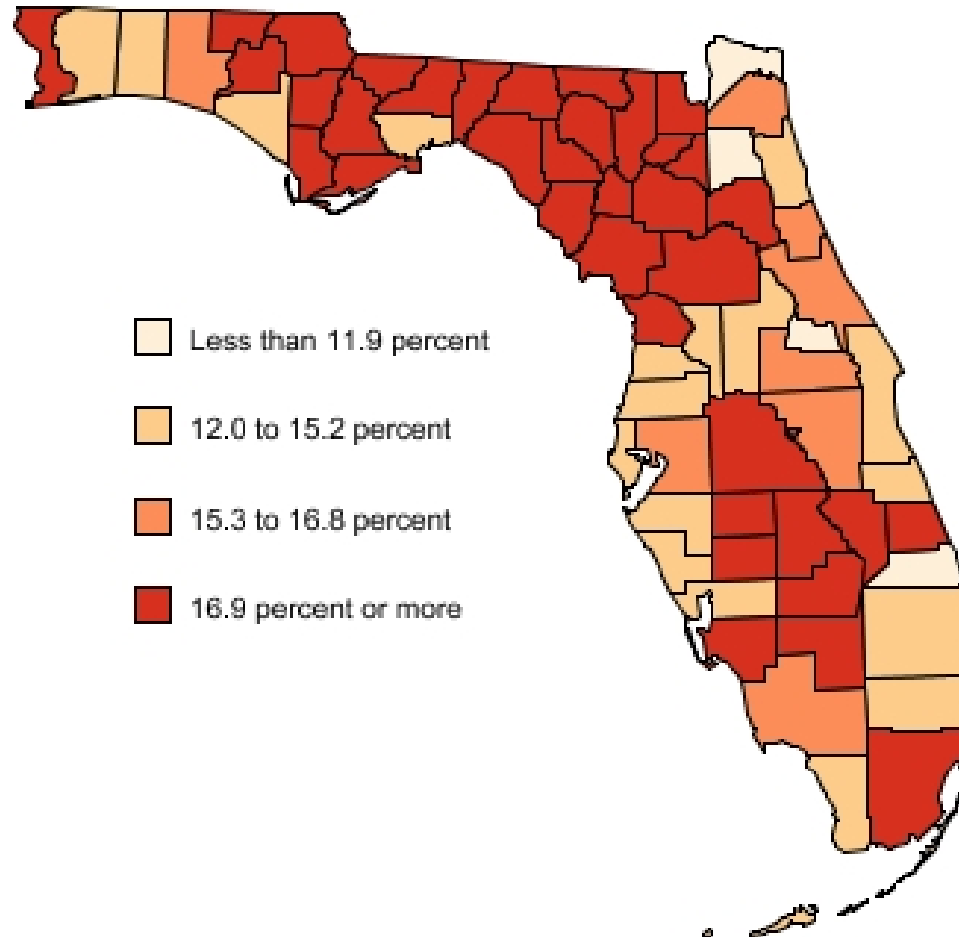- Multiple factors
- Impacts resiliency

Source: http://www.unisdr.org/campaign/resilientcities/

A person's ability to prepare for, respond to, and recover from a disaster is directly related to their vulnerability.

Economics:
Large Number of People in Poverty

Poverty Rates

Less than 11.9 percent

12.0 to 15.2 percent

15.3 to 16.8 percent

16.9 percent or more

Source: 2010 Poverty Rates, U.S. Census

People who are poor may be fully aware of the risks in a pending disaster, but have fewer alternatives to choose from to implement protective actions.

Factors Impacting Vulnerability

- Race and ethnicity
- Class
- Gender
- Age
- Disability
- Health
- Literacy
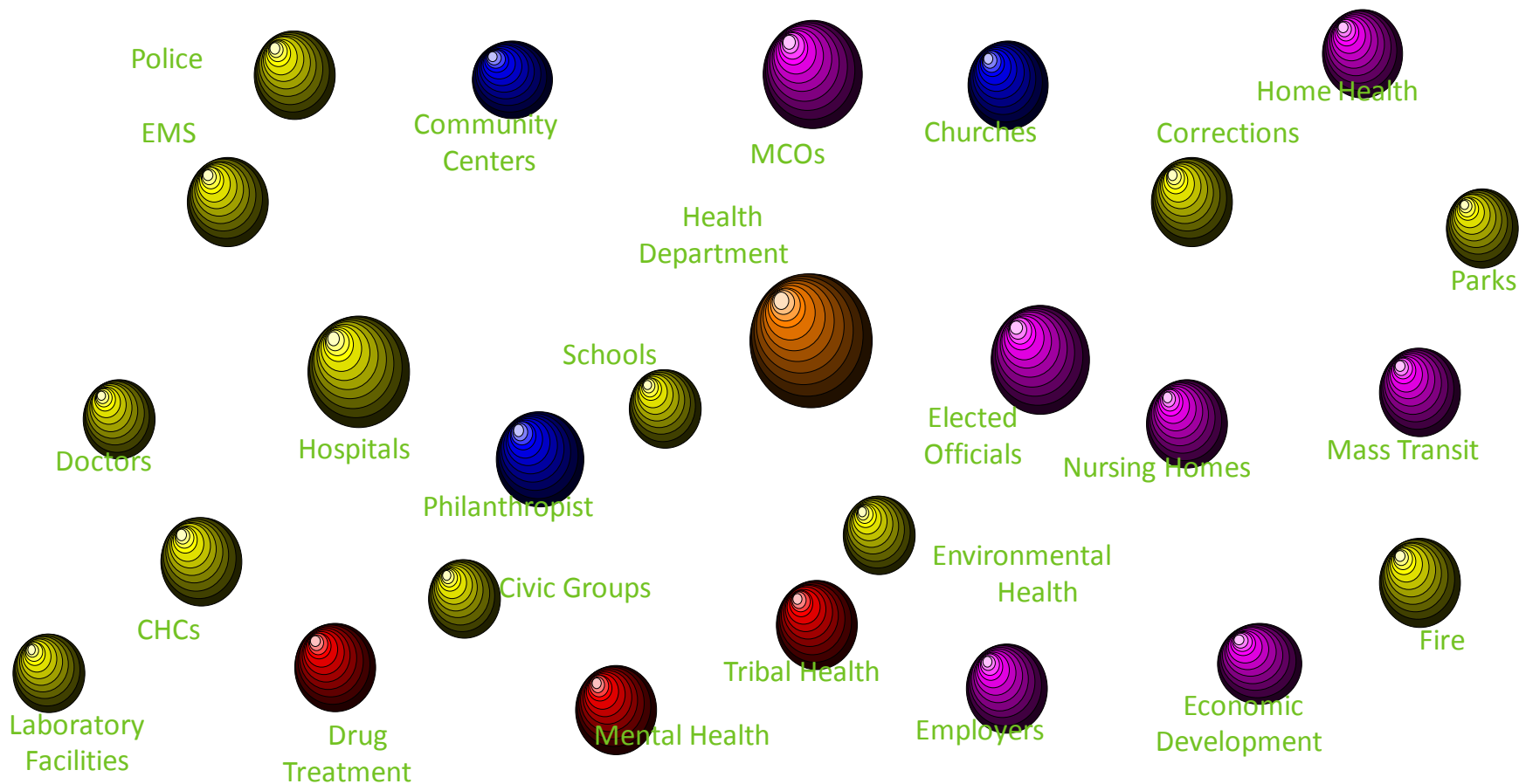- Families and households
- Language

Considerations

- Issues that are present in the community will also be present post-disaster and may be made worse by the disaster (i.e., violence, behavioral health issues, abuse, lack of trust).

- Know the community before the disaster.

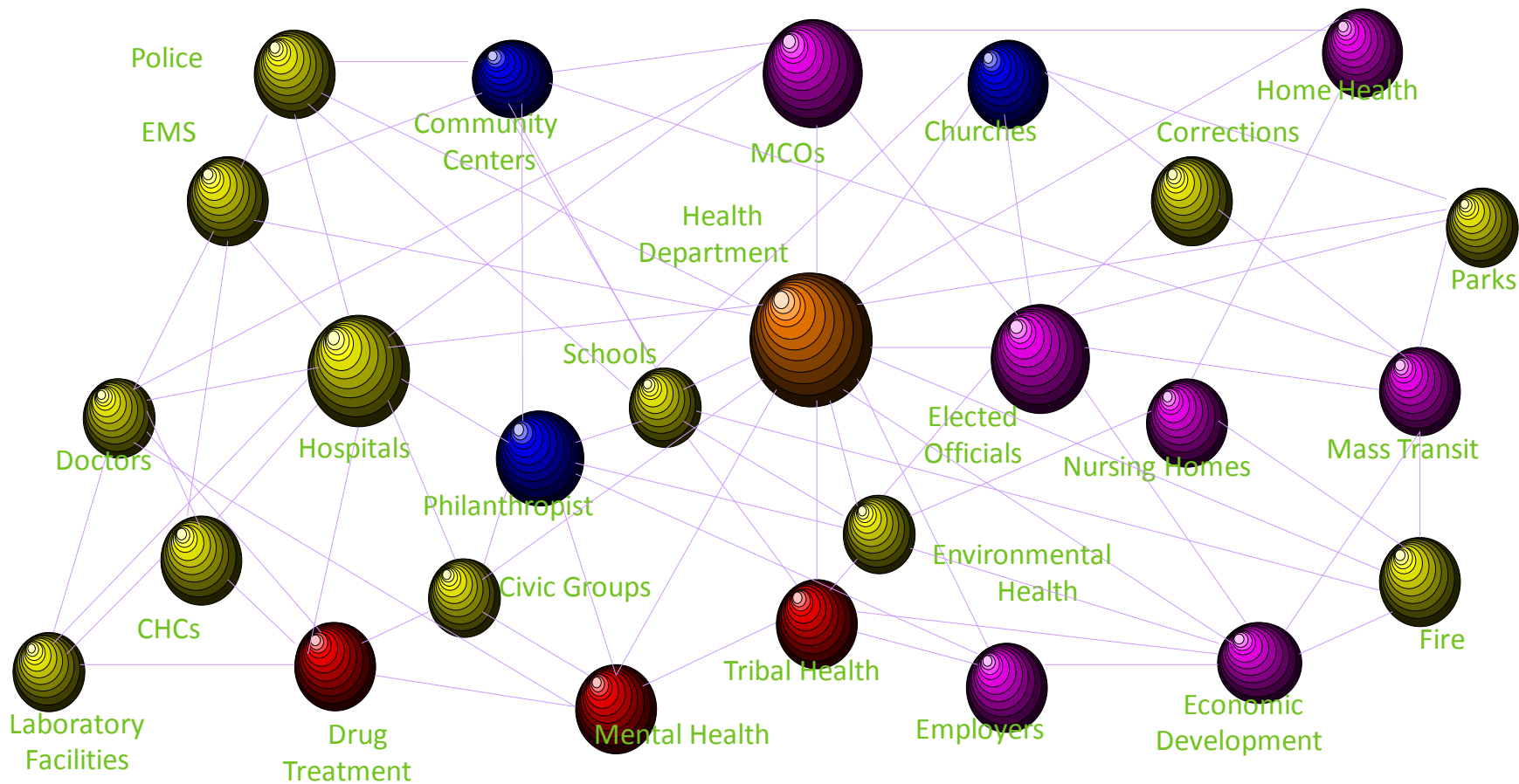- Know the resources in the community before the disaster.

System Assessment

Dr. Tabler

General Systems Theory (GST)

- Individuals, groups, & organizations considered systems in homeostasis.

- Systems – self-regulating systems, self-corrected through feedback from environment

- Homeostatic control mechanism has 3 interdependent components
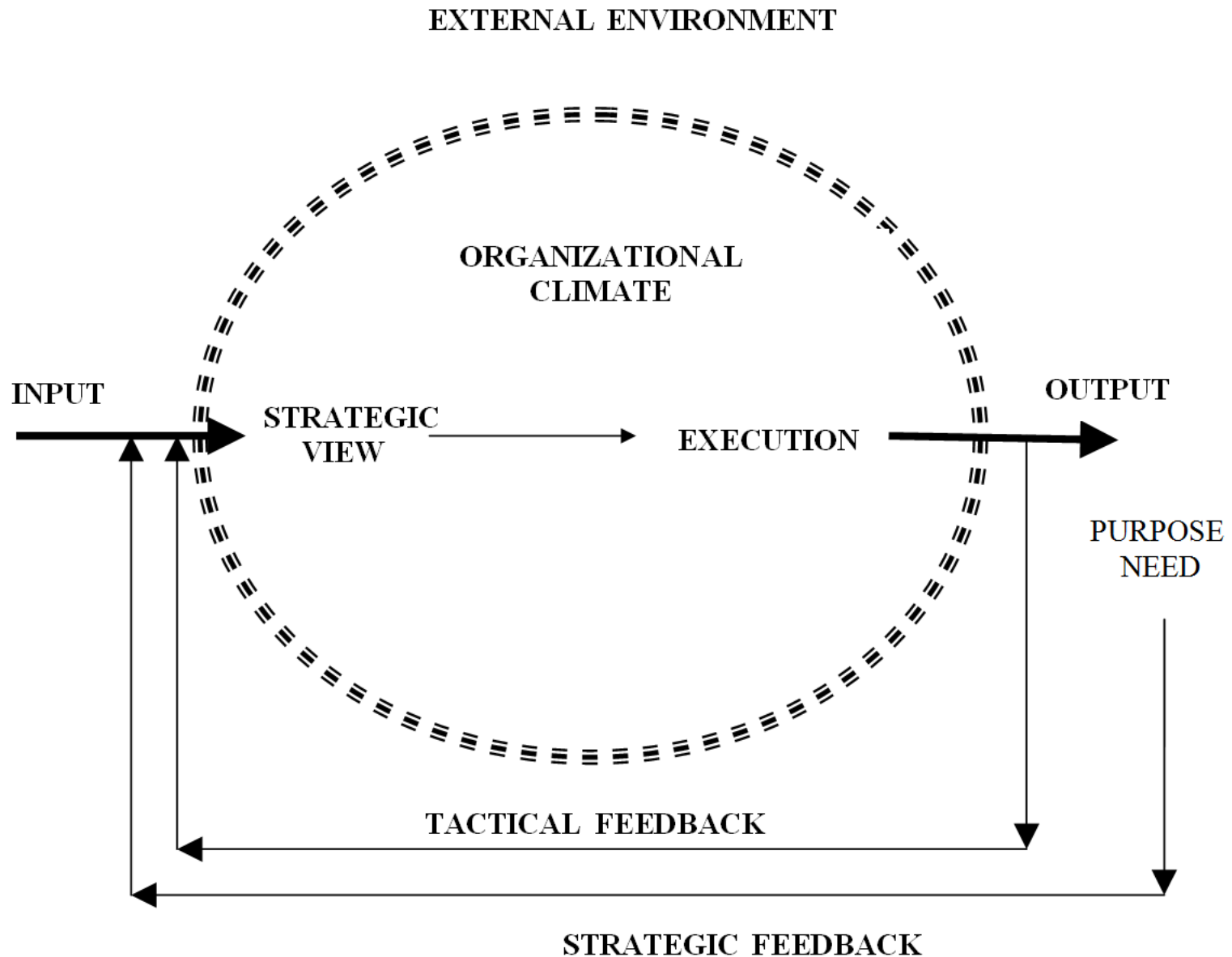
  Receptor → Control Center → Effector

Open Systems Model

- A open system continuously interacts with its environment.

- Organizations are goal-seeking organisms whose structures and systems reach a state of equilibrium between internal climate and environmental forces.

EXTERNAL ENVIRONMENT

ORGANIZATIONAL CLIMATE

INPUT

STRATEGIC VIEW

EXECUTION

OUTPUT

PURPOSE NEED

TACTICAL FEEDBACK

STRATEGIC FEEDBACK

Pre-Impact Assessment

A pre-impact assessment of organizations and interdependencies of the system they operate in is necessary to gain situational awareness of gaps and failure points, both at the organizational and system levels.

Points of Failure

After identifying the *points of failure*, mitigation efforts can insure that the mission critical resources needed by the system are available post-impact, so organizations can continue to deliver services to vulnerable populations.

Pilot Survey

The Hillsborough County Vulnerable Population Task Force conducted a pilot survey, "Prepare, Respond, & Recover," of the agencies serving vulnerable populations.

System Accountability

Because of our piecemeal system of delivering social, psychological, and medical services, the governments of many large communities do not have a clear accountability of all the players in the system and their resources.

System Accountability

A major part of this issue is the recent proliferation of Faith-Based Organizations (FBOs), Community-Based Organizations (CBOs), Not-for-Profits (NFPs) and Non-Government Organizations (NGOs), who obtain their funding through a vast array of individual and group philanthropy, as well as grants from city, county, state, federal, and international governments.

System Effectiveness

It is difficult to assess the effectiveness of a system's ability to function after a disaster without a baseline of how that system functions day-to-day.

Vulnerable Groups Identified

- Health
- Economic
- Social
- Linguistic

Service Providers Identified

Identified agencies that provide services to vulnerable populations from lists kept by:

- Tampa Bay United Way

- Hillsborough County Children's Board

- Crisis Center of Tampa Bay

- Search on Goggle

Survey

The survey was reviewed multiple times by members of the VPTF until an assessment instrument of 40 questions was developed.

Data collected focused on:

- Organizational emergency operation protocols
- Continuity of operations plan and exercises of that plan
- Disaster preparation by organization and employees

Online Survey

The survey was posted online with Survey Monkey.

Of the 62 organizations contacted,
31 (50%) responded to the on-line survey.

Survey Results

Organizational protocol of operating in an emergency

(N = 31)

29 (93.6%) - Yes

2 (06.4%) - No

Survey Results

Written Continuity of Operations Plan
(N = 31)

19 (61.3%) - Yes

10 (32.3%) - No

2 (06.4%) - Do Not Know

Survey Results

Last time Continuity of Operations Plan was revisited (N=18)

6 (33.3%) – 1 to 6 months

5 (27.8%) - 6 months to 1 year

7 (38.9%) - 1 to 3 years

Survey Results

Last time Continuity of Operations Plan was exercised
(N=17)

1 (05.9%) – within last month

1 (05.9%) – 1 to 6 months

2 (11.8%) – 6 months to 1 year

6 (35.3%) – 1 to 3 years

7 (41.2%) – over 3 years

Survey Results

Organization conducts disaster drills (N=30)

9 (30.0%) – Yes

20 (66.7%) – No

1 (03.3%) – Do Not Know

Survey Results

Facility is in an evacuation zone
(N=27)

8 (29.6%) – Yes

11 (40.7%) – No

8 (29.6%) – Do Not Know

Survey Results

Hurricane winds that facility can handle (N=27)

1 (03.7%) – Tropical Storm (39-73 mph)
1 (03.7%) – Category 1 (74-95 mph)
3 (11.1%) – Category 2 (96-110 mph)
1 (03.7%) – Category 3 (111-129 mph)
2 (07.4%) – Category 4 (130-156 mph)
1 (03.7%) – Category 5 (157+ mph)
18 (66.7%) – Do Not Know

Table 1: Employee Questions Asked

Question	Yes	No	Don't Know
Know Role*	18 (66.7%)	10 (37.0%)	2 (07.4%)
Cross Trained*	15 (55.6%)	11 (40.7%)	1 (03.7%)
Family Plan Required*	3 (11.1%)	20 (74.1%)	4 (14.8%)
Director Family Plan**	17 (65.4%)	9 (34.6%)	

*N=27, **N=26

Other Data Collected

- What products are required for your organization to continue providing core services?

- What is the maximum number of people your organization has the capacity to serve?

- What organizations send you clients or referrals?

- What organizations must you interact with in order to provide services?

- What organizations do you release your clients to after they receive your services?

Preparedness and Planning?

Components of a Gap Analysis

NEEDS − (**SYSTEM/ORG. CAPABILITIES / CAPACITY** / **AVAILABLE RESOURCES**) = **GAPS**

Vulnerabilities + Situation(s)

Ongoing Partner / System Resources + Augmented Resources

Pre-scripted Action Request Forms for resources
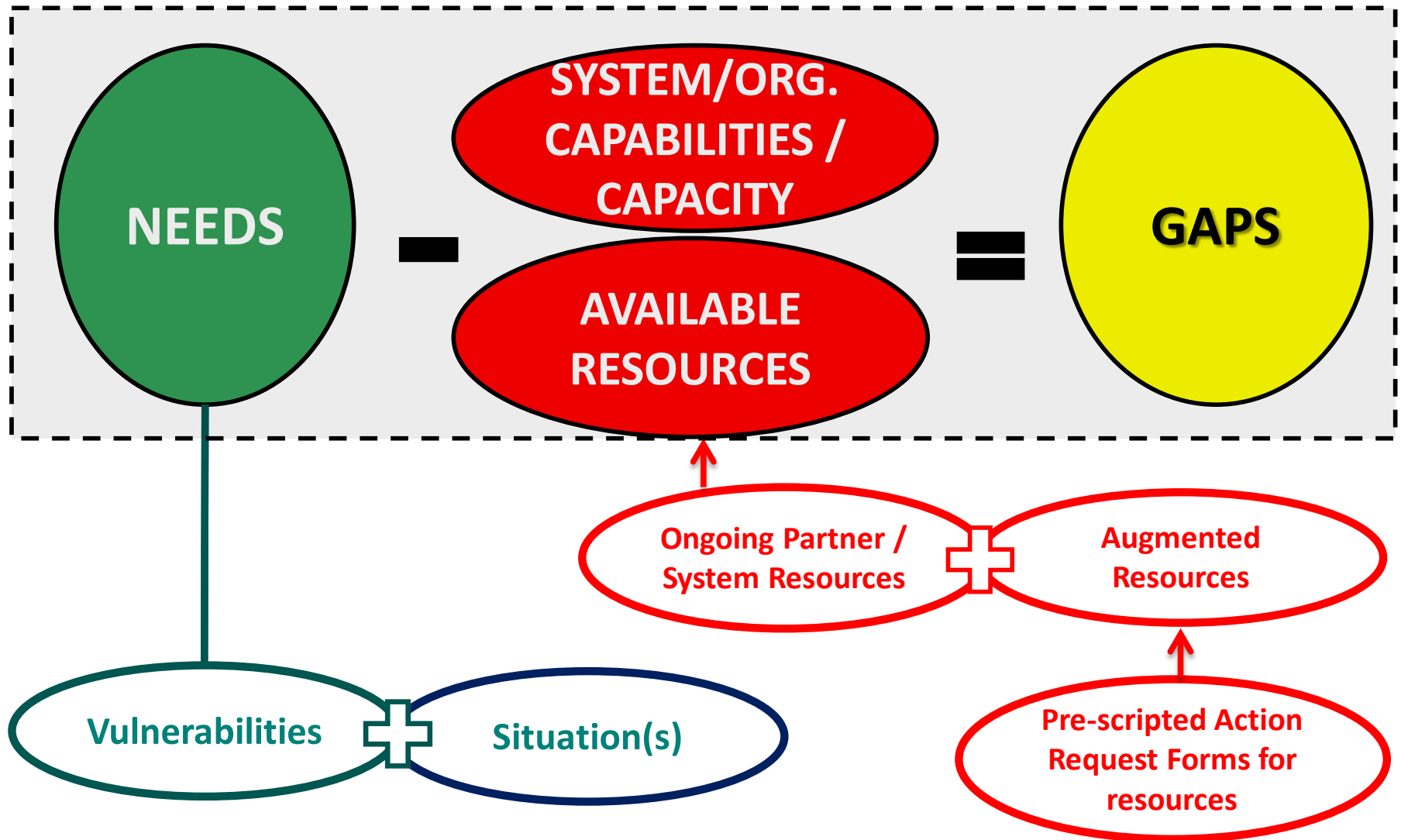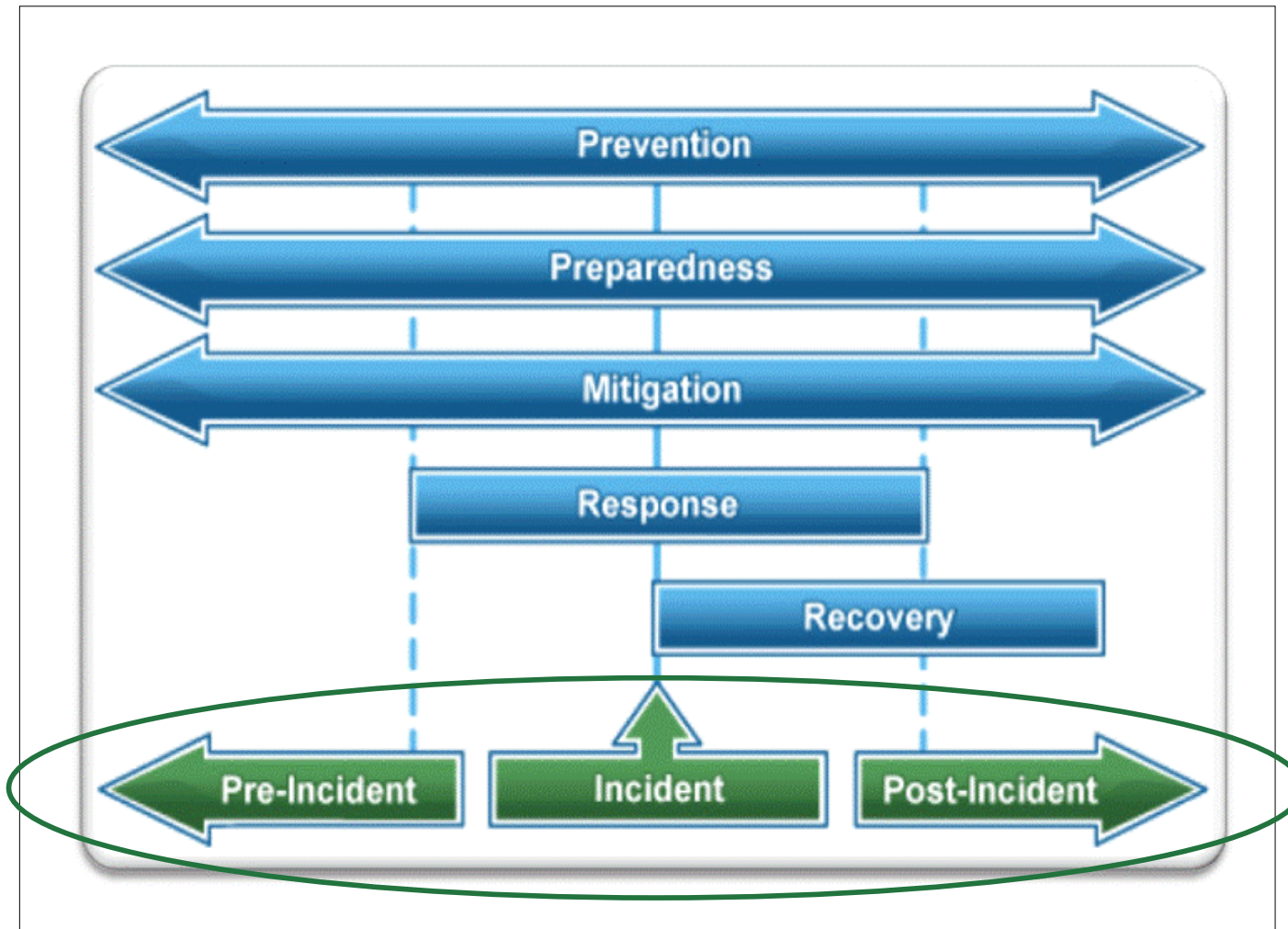
Emergency Management Functions

Vulnerable Populations

NONE

Slight

Non-Existent

On the Spot

Longer

Preparedness

- Use existing and new data for vulnerability assessments to support planning.

- Explicitly plan for high-risk groups.

- Think systems.
  Example: Access to healthcare = availability (services & openings) + proximity + transportation + economic ability (free or payment / insurance).

Contingency Planning

- 'What if…'

- The time to brainstorm and contingency plan is before the event or incident, not during.

- Have a plan a, b, c, and d.

- Script the response to take less time executing it.

Source:http://apyxx.com/new-orleans-disaster-recovery-planning/

Prioritization

- Life saving
- Life sustaining
- Infrastructure
- Normalization

Source: www.dobbins.afrc.af.mil

Source: http://www.theguardian.com/world/picture/2010/aug/21/pakistan-flood-aid

COntinuity of OPerations: COOP Sample Format

- Critical Function

- FTEs

- Position titles

- General educational background, knowledge, and certifications required

- Specific program training, experience, and certifications preferred

COOP, continued

- Detailed explanation of tasks assigned to this position

- Applicable statutory, regulatory, or program procedure references

- Information system access required for this task

- Third party contacts (if applicable)

Tactical Planning

- Assumptions

- Steps to improve situational awareness

- Level of intervention:
  Minimal, moderate, maximum

Source: www.getintoflying.co.uk

Components

- Mission

- Mission duration

- Concept of operations

Source: www.iro-dogs.org

Tactical Planning Components (continued)

- Area(s) of operation

- Muster / staging point location

- Staffing (including table of organization)

- Shifts

- Use of volunteers

- Planning support

- Logistics (including transportation, food, water, supplies, equipment, and lodging)

- Demobilization

Red Team

- Take the plan apart and 'defeat' it.
- Find the weaknesses.
- The Red Team is not your nemesis.

Source: The Natural Hazards Observer

Plan Review and Comment

- Execution Critical

- Substantial

- Supportive

- Administrative

Source: 36readyblog.com

Planning Axioms

- Planning is a team activity.

- Are you solving the problem right or solving the right problem?

- Plans are written on paper, not etched in stone.

- A good plan now is better than a perfect plan after you need it.

- Plans should be part of the solution, not part of the problem.

Planning Axioms (continued)

- Plan for single points of failure.

- Make your plans scalable.

- Reduce cognitive load where possible.

- Consider unintended consequences to the plan – today's solutions can create tomorrow's problems.

The After Action Process: Types of Lessons

- Learned

- Observed

- Lost

Source: blog.womeninconsulting.org

In conclusion…

Thank you for attending this webinar!

http://health.usf.edu/publichealth/clphp

University of South Florida College of Public Health
our practice is our passion.

USF
HEALTH