PUBLIC HEALTH MADISON & DANE COUNTY
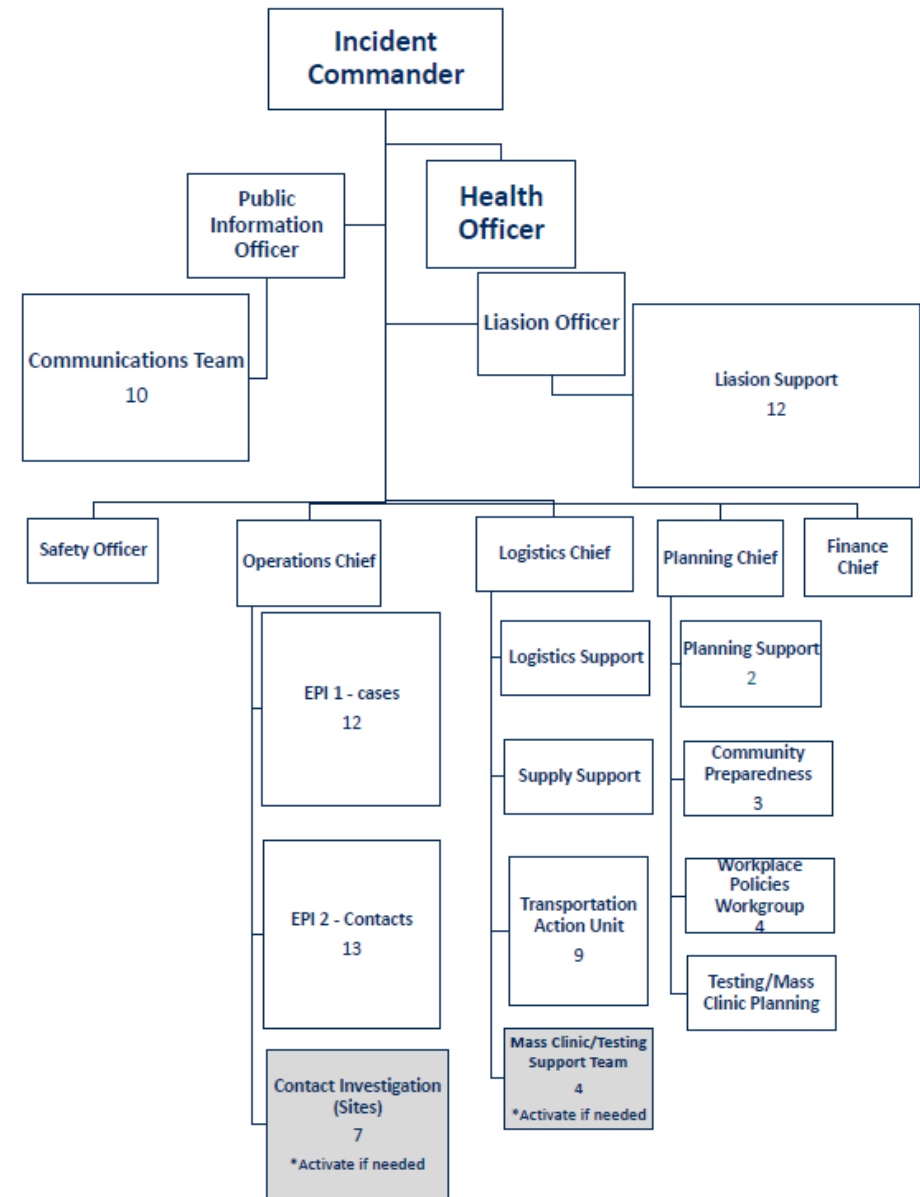
CORONAVIRUS (COVID-19) RESPONSE

JANEL HEINRICH | DIRECTOR
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Public Health
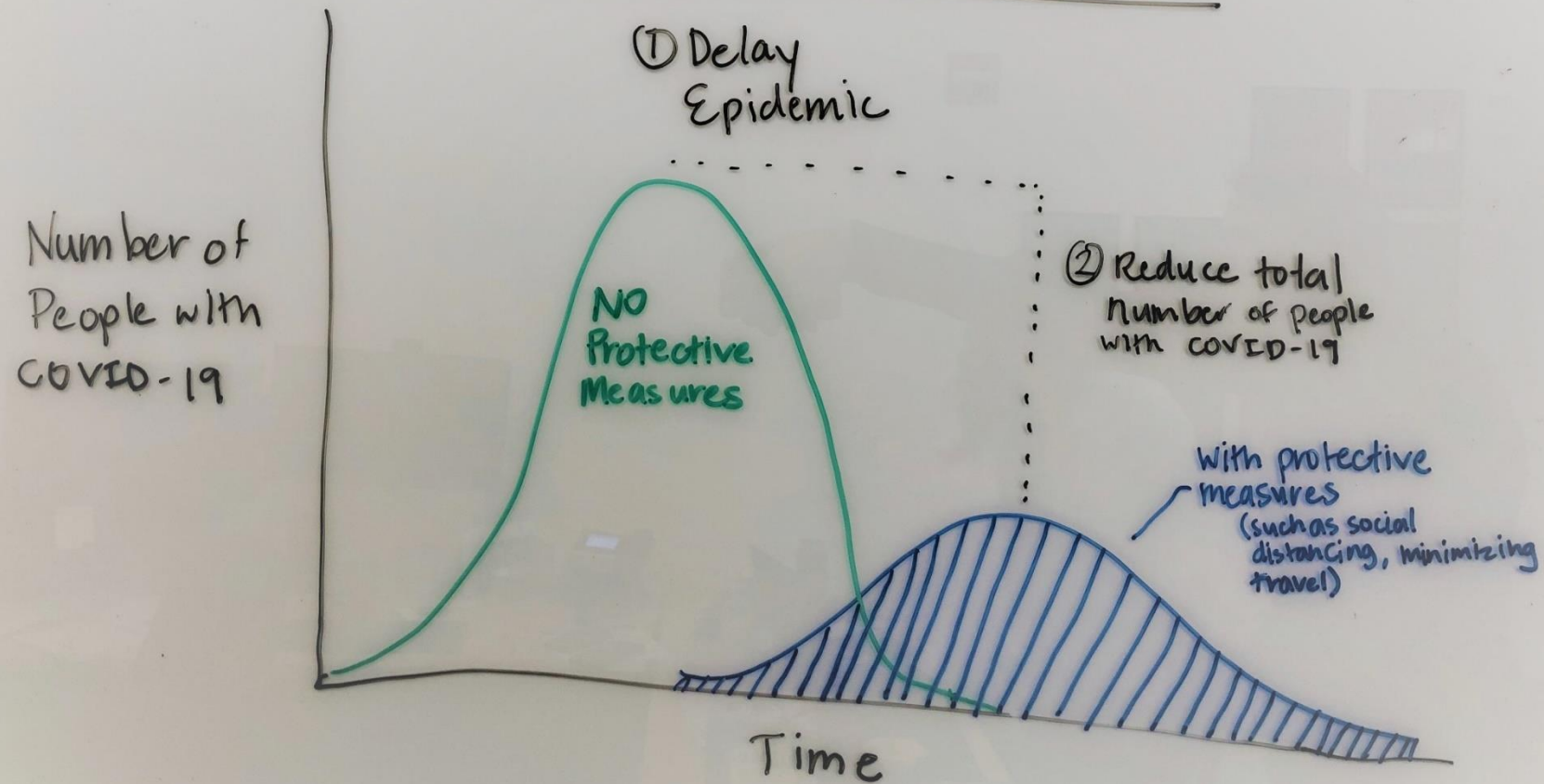MADISON & DANE COUNTY

OUR TEAM

About 90 staff members have been activated

FLATTENING THE CURVE

Our goal is to delay the epidemic and reduce the total number of people with COVID-19.

Monitoring Travelers

Contact Monitoring

WHAT PUBLIC HEALTH IS DOING
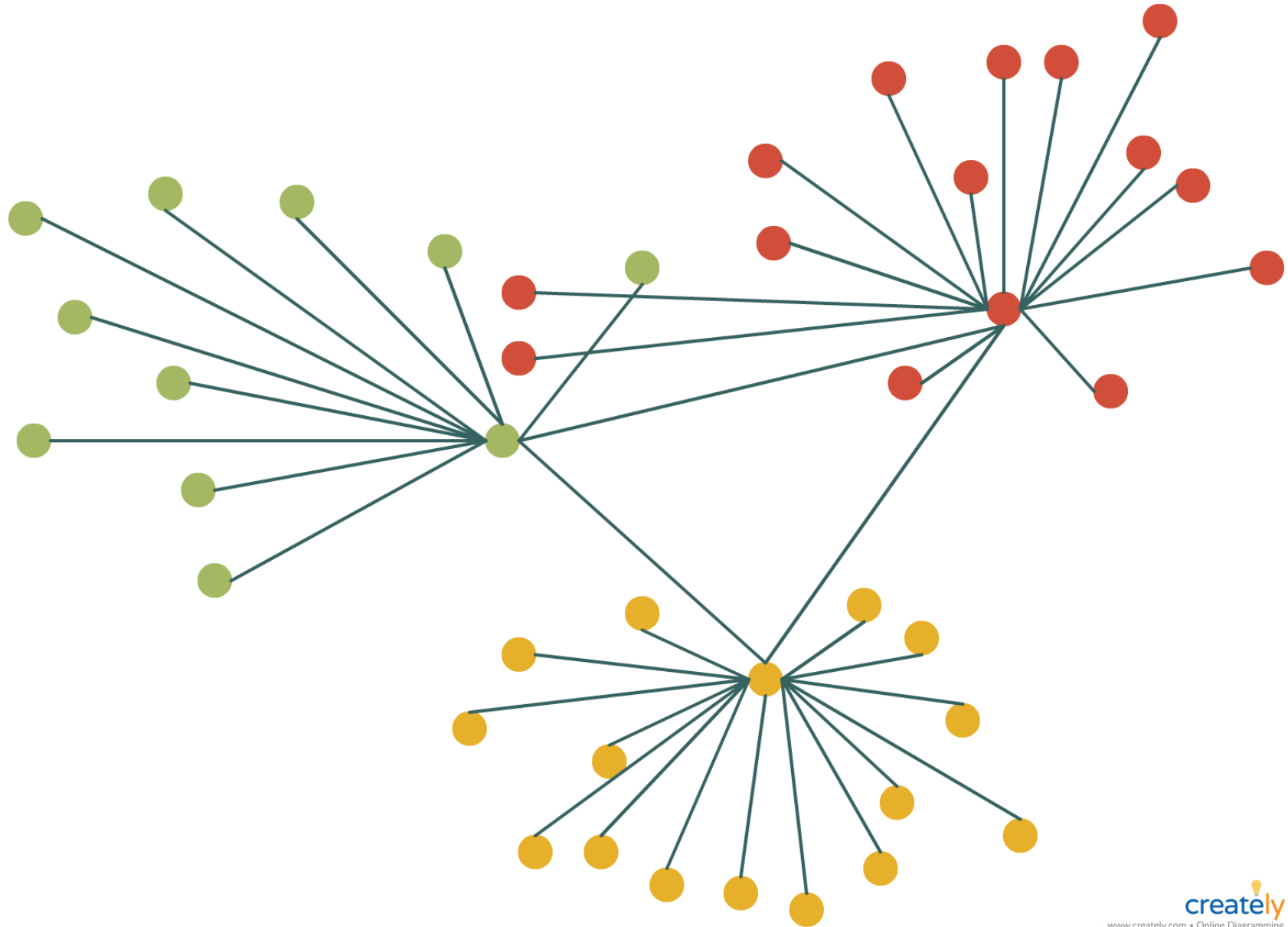
WHAT PUBLIC HEALTH IS DOING

Helping People Prepare

COMMUNITY LIAISONS & OUTREACH

City/County Planning Team/EOC

Schools

EMS, Airport, Public Safety

Legal

Food Security

Healthcare

Housing

Faith Community

Aging Population

Business

Community Centers & Neighborhood Associations

Community Based Nonprofits & Planning Councils

POPULATION-BASED MEASURES

Close schools

Limit gatherings to under 50 people

Provide technical assistance to businesses and entities affected

COMMUNICATIONS

News releases

Press conferences

Website

Fact sheets and other resources

Blog posts

Public info line and inbox

Direct emails to partners

Social media

Answering press calls

REFERENCES

Public Health Supervisor (and current ICS operations Chief) Kat Grande and colleagues:

Social Network Diagramming as an Applied Tool for Public Health: Lessons Learned From an HCV Cluster

Katarina M. Grande, MPH
Marisa Stanley, MPH
Carrie Redo, RN, BSN
Amy Wergin, RN, BSN
Sheila Guilfoyle, BA
Mari Gasiorowicz, MA

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Investigations of infectious disease clusters and response and control efforts can rapidly consume health department resources. Tools and strategies that can effectively focus interventions are needed. One example is social network diagramming and analysis, which was successfully used to continuously guide follow-up in a large HCV cluster in a rural Wisconsin county from 2010 to 2012.

In outbreaks and clusters of infectious disease, social network analysis adds a layer to the traditional epidemiological approach that describes the course of an outbreak in terms of individual-level data. Incorporation of network properties illustrates underlying transmission dynamics based on social contacts, which can further define one's "risk space."[1-3] The term "social network" refers to connections or relationships among individuals. The type of relationship depends on what the network is being used to examine, but the network can include friendships, sexual relationships, or

Objectives. We present an applied example of social network diagramming from 2010 to 2012 that was used to guide follow-up in a large HCV cluster in rural Wisconsin.

Methods. In addition to collecting standard individual-level attributes, we also obtained partner-level information. Both sets of data were input into a network diagramming program to create a series of diagrams that emphasized variables, such as risk factors, key location in the network, and number of partners.

Results. The visualization and cluster analysis guided testing and intervention priorities, were useful in sharing de-identified information about the cluster between health departments and community organizations and illustrated the key role young females played in holding the cluster together.

Conclusions. Social network diagramming should be considered a practical and important public health tool for use in cluster management. (*Am J Public Health.* 2015;105:1611–1616. doi:10.2105/AJPH.2014.302193)

using shapes connected by lines. Visualizing the network in real time can help public health practitioners quickly identify individuals for follow-up, individuals who are critical in the spread of the infection, or individuals at high risk of becoming infected.[10] This practical approach, recently described by Devakumar

in women—from 30% of all reported cases to 40% across the same time period (unpublished state surveillance data analyzed by authors; Wisconsin Department of Health Services, Division of Public Health, Hepatitis C Program's National Electronic Disease Surveillance System-compliant database). Manitowoc County (pop-