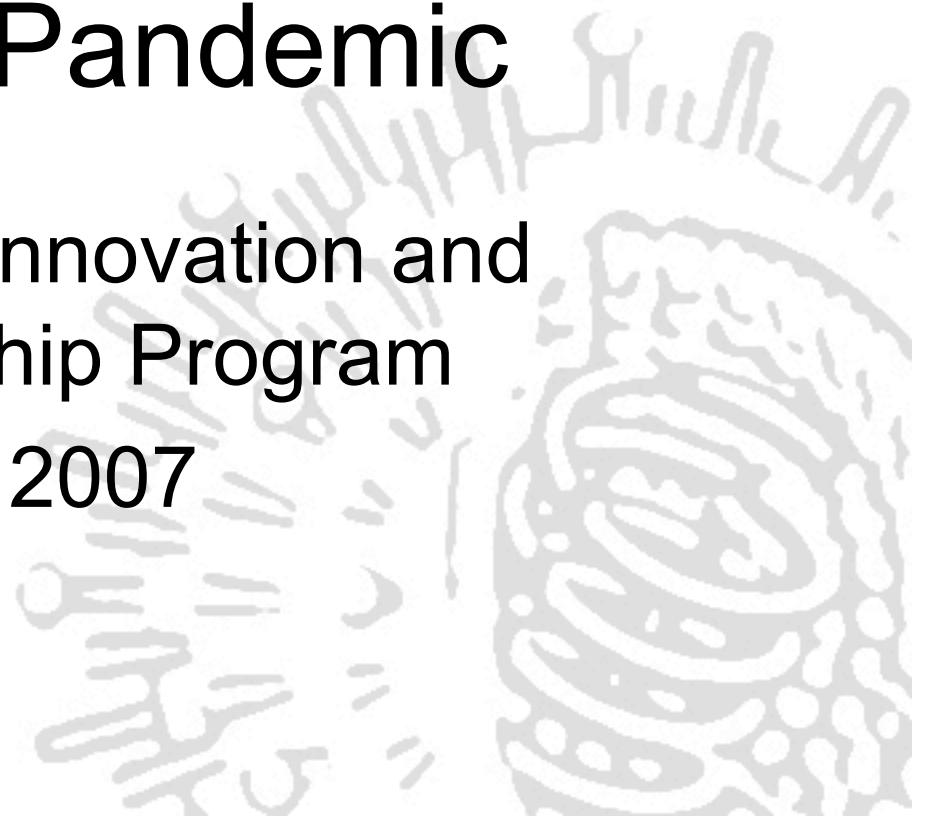


Innovations to Save Lives in the Next Pandemic

Stanford Social Innovation and
Entrepreneurship Program

June 7, 2007

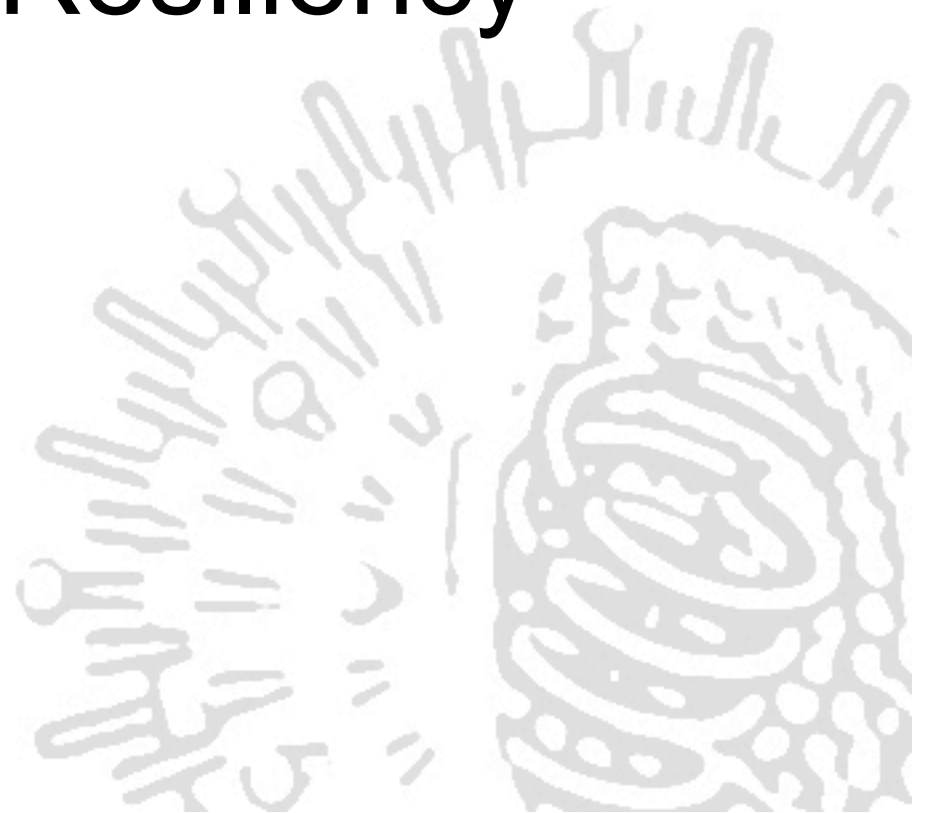


Three Innovations

1. Plan for Community Resiliency
2. Pandemic Hotline
3. Pandemic Homepage

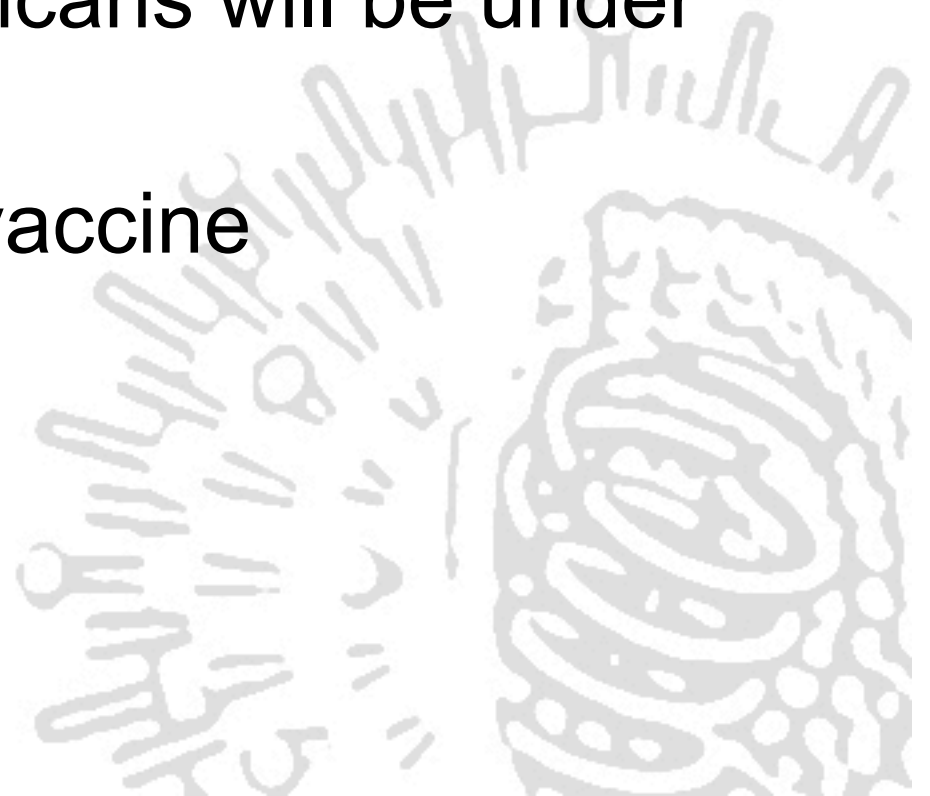


Community Resiliency



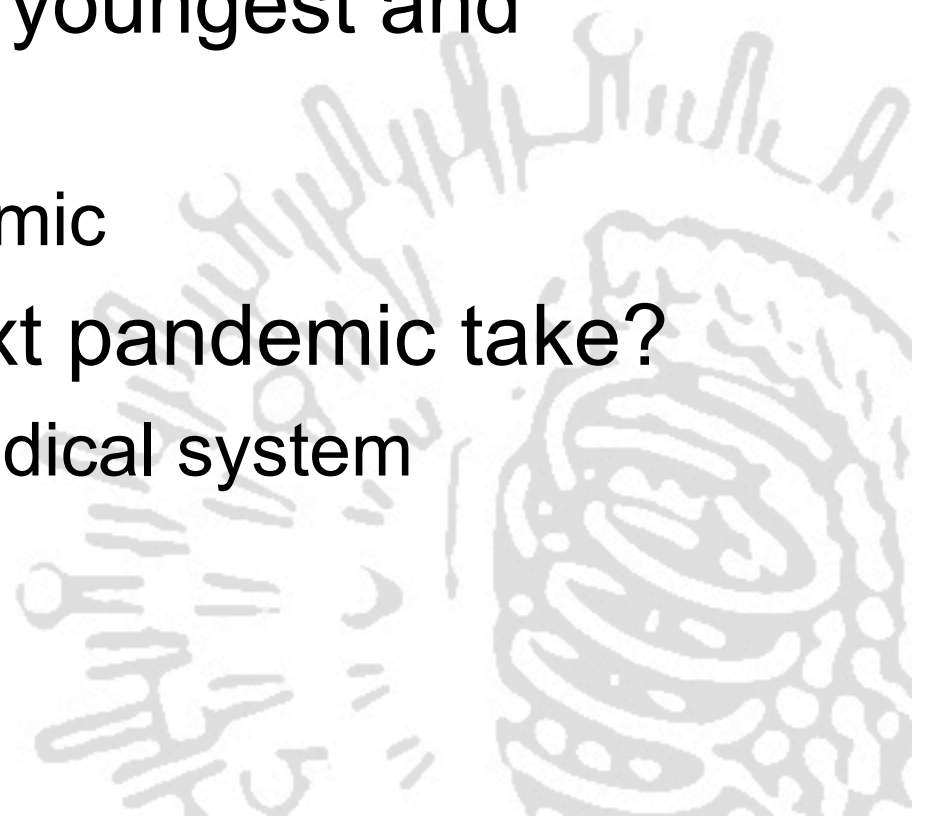
The Reality

- A pandemic is inevitable
- In 2007, we are no safer than in 1918
- Vast majority of Americans will be under prepared
- We cannot rely on a vaccine



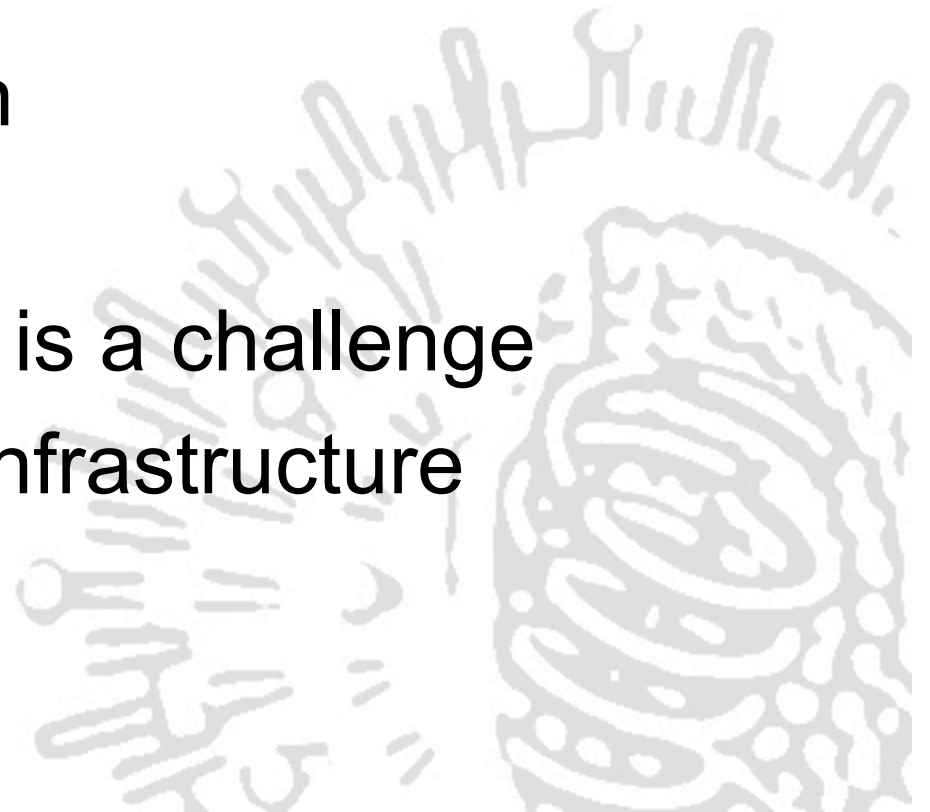
How Will the Pandemic Affect You?

- Vulnerable populations may suffer
 - Similar to Hurricane Katrina
- Pandemic may target youngest and healthiest
 - Similar to 1918 pandemic
- What form will the next pandemic take?
 - Cannot depend on medical system



Problem

- Tension in a pandemic between keeping people connected and physically separated
- Self-imposed isolation
- Hysteria and chaos
- Community resiliency is a challenge
- Need for community infrastructure



Existing Groundwork in California

- Health Framework for California Schools
- California Codes
- Schools



Opportunities for Innovation

- Build a community infrastructure
 - Community networks
 - Community coordinators
 - Reaches out to vulnerable populations
- Diffusion of responsibility
 - Mobilize individuals
 - Foster community resilience
- Organize communities through public schools



Innovation Overview

- Two main components
 - Curriculum for public schools
 - Pandemic preparedness
 - Community programming
 - Community Resiliency Plan
 - Fosters and mobilizes support networks



Figure 1: How the Curriculum Works

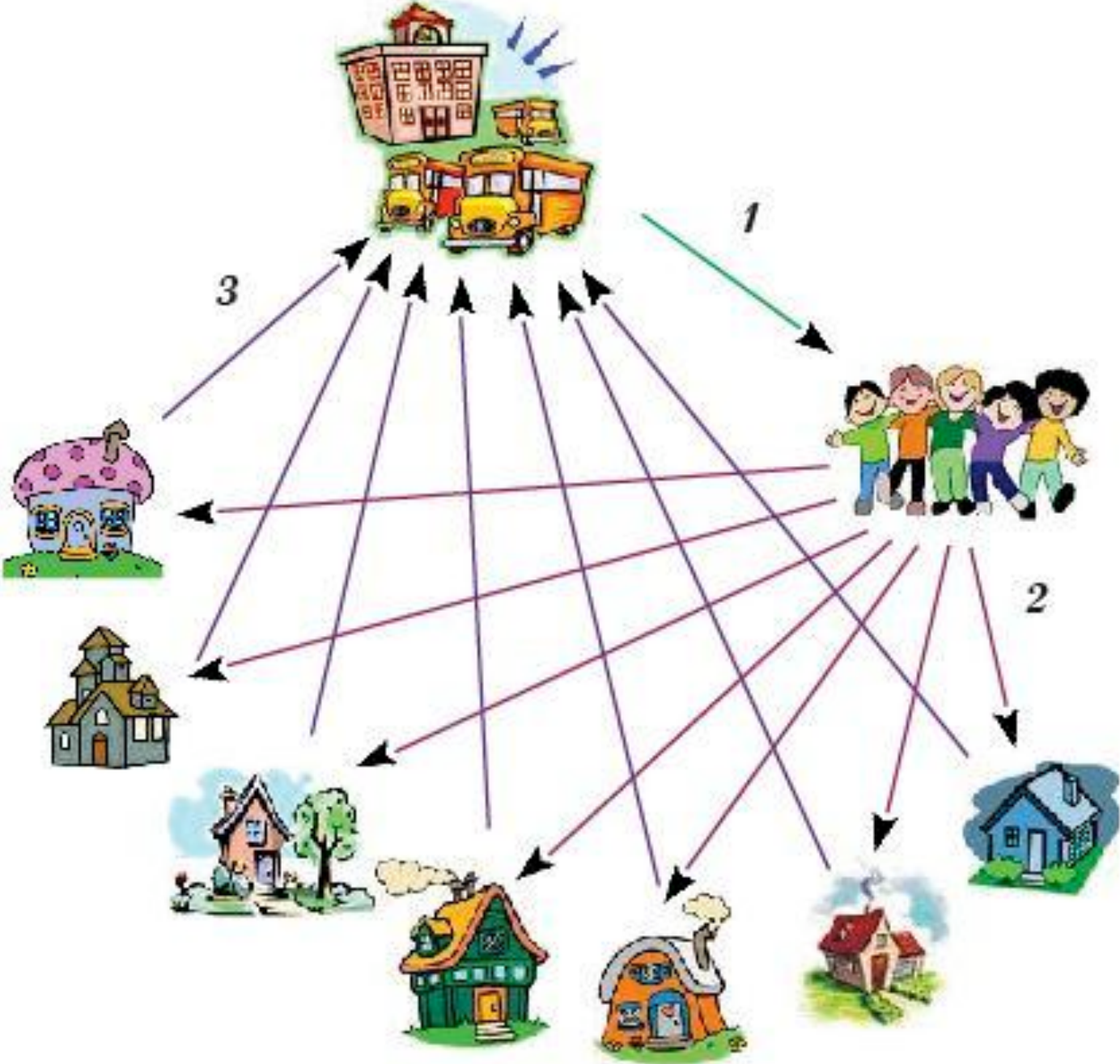


Figure 2: Notifying the Community of an Imminent Pandemic

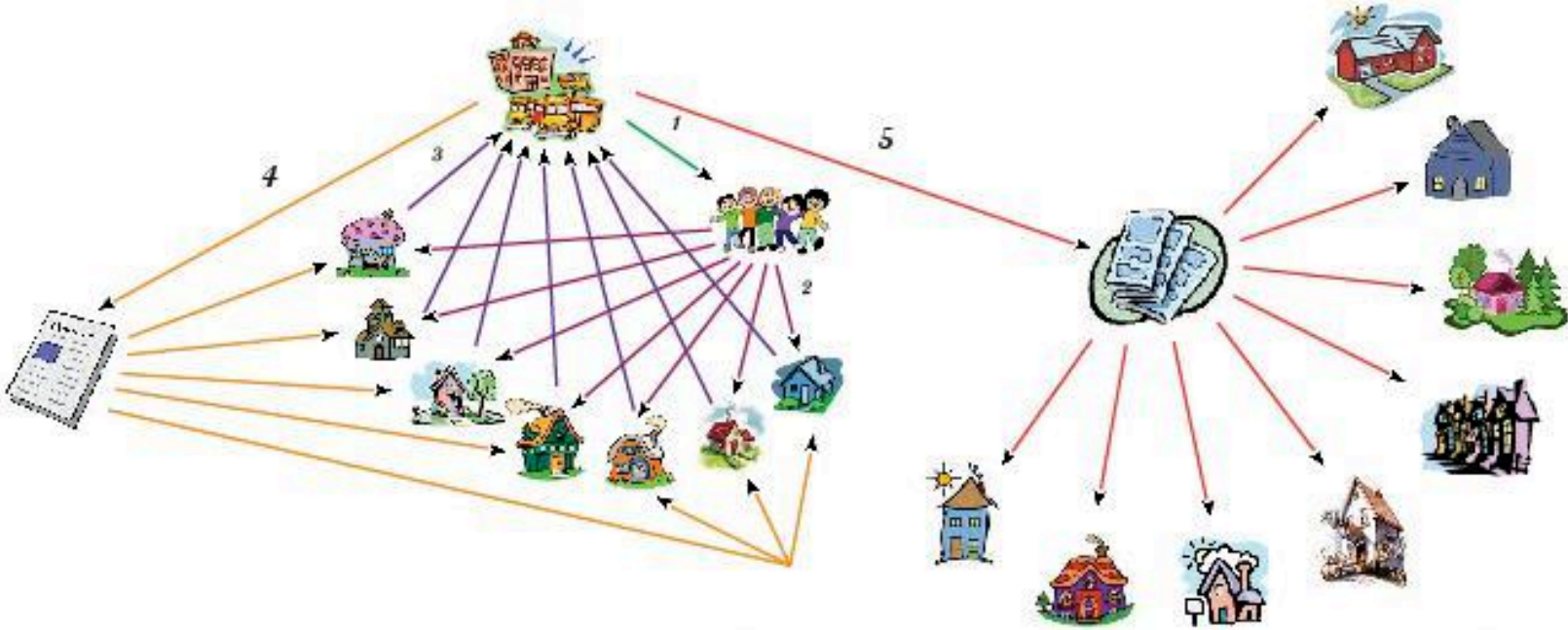


Figure 3: Resilient Community Networks: Based on Mutual Agreements, and Characterized by Overlaps

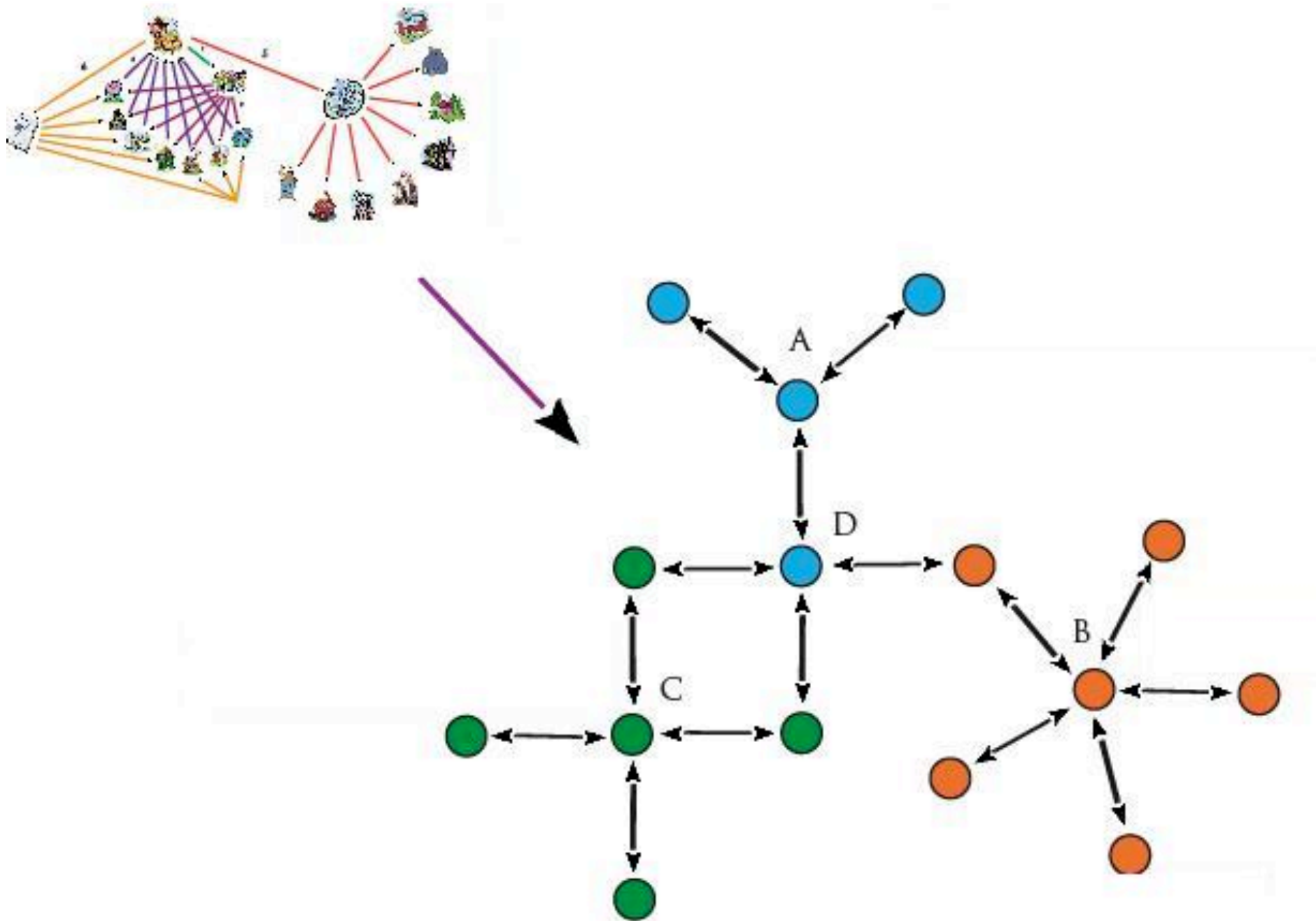


Figure 4: Vulnerable Populations and Outside Organizations

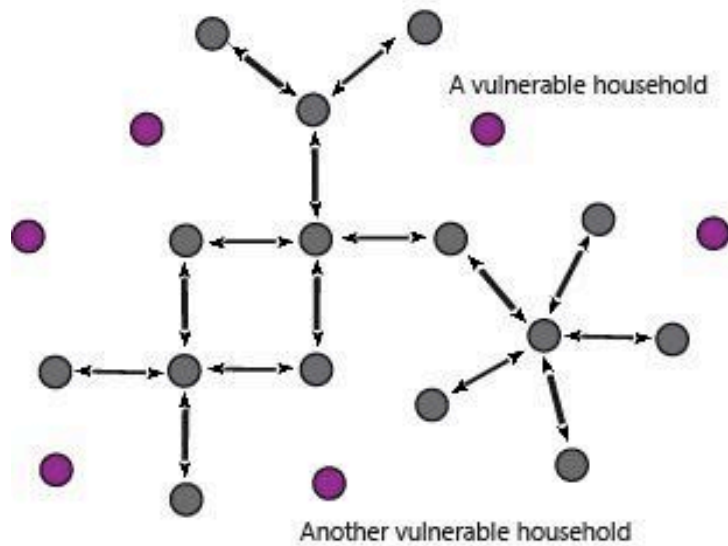
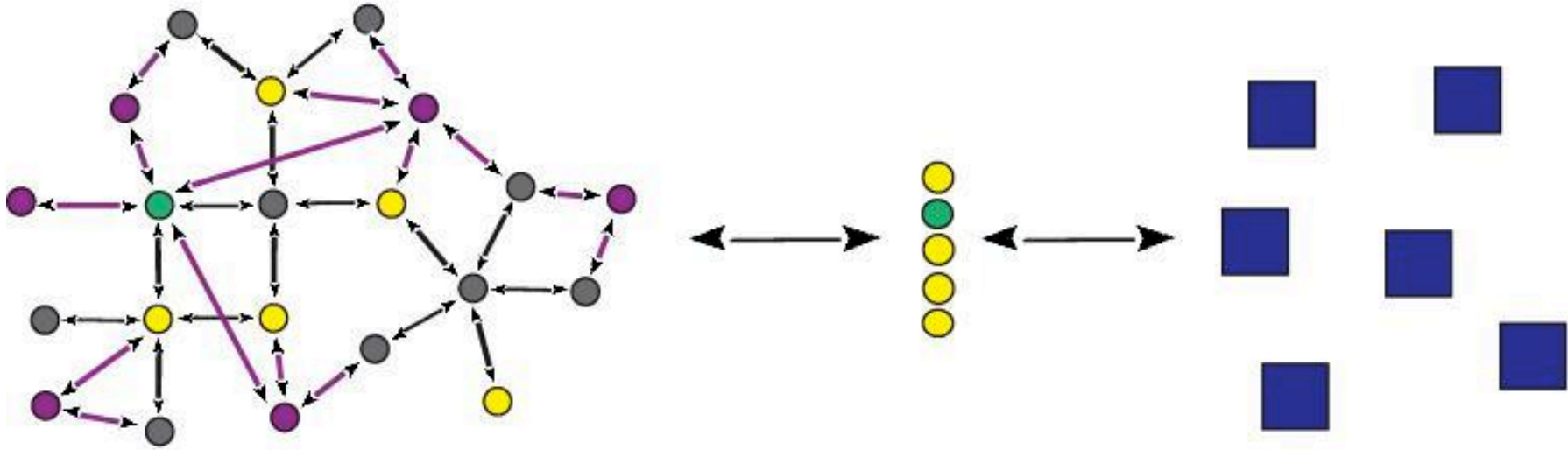
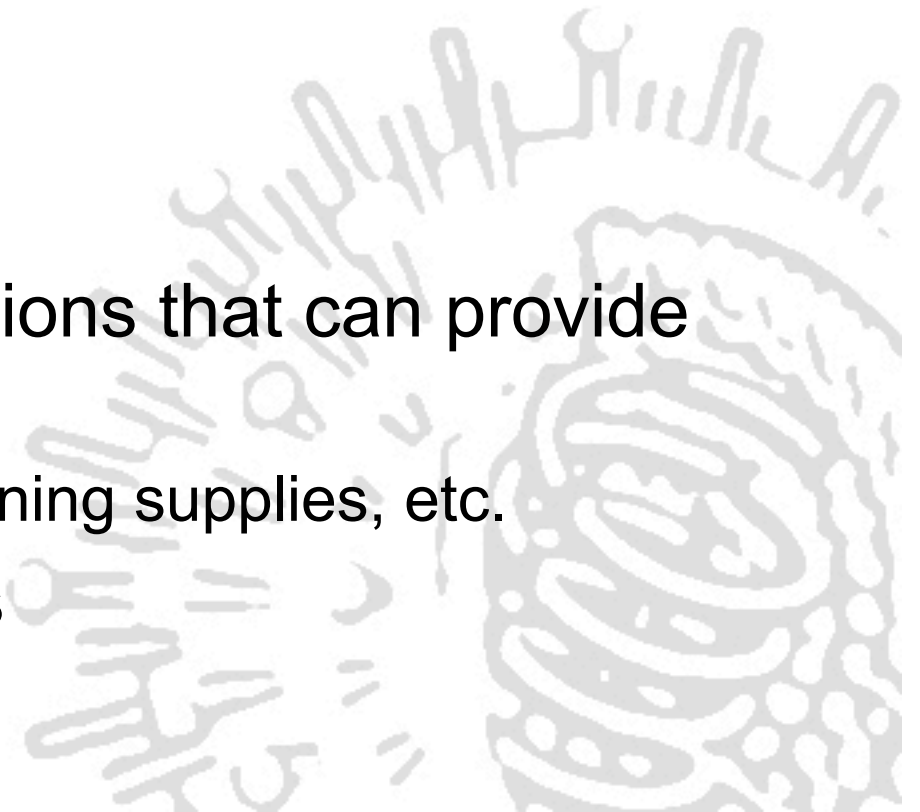


Figure 5: Resilient Community Networks with Community Coordinators:
Establishing Relationships with the Vulnerable Population and Outside Organizations



Resources Coordinators

- Food Coordinator
 - In touch with organizations that can provide food to the community
 - Pivot point for food
- Supply Coordinator
 - In touch with organizations that can provide supplies
 - Toiletries, diapers, cleaning supplies, etc.
 - Pivot point for supplies



Services Coordinators

- Medical Outreach Coordinator
 - Liaisons between community and medical services
 - Keep track of information for hospitals, clinics, etc.
 - Keep track of medical supplies
- Community Services Coordinator
 - Pivot point for services
- Special Needs Coordinator
 - Vulnerable individuals



Community Immunity Leadership Guide

- Sent to those who volunteered for leadership roles
- Basic information
- Community leaders
- Responsibilities/tasks
- If you are unable to fulfill tasks
- Contact information
- Volunteer chart

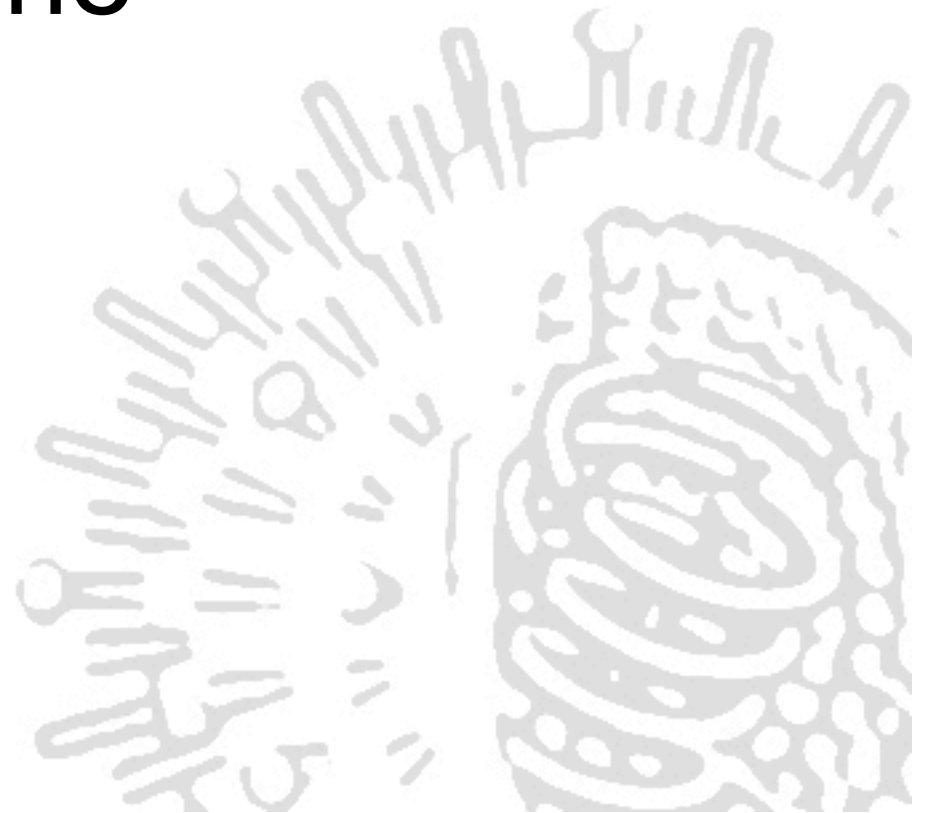


Moving Forward

- Need support from:
 - Departments of Education
 - Departments of Public Health
 - Schools
 - PTA and other organizations
- Curriculum
- Letter
- Pamphlet
- Community leadership guide



Hotline

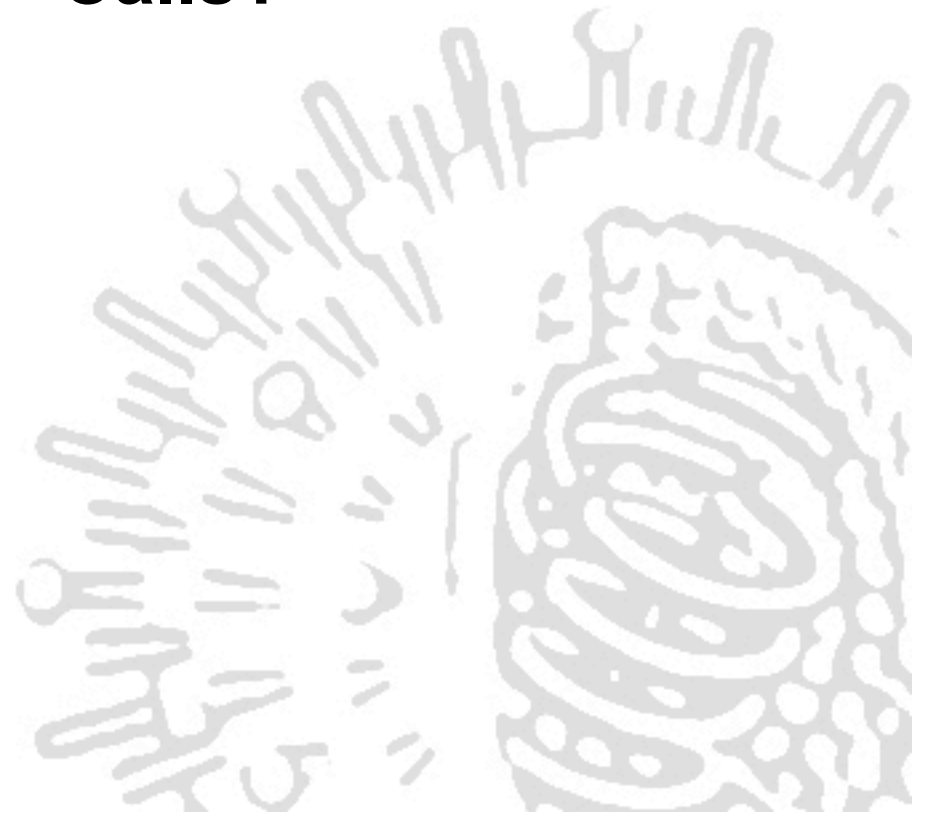


SARS: Ontario 2004



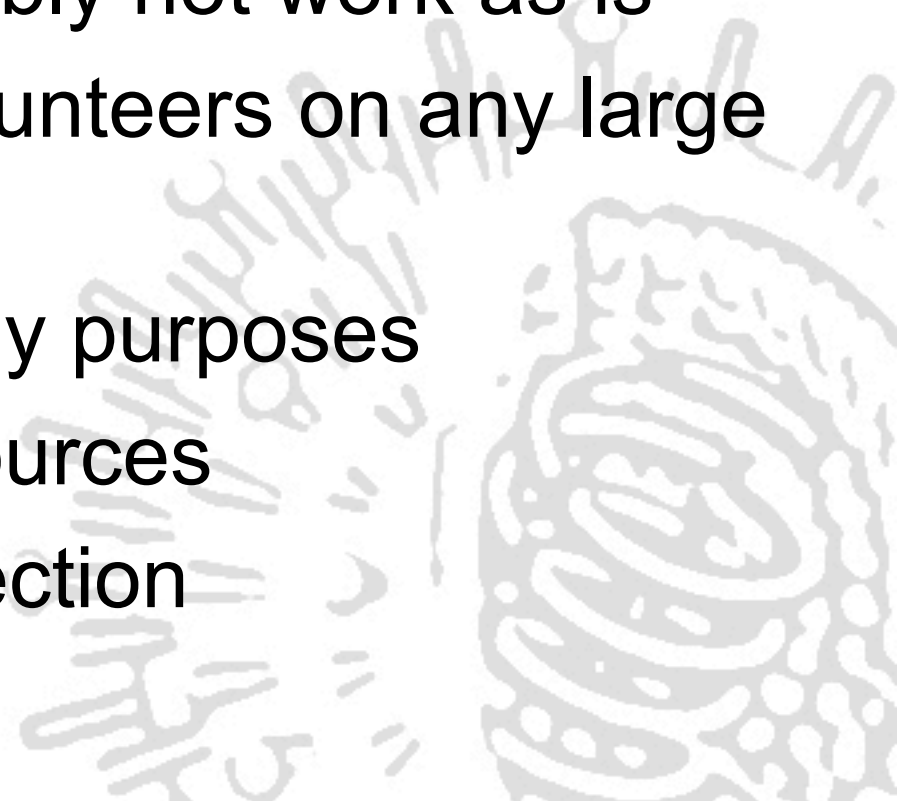
SARS Ontario vs. Flu U.S.A.

- 12.7 Million People
 - .0003% Sick
 - 400,000 Calls
- 300 Million people
 - 25-35% Sick
 - **Calls?**



Opportunities for Innovation

- No comprehensive, national pandemic flu hotline
- Call centers will probably not work as is
- No plans integrate volunteers on any large scale
- Many hotlines for many purposes
- Limited volunteer resources
- Inconsistent data collection



Our Innovation: An Overview

- Volunteer-based
- Distributed calling
- Consistent, up to date information
- Data collection



Our Target Callers

- Households with flu
- Households without reliable internet



Hotline Services

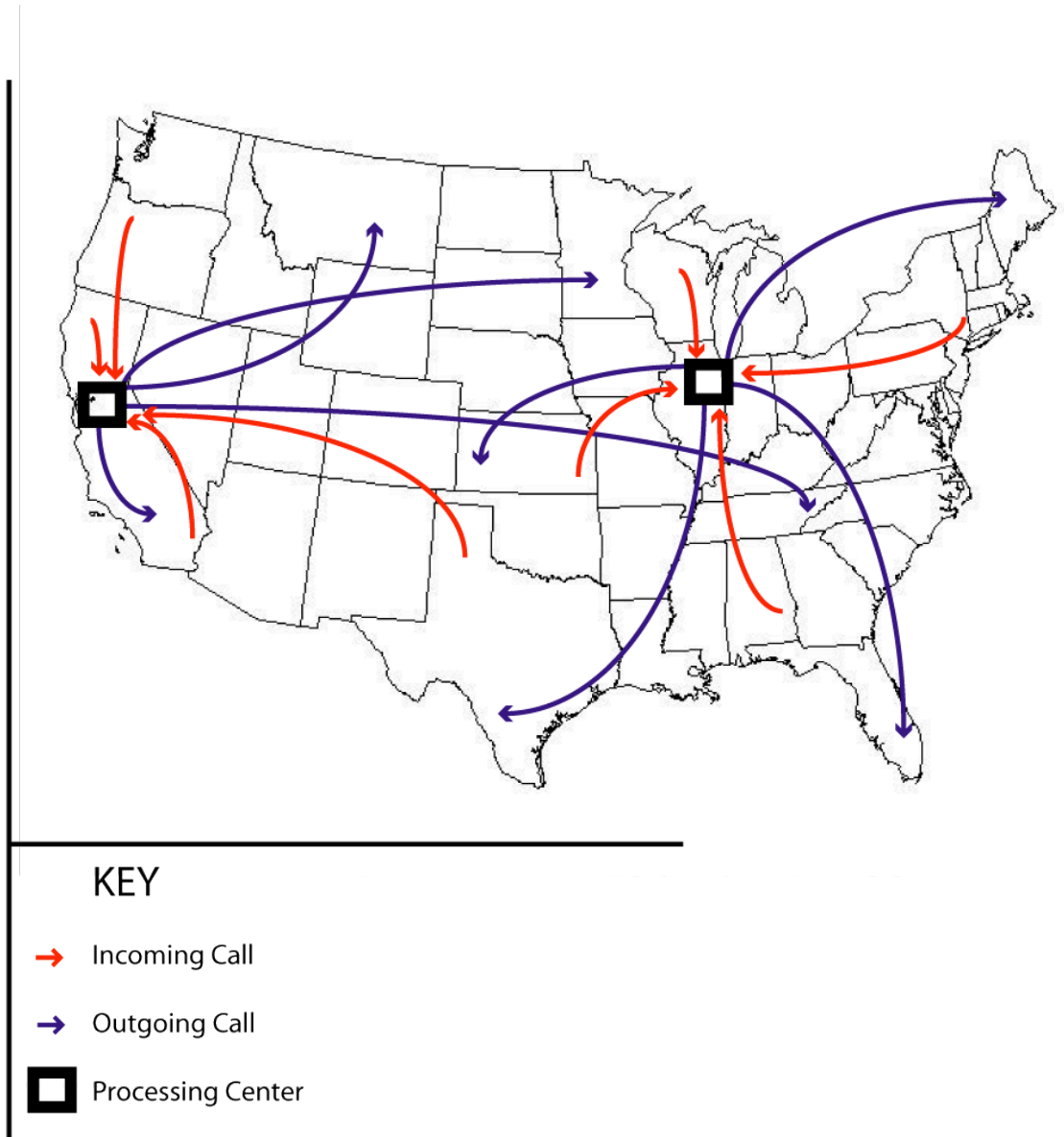
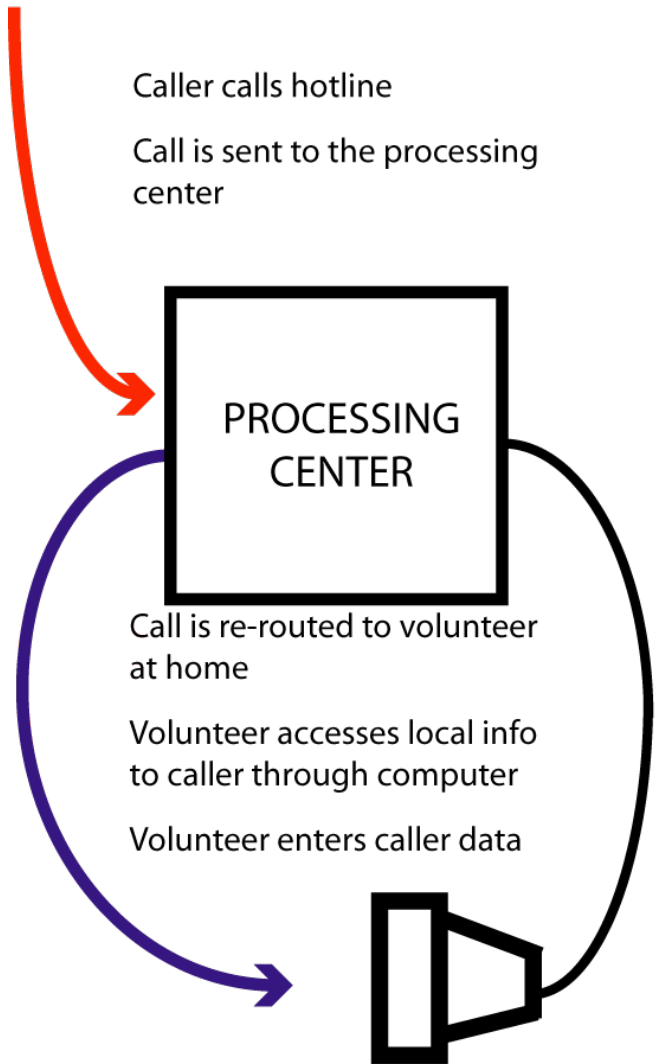
- Information
- Medical help
- Sense of comfort



Overarching Goals

- Reduce strain on hospital/emergency lines
- Provide vulnerable with support and information
- Help people care for family at home





Volunteer Walkthrough

- Register
- Train
- Inform
- Connect



Mozilla Firefox

File Edit View History Bookmarks Tools Help

Search: Google

Customize Links WOWID: Search Res ... RFF-D?-00-23-REV p... Fsheres

Home Care Resources Medical Info Pandemic News

Google Maps

Search the map Find businesses Get directions

Stanford University Hospital

300 Pasteur Drive
Stanford, CA 94305

611 Beds
564 Physicians
806 Nurses

CLOSED
Next Closest:
Veterans Hosp'l,
Palo Alto

Get Directions To Here From Here
Search Nearby

- Archive - look for pandemic news from the past
- Google.com
- CNN.com
- NBC.com
- ABC.com

WebCT Chat -- practice_achmidt01/Room 1[ANDREW SCHMIDT]

Output Interaction Box

Users Logged On

Expert - Home Care
Expert - Medicine
Expert - Resources

Volunteer 12
Volunteer 21
Volunteer 33
Volunteer 78
Volunteer 56

Entry Chime

Enter your message below

Send URL

Quit

Volunteer 12: A 45 year old woman is asking about whether she should take her 3 year old daughter to the hospital. The infant is coughing and has a fever and is constantly crying. Is there a treatment she can give to the infant at home?

Expert Home Care: Tell the mother to take her infant to the hospital right away. Make sure to tell the mother to wear personal protective gear in order to minimize infection. The infant needs medicine as soon as possible.

Volunteer 12's Private Conversation with Expert - Home Care

Volunteer 12: A 45 year old woman is asking about whether she should take her 3 year old daughter to the hospital. The infant is coughing and has a fever and is constantly crying. Is there a treatment she can give to the infant at home?

Expert-Home Care: Tell the mother to take her infant to the hospital right away. Make sure to tell the mother to wear personal protective gear in order to minimize infection. The infant needs medicine as soon as possible.

Caller Walkthrough

- Queue
- Data collection



Moving Forward

Continue what we've been doing...

Bring technology and public health together!



Hotline Demonstration at 8:30!

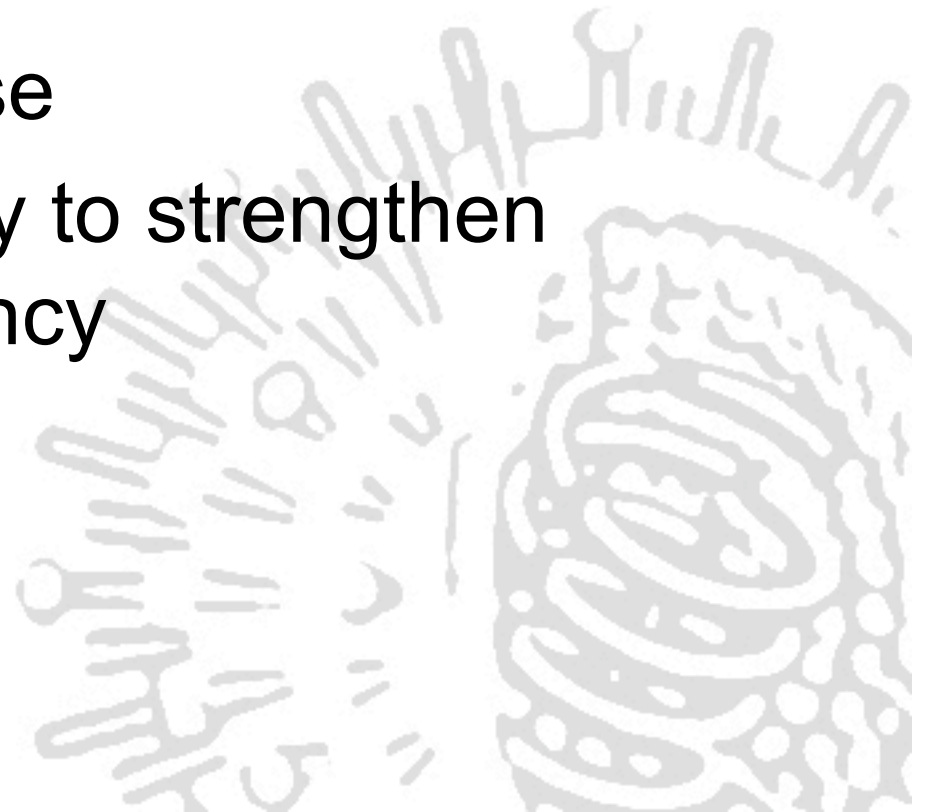


Homepage



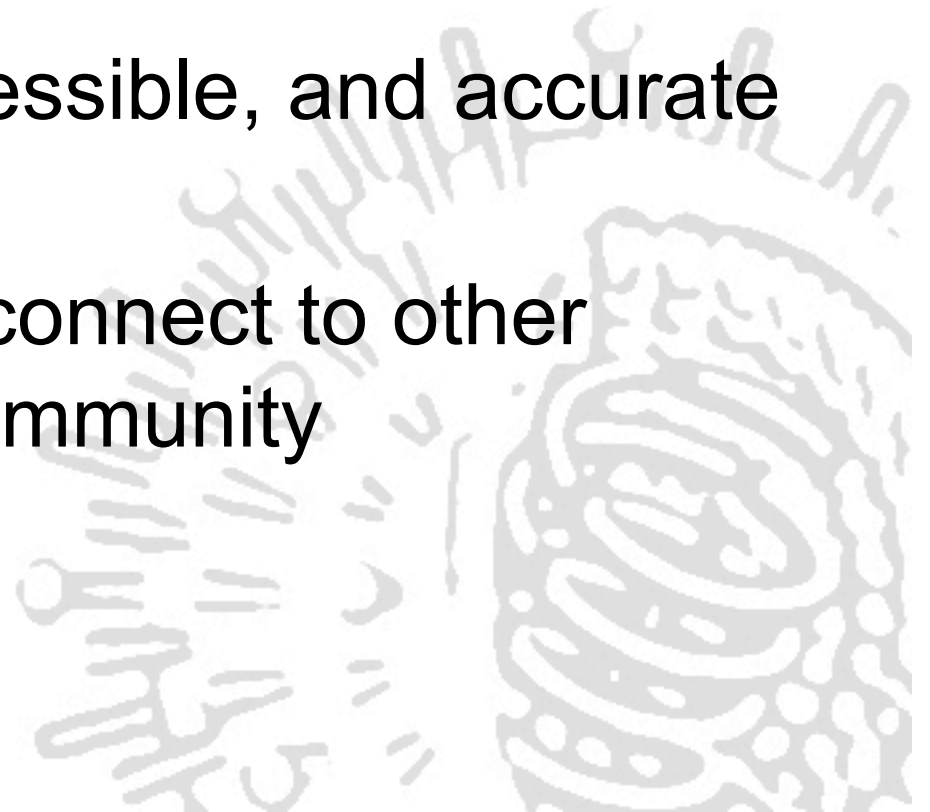
Opportunities for Improvement

1. Lack of uniform, centralized, local information
2. Lack of ease of use
3. Lack of technology to strengthen community resiliency



Three Solutions for Improvement

1. One location for easily updatable localized information
2. Summarized, accessible, and accurate basic information
3. One easy way to connect to other people in one's community



Get Informed. Be Prepared.

One-stop access to U.S. Government avian and pandemic flu information. Managed by the Department of Health and Human Services.

Pandemic Flu Home

General Information

Where You Live

Frequent Questions (FAQs)

Planning & Response

Monitoring Outbreaks

Health & Safety

Tests, Vaccines, Medications, & Masks

Bird & Animal Issues

Global Activities

Economic Impacts

Travel

Research Activities

News Room

Glossary

- Federal Planning
- State & Local Planning
- Individual Planning
- Workplace Planning
- School Planning
- Health Care Planning
- Community Planning

Understanding Flu Terms

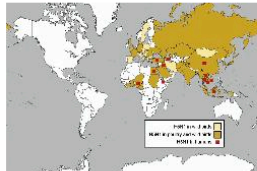
Flu terms defined — Seasonal flu, avian flu, and pandemic flu are not the same.



Informational "Keep Bird Flu out of the U.S." Poster

- News Releases
- Site Updates
- Leadership Blog
- Help with RSS

Nations With Confirmed Cases H5N1 Avian Influenza (June 2007)



Click on map for larger image Confirmed Human Cases by Country

[Note: Numbers are confirmed by World Health Organization and may not reflect news or country reports.]

Confirmed Animal Cases by Country

See Travel Information



June 5, 2007 - Week 3 of the Department of Health and Human Services Pandemic Flu Leadership Blog continues with a conversation with U.S. leaders, who are discussing what they need to succeed in helping Americans prepare for a potential pandemic.

The 5-week-long blog features Pierre Omidyar (eBay), Greg Dworking (Flu Wiki), Rebecca Patton (American Nurses Association) and others.

Join the conversation at blog.pandemicflu.gov

WHO Pandemic Alert Phase

- Phase 3: No or very limited human-to-human transmission

Avian Flu Watch

- Human Cases (WHO)
- Animal Infection (OIE)
- Situation Update (WHO)
- H5N1 Timeline (PDF - 102KB) (WHO)

Meetings & Conferences

- June 13, 2007 Pandemic Preparedness Leadership Forum, Washington, DC
- July 31-August 2, 2007 HHS Public Health Emergency Medical Countermeasures (PHEMC) Enterprise Stakeholders Workshop, Washington, DC

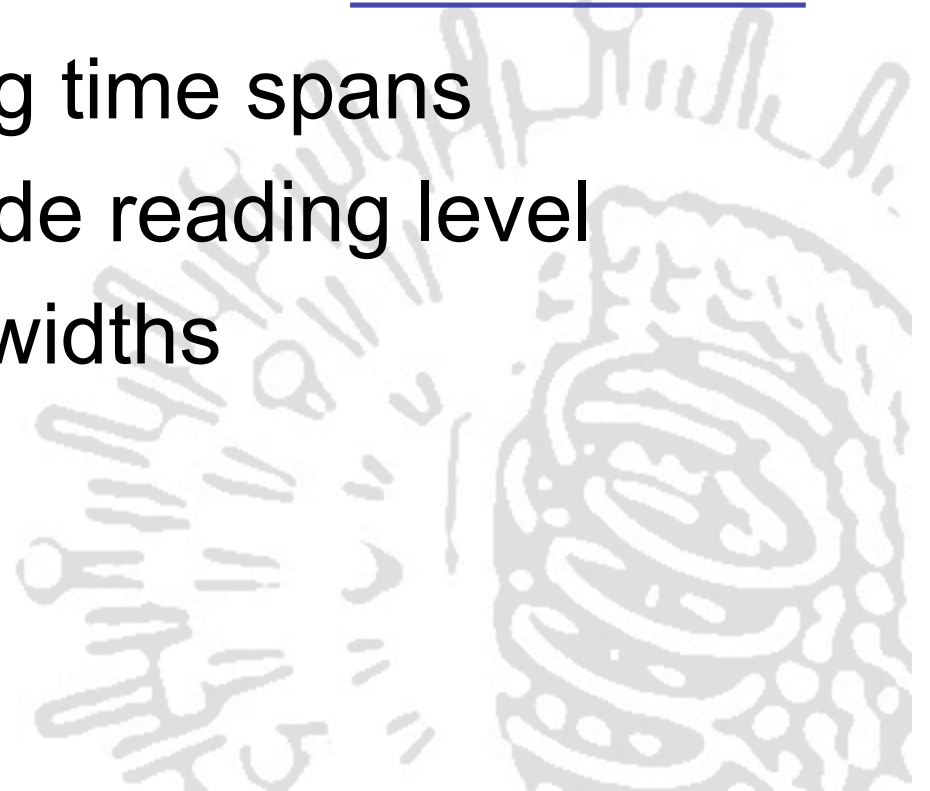
Resources

- Federal Progress Report
- Planning Checklists
- Planning Tools
- Community Strategy for Pandemic Influenza Mitigation (PDF - 10.3MB)
- Pandemic Influenza Preparedness, Response, and Recovery Guide for Critical Infrastructure and Key Resources (PDF - 4.97 MB)
- Hotlines
- Risk Communication
- National Strategy
- HHS Pandemic Plan



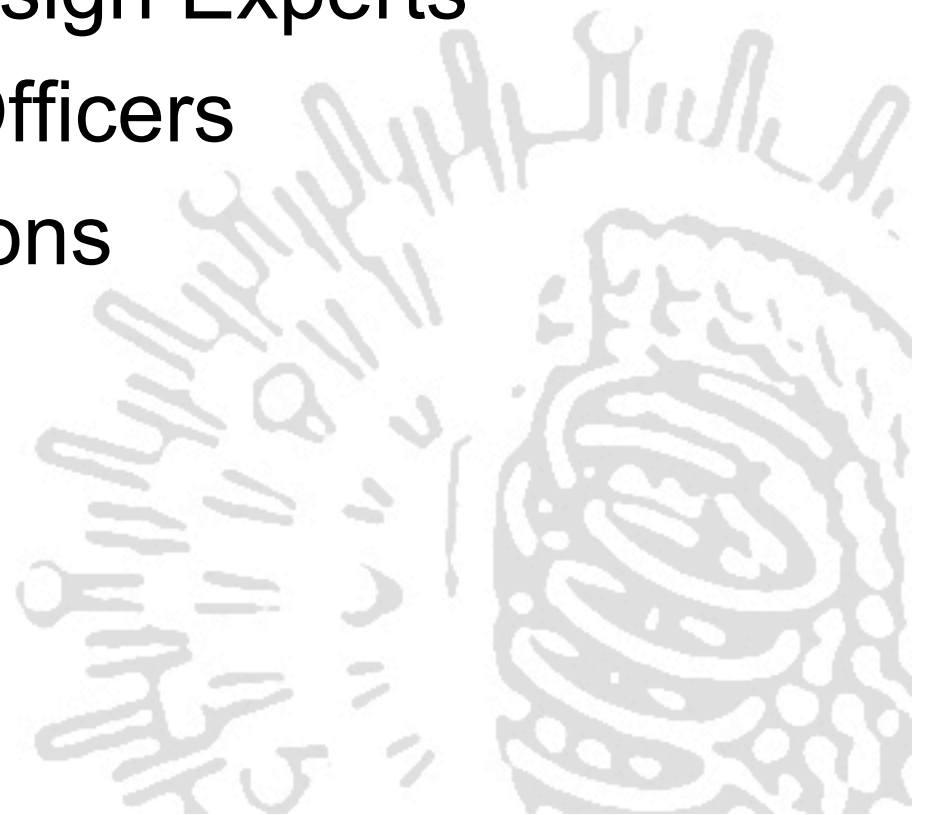
Overall Design: Key Findings

- Less is Best
- Inspired by websites such as flufacts.com
- Cover pre and during time spans
- Written for a 6th grade reading level
- Wide range of bandwidths



Testing

- Card Sorting
- Human Interface Design Experts
- Public Information Officers
- Vulnerable Populations



Moving Forward

- Support from an Internet provider with massive server capacity
- Collaboration from health departments

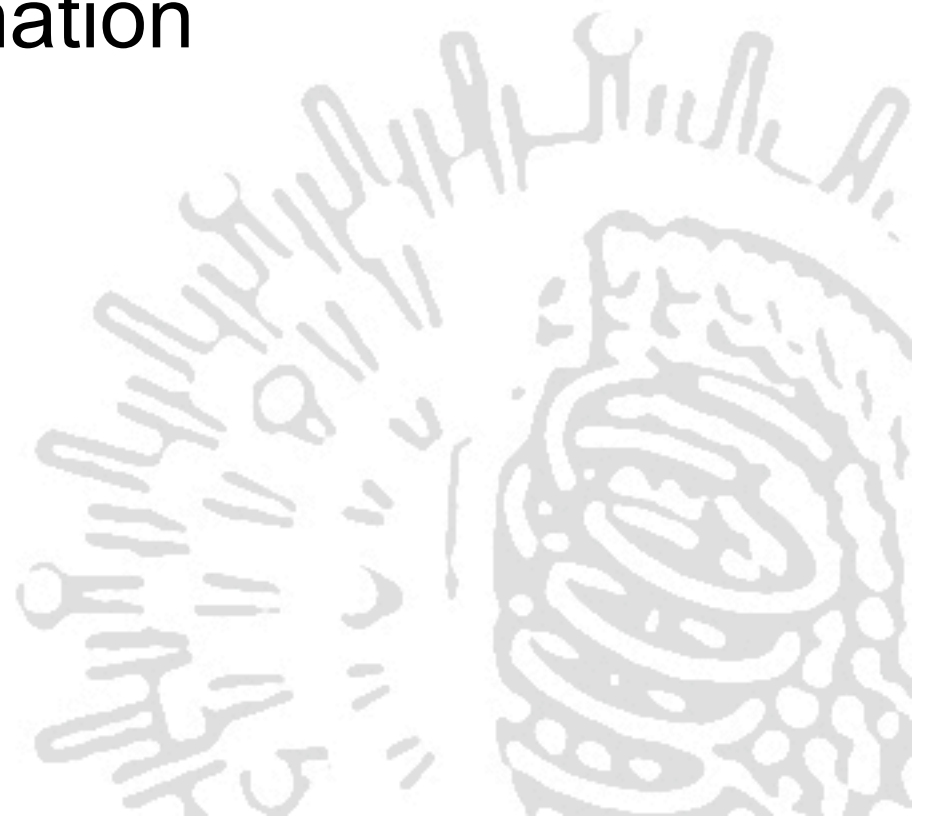


Connecting Our Innovations



How They Work Together

- Cross-referential publicity
- Consistency in information
- Redundancy in information



Thank you!

Reports can be found at
sie-panflu.stanford.edu

