

H1N1 Response in Virginia

- Reduce illness and death
- Minimize social disruption

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Mission and Role of Public Health in Infectious Disease Outbreak

- Reduce (or slow) disease transmission
- Minimize mortality and morbidity
- Understand magnitude of infection through clinical screening, laboratory testing, and epidemiologic investigation
- Identify likely sources and channels of disease transmission
- Identify and protect high risk populations (very old, very young, nursing home residents, pregnant women, and people with chronic conditions)
- Provide guidelines for laboratory testing, clinical treatment, and post exposure prophylaxis
- Make sure plans, personnel and materials are in place for higher levels of response

VDH- Paninfluenza Preparedness

- **Federal funding since 2006: \$13.3 million**
- **VDH PanFlu Plan developed 2002- tested and updated x 6**
- **PanFlu Summit, 3/06- Co-hosted by Governor and Secretary HHS**
- **PanFlu Advisory Committee- Quarterly meetings**
- **Purchase of state antiviral stockpile (770K courses)**
- **Annual mass vaccination exercises statewide**
- **Focus on medical surge planning /alternative care sites**

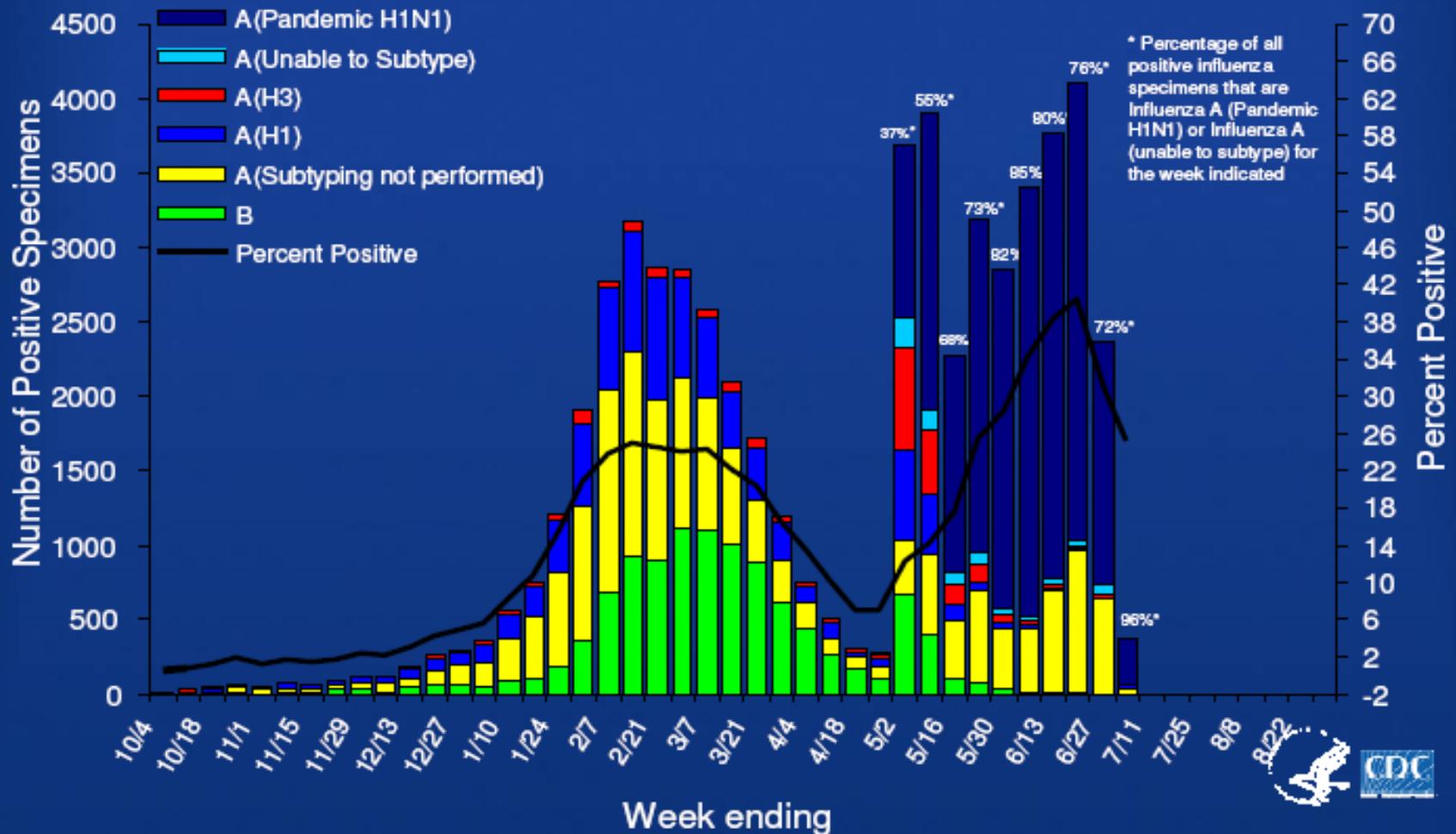
2009 H1N1 Outbreak 2009

Influenza is perhaps the most unpredictable of all infectious diseases

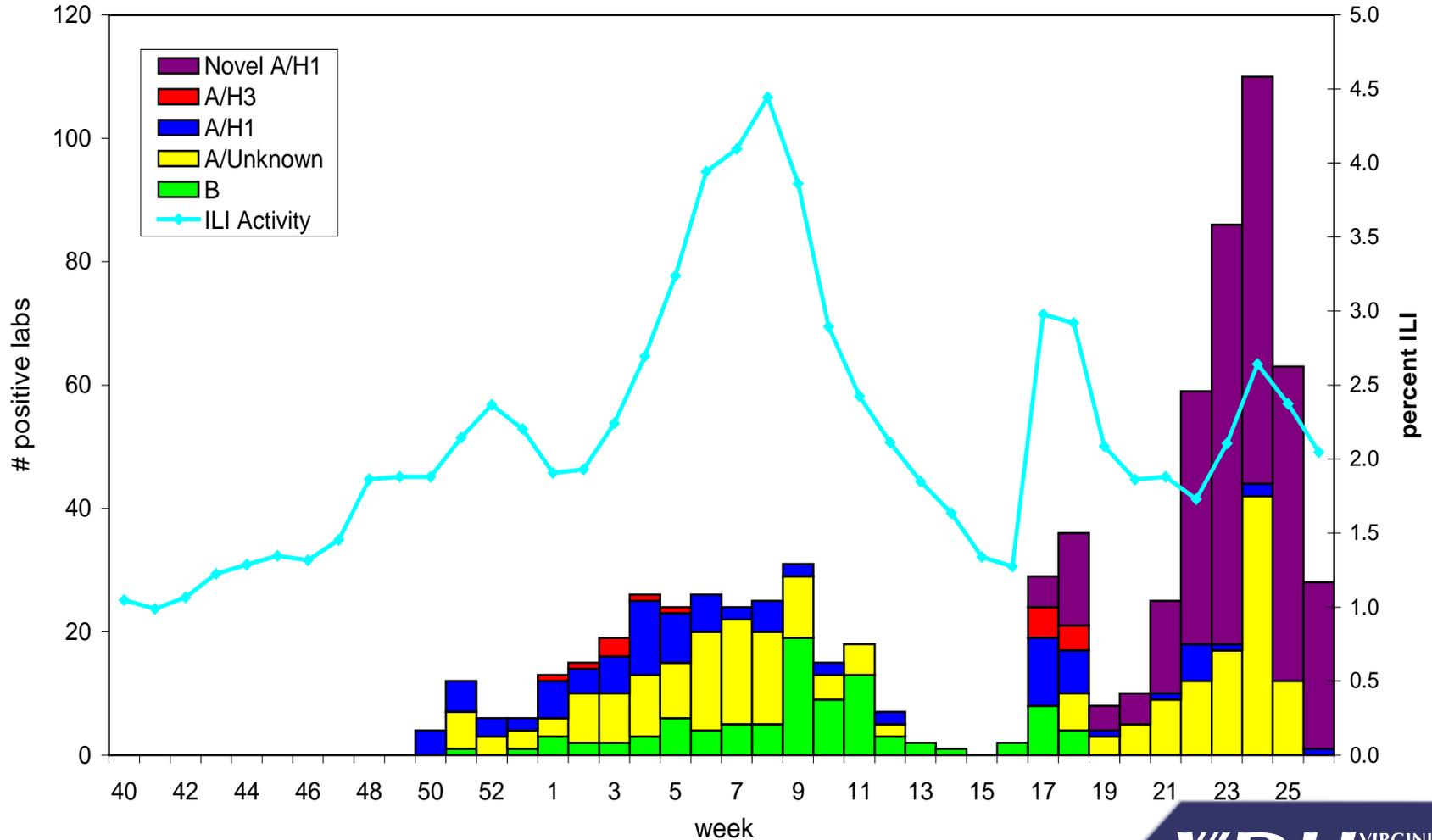
- Occurred very late in the season
- Remarkable heterogeneity across US
- Affected young people disproportionately
- Caused widespread illness, some severe or fatal
- Socially disruptive, especially for schools
- Tens of thousands of health workers and others responding worldwide



Pandemic H1N1 is now causing nearly all type-able influenza in the US



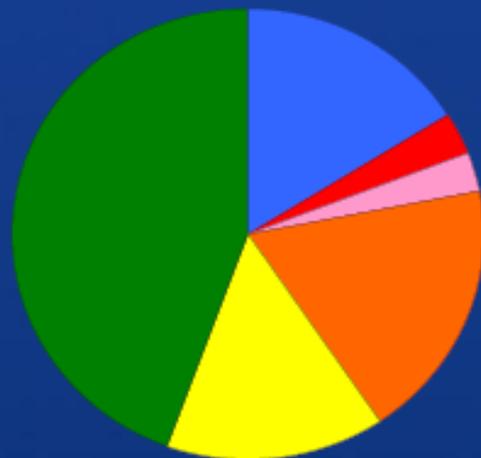
Positive Laboratory Isolates and ILI Reports by Week in Virginia,
2008-2009 Influenza Season



Teens and young adults disproportionately affected

Few cases among elderly

Seasonal 2007-08



N=3,930

2009 H1N1 (April - Jun)

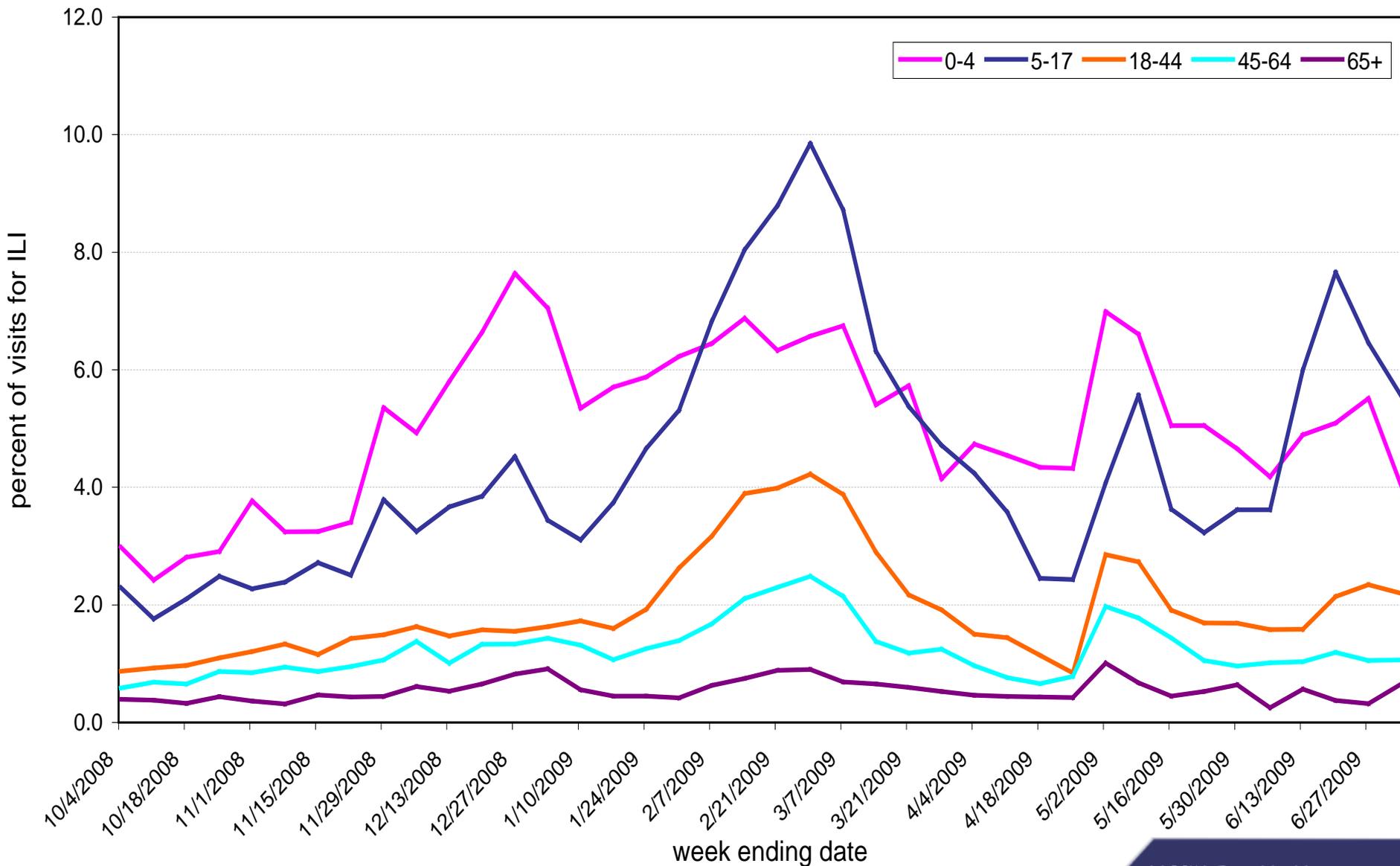


N=312

*April 12-June 30

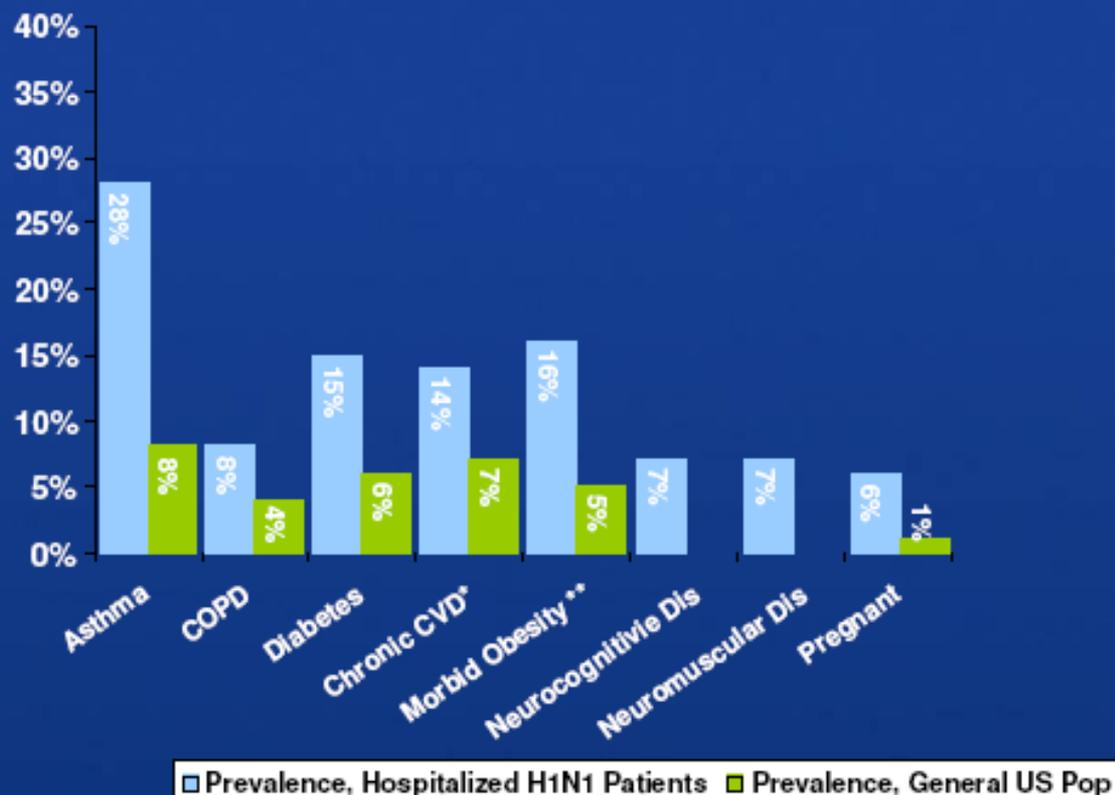


Percent of Visits for ILI out of All Visits by Age Group in Virginia 2008-2009 Influenza Season



2009 H1N1 Hospitalizations Underlying Conditions

April 1 – May 30st (n=268)



*Excludes hypertension

** Obesity is defined as BMI of 30 or higher (includes morbid obesity) and Morbid obesity is defined as BMI of 40 or higher. BMI calculation was performed on non-pregnant adults ≥ 20 years (n=119). 45% of 119 non-pregnant adults ≥ 20 years were missing height and weight information. Prevalence for US non-pregnant adults ≥ 20 years is based on NHANES (JAMA. 2006;295(13):1577)



It's Not Over...

- Continuing spread in US
 - Outbreaks in >50 summer camps, some communities
- Southern Hemisphere patterns
 - Substantial disease in Argentina, Chile, Australia
 - Reported cases from Africa, Asia
 - Co-circulation with seasonal influenza strains in some areas
 - Reported strain on health care system in some localities
- Antiviral resistance to oseltamivir (tamiflu) detections
 - Denmark, Japan, U.S.-traveler to Hong Kong



H1N1 Lessons Learned

Nothing replaces pre-event planning

Communications

- Consistent Messaging; link to CDC
- Embrace Media; provide contact frequently
- Be early; be concise; be accurate
- Focus messages to targeted communities
- Open Public Inquiry Hotline early

Immediate Heightened Surveillance

Engage Lab and other partners early

Keep leadership informed

Organize in depth

- Unified Command
- Plan for the long haul
- Share info; update regularly

2009 H1N1

Events could change...

- Proportion of severe disease
- Transmissibility
- Antiviral resistance patterns
- Vaccine effectiveness, safety, match
- Adjust plans based on data



What we can do

- Surveillance – Continue to track flu for change in epidemiology, virulence, antigenic pattern, and drug resistance
- Plan at all levels as appropriate for role in prevention/response
 - Health care system (diagnosis, treatment, surge, vaccination)
 - Schools, child care, jails, other potentially affected institutions
 - Public health (surveillance, testing, response, guidance, vaccination, treatment)
- Effective communication depends on accurate information



HHS H1N1 Response Pillars

Communication

Surveillance

Mitigation

Vaccination

Virginia Addition

- Direct Medical Care / Medical Countermeasures

Refocusing Pandemic Planning

Gap Analysis

- Comprehensive Communications Planning
 - Outreach to Public
 - Focused Sector-specific Messaging
- Cross-border Coordination
- *Detailed* Medical Countermeasure Distribution Planning
 - Mass Vaccination
 - Private / Public Partnerships
 - Tracking
 - Cold Chain Management / Storage
 - Funding
 - Antiviral Medication Distribution
 - Initiation Thresholds / Triggers
 - Dispensing fee
 - Tracking

Refocusing Pandemic Planning

Updated priorities

- Completed comprehensive H1N1 In-Progress Review & improvement work plan
- Develop (4) planning scenarios with companion Concepts of Operations
- Address ALL populations
- Focus planning on new CDC H1N1 Pillars
- Establish office of H1N1 response to coordinate / facilitate / monitor / report VDH progress
- Commissioner's Infectious Disease Clinical Advisory Group

Workplace Planning

Initiate Activities Early

- Purchase and stockpile critical equipment and supplies ahead of time
- Equip key staff with needed laptops and remote access capabilities

Prior to a widespread outbreak:

- Determine and schedule conference calls
 - Local/Company coordination
 - Corporate coordination
 - Customer coordination
 - Key supplier coordination
- Pre-establish communications channels
- Identify local functions that need coordination
- Coordinate vertically and horizontally.

Workplace Planning

- Verify work-at-home capabilities
 - Exercise regularly
 - Consider provisioning multiple access methods for critical staff (broadband, DSL, air cards, etc.)
- Prepare for psychological aspects
- Prepare for labor shortage
 - Develop pools of available staff
 - Refresh/train pools regularly or at trigger point
- Remain flexible/adaptable
- Cohorting of sick children/daycre

PanFlu COOP

- Delegation of Authority
- Leadership Succession
- Cross Training
- Discuss expectations with staff early
- Communications will be key
 - Need reliable, credible sources of information
 - Need coordinated communication channels
 - Rely on both internal/external channels
- Monitor state of transportation systems
- High exposure staff will probably need prophylaxis
 - Security, Healthcare Providers
- May need to consider relief for regulatory requirements

It is not the strongest of the species that survives, nor the most intelligent....It is the one that is most adaptable to change.

– Charles Darwin



Resources

Virginia Department of Health Website

www.vdh.virginia.gov

CDC H1N1 Website

www.cdc.gov/h1n1flu

CDC School guidance

<http://www.cdc.gov/h1n1flu/schools/>

Coordinate with you local health department emergency planner and epidemiologist

<http://www.vdh.virginia.gov/EPR/>