

**Planning for Pandemic
2009 H1N1:
A Briefing for the
Virginia Health Care Association
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May 7, 2009**

2009 H1N1

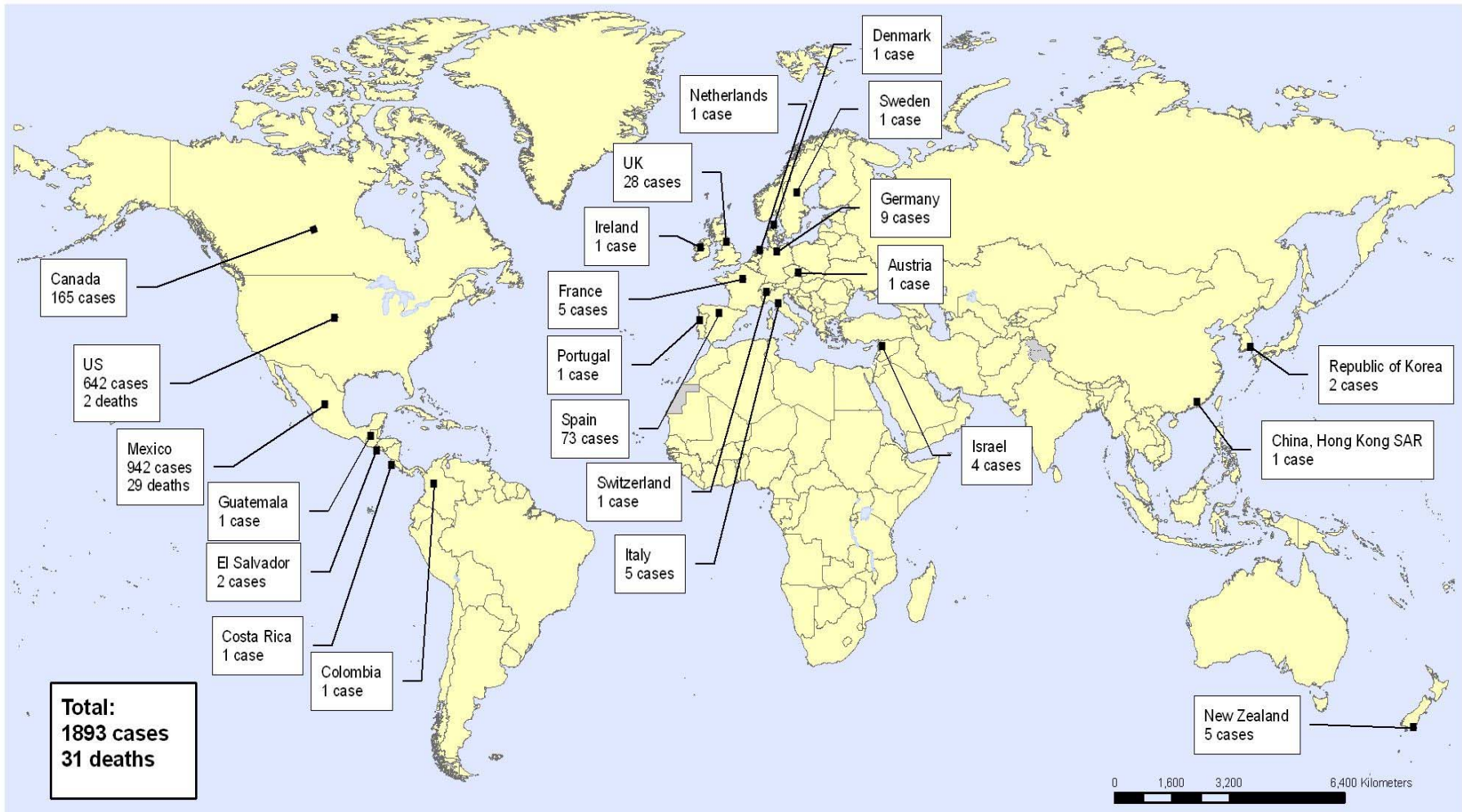
- The swine influenza A (H1N1) virus that has been identified is a virus that has never been seen before in swine or in humans anywhere in the world.
- It is different from the influenza A (H1N1) virus that is commonly seen in people.
- In the US, illness has been relatively mild; 2 deaths have been reported.
- Symptoms include fever, sore throat, cough, body aches, and sometimes vomiting or diarrhea.
- Illness has spread from one person to another.

Current Situation (as of May 6th)

- In Virginia: 11 confirmed cases, no deaths or hospitalizations.
- In the United States: 642 confirmed cases, 2 deaths.
- In Mexico: 942 confirmed cases, 29 deaths.
- Worldwide: 1893 confirmed cases in 23 countries.
- Still at WHO Phase 5.

New Influenza A (H1N1), Number of laboratory confirmed cases and deaths as reported to WHO

Status as of 6 May 2009
18:00 GMT



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

Map produced: 6 May 2009 18:00 GMT

Data Source: World Health Organization
Map Production: Public Health Information
and Geographic Information Systems (GIS)
World Health Organization



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Pandemic Influenza Surveillance

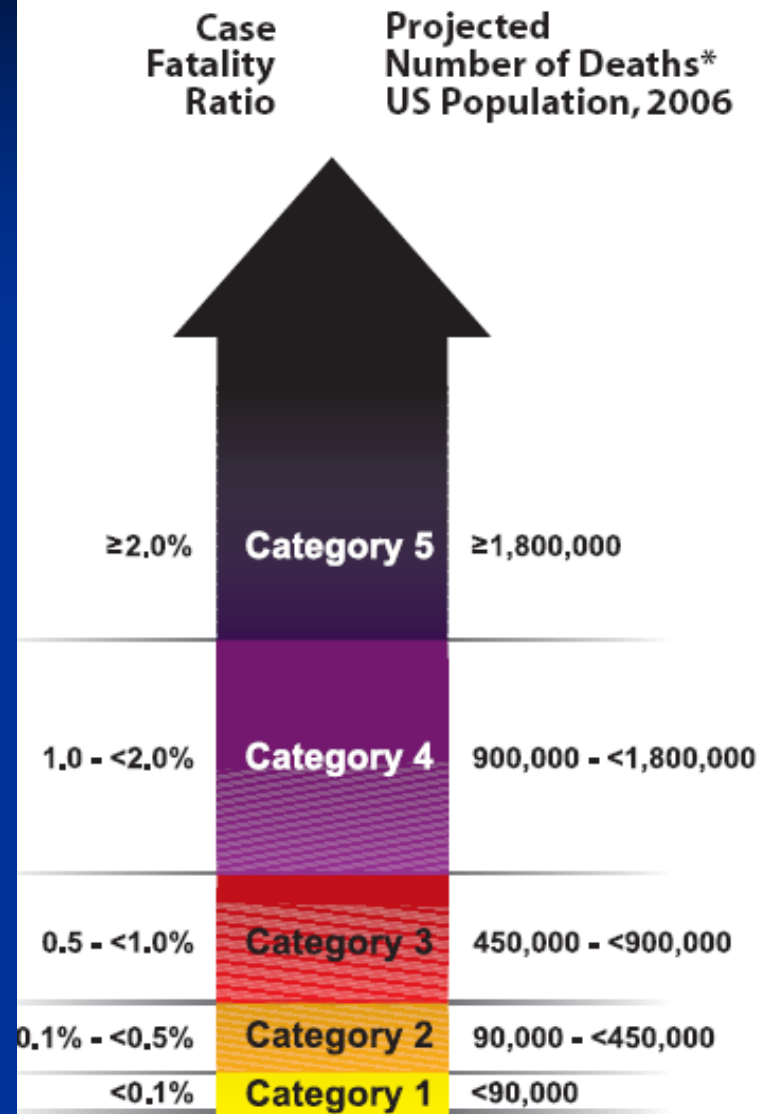
- Disease reports from physicians, hospitals, and laboratories
- Monitoring flu-like illness visits to EDs and pharmacy sales for flu medicines
- Hospitals to enter suspected flu admissions and deaths into VHHA web-based system
- Not possible to count all cases

Unique Features of Pandemic Flu

- Multiple areas affected at the same time
 - More difficult to shift resources
- Could go on for months in a community, with 2-3 different waves over 18-24 mo
- Healthcare workers will be affected
- Preventive and therapeutic agents delayed and in short supply
 - New vaccine must be made for the pandemic virus
- Widespread illness would impact essential services

WHO Phases		Federal Government Response Stages	
INTER-PANDEMIC PERIOD			
1	No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk of human disease is considered to be low.	0	New domestic animal outbreak in at-risk country
2	No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human disease.		
PANDEMIC ALERT PERIOD			
3	Human infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.	0	New domestic animal outbreak in at-risk country
		1	Suspected human outbreak overseas
4	Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans.	2	Confirmed human outbreak overseas
5	Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible (substantial pandemic risk).		
PANDEMIC PERIOD			
6	Pandemic phase: increased and sustained transmission in general population.	3	Widespread human outbreaks in multiple locations overseas
		4	First human case in North America
		5	Spread throughout United States
		6	Recovery and preparation for subsequent waves

Figure A. Pandemic Severity Index



*Assumes 30% Illness Rate and Unmitigated Pandemic Without Interventions

Pandemic Flu Planning Assumptions

- 30% attack rate
- 50% or more of those who become ill will seek medical care
- Number of hospitalizations and deaths will depend on the virulence of the pandemic virus

Table A. Summary of the Community Mitigation Strategy by Pandemic Severity

Interventions* by Setting	Pandemic Severity Index		
	1	2 and 3	4 and 5
Home Voluntary isolation of ill at home (adults and children); combine with use of antiviral treatment as available and indicated	Recommend†§	Recommend†§	Recommend†§
Voluntary quarantine of household members in homes with ill persons¶ (adults and children); consider combining with antiviral prophylaxis if effective, feasible, and quantities sufficient	Generally not recommended	Consider**	Recommend**
School Child social distancing -dismissal of students from schools and school based activities, and closure of child care programs -reduce out-of-school social contacts and community mixing	Generally not recommended	Consider: ≤4 weeks††	Recommend: ≤12 weeks§§
Workplace / Community Adult social distancing -decrease number of social contacts (e.g., encourage teleconferences, alternatives to face-to-face meetings) -increase distance between persons (e.g., reduce density in public transit, workplace) -modify postpone, or cancel selected public gatherings to promote social distance (e.g., postpone indoor stadium events, theatre performances) -modify work place schedules and practices (e.g., telework, staggered shifts)	Generally not recommended	Consider	Recommend
	Generally not recommended	Consider	Recommend
	Generally not recommended	Consider	Recommend
	Generally not recommended	Consider	Recommend

Pandemic Influenza Planning: Health

- Risk communications
- Community containment
- Antiviral distribution plan
- Mass vaccination
- Medical surge, healthcare coalitions
- Surveillance and investigation
- Laboratory services
- Fatality management
- Altered standards of care due to resource limitations

Isolation

- Physicians have been asked to be on the alert for patients with flu-like illness and travel history that may suggest swine influenza
- Early on, identified potential patients will be tested for influenza and asked to stay home while ill.
- Testing will scale back once the flu strain has been confirmed to be circulating widely in Virginia communities.
- Ill persons will continually be reminded to stay home.

Quarantine

- Close contacts of early possible cases in Virginia will be asked to stay home in case illness develops.
- This will not be practical once illness is established and spreading in the community.
- Then people will be advised to avoid large gatherings to the extent possible.

Issue: Antivirals

- Federal stockpile of antivirals growing
- VA has courses on-hand
 - Additional courses have been added from from the Federal Strategic National Stockpile
 - For Treatment: Distribution Through Pharmacies, etc when supplies inadequate
- Increasing supply and production capacity – discussion of increased prophylaxis use

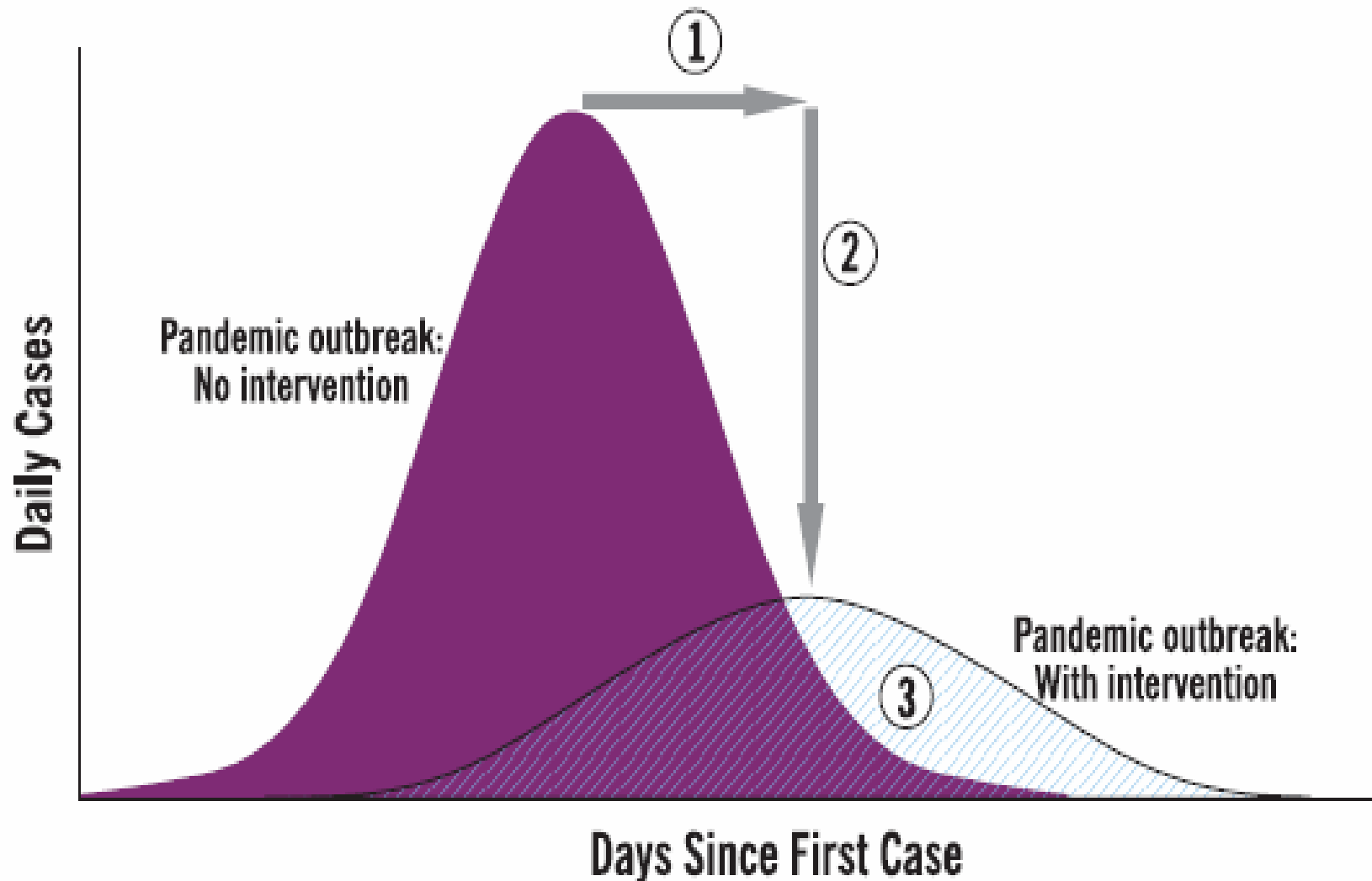
Issue: Community Containment

- Limiting community spread: social distancing
 - School closures
 - Recommendations about telecommuting
 - “Snow days”
 - Isolation/quarantine: mainly voluntary
 - Discouraging/banning large gatherings (indoor/outdoor)
- New recommendations based on severity of pandemic, on a scale of 1-5

Figure 1.

Goals of Community Mitigation

- ① Delay outbreak peak
- ② Decompress peak burden on hospitals / infrastructure
- ③ Diminish overall cases and health impacts



Vaccines

- No H1N1 Vaccine yet developed; Working.
- VDH has a robust and frequently tested Statewide Mass Vaccination Plan

Pandemic Influenza Planning: Non-Health

- Command and Control
- Public Safety Sustainability
- Community containment measures
 - Economic impact
 - School closure / Event cancellation
 - Isolation
 - Voluntary quarantine
- Continuity of Operations:
 - Government entities
 - Critical infrastructure: Courts, economy, trade, business
 - Agriculture, water and food chain safety
- Human resource issues, policies (public and private)

2009 H1N1 and Long Term Care

- CDC is our “gold standard” for guidance
- Currently CDC offers guidance for LTC settings with regard to:
 - seasonal influenza (which kills about 36,000 Americans and 1000 Virginians per year, many who live in LTC settings)
 - pandemic flu (Although this guidance is largely based upon scenarios involving highly virulent strains such as the H5N1 “Avian flu”.)
 - But CDC is yet to offer any guidance for the LTC setting specific to the new H1N1 situation.

H1N1 and LTC: How concerned should we be?

- With evolving situation and heightened public attention, speculation is rampant. Some may claim that we have overreacted.
- For instance: There are reports of “immunity” or less virulence of novel H1N1 in people >50 years old. So is this new H1N1 strain such a big deal for the LTC setting?
 - That would be a big relief to LTC, but it is far too early to depend on this assumption, especially given the ability of the virus to quickly change.
 - Although the mean age of confirmed cases is <20, it has also shown up in people 65+. The LTC population is still a very high priority for influenza surveillance and control (because this population is high risk for morbidity/mortality).

H1N1 and LTC: How concerned should we be?

- And of course, not everyone in LTC settings (residents or staff) is elderly!
- So stay tuned for more information specific to the new H1N1 virus as it relates to the long term care setting.
- In the interim, it is **CRITICAL** that we maintain standard infection control practices. In addition to the new H1N1 virus, we are still seeing illnesses like seasonal flu, measles, etc. which can be devastating in the LTC setting and which can be prevented or mitigated with good infection control practices.

Seasonal Influenza Control Measures for Long Term Care Settings

- Vaccination of residents AND personnel
- Respiratory hygiene/ cough etiquette throughout the facility
- Vigilant hand washing, routine surface cleaning, etc.
- Watch for “*acute febrile respiratory illness*” among residents AND staff:
 - temperature >100 degrees Fahrenheit AND
 - recent onset of at least one of the following:
 - rhinorrhea (“runny nose”) or nasal congestion
 - sore throat
 - cough
- However, LTCs should recognize that influenza infection does not always result in a fever (particularly in people who are elderly or immune compromised).

Seasonal Flu, Social Distancing, Precautions, and the LTC Setting

- If staff are sick with influenza-like illness (ILI), they should not work near residents (for at least 7 days following the initial onset of symptoms).
- Symptomatic residents should be on standard AND droplet precautions.
- Cohort/ isolate as is practical (case-by-case in LTC)
- Consider limiting group activities if a high incidence of influenza (or for particularly high-risk residents)
- Discourage visitation by persons exhibiting symptoms

Droplet Precautions

- Intended to prevent transmission of pathogens spread through close respiratory or mucous membrane contact with respiratory secretions.
- Special air handling and ventilation are not required to prevent droplet transmission.
- A single patient room is preferred. Spatial separation of patients by > 3 feet and drawing the curtain between patient beds is especially important for patients in multi-bed rooms with infections transmitted by the droplet route.
- Healthcare personnel should wear a mask (a respirator is not necessary) for close contact with infectious patient.
- Patients on Droplet Precautions who must be transported outside of the room should wear a mask if tolerated and follow Respiratory Hygiene/Cough Etiquette.

“Pandemic Influenza” Control Measures for LTC Setting

- Guidance for LTCs in a pandemic are more drastic. For instance:
 - Symptomatic residents should be cohorted together by either:
 - Whenever possible, staff who are assigned to work on affected units should not work on other units.
 - Additional restrictions on visitation (including suspension of all visitation) may be necessary.
 - High-risk residents may need prophylaxis (preventive treatment) with antivirals (e.g. Relenza, Tamiflu) if exposed to the H1N1 virus.
 - Additional respiratory protection (including respirators) **MAY** be necessary for staff who must come in close contact with infected residents.

- Although there are no specific LTC recommendations for the new H1N1, LTCs should at least be following control measures for seasonal influenza, and should be familiar with and prepared to shift to the pandemic influenza measures, in the event of any new information.

Use of Antiviral Medications

- Currently, we are seeing no problems with the pipeline of antiviral medications.
- However, we are concerned about reports of inappropriate use of antivirals due to:
 - Possible impact on future supplies
 - Contribution to emergence of resistant strains
- Thus, we appreciate your help in ensuring that antiviral medications for residents and staff are used in accordance with CDC guidelines.

Who should I call at VDH?

- Virginia has 35 local health districts. They are on the “front line” of public health, and routinely work with LTC facilities. All have:
 - a physician health director
 - a district epidemiologist
 - public health nurses
 - environmental health specialists
- But please don't hesitate to contact VDH. For questions specific to H1N1, VDH has temporarily opened a **Public Information Hotline**:
 - 1-877-ASK-VDH3 or 1-877-275-8343.
 - 8:30 a.m. - 4:30 p.m., Monday - Friday

Questions?

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

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

<http://www.cdc.gov/swineflu/investigation.htm>