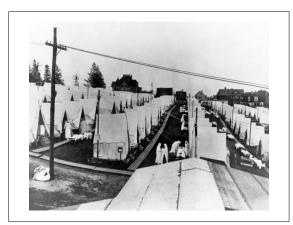
## Donald Williamson, MD

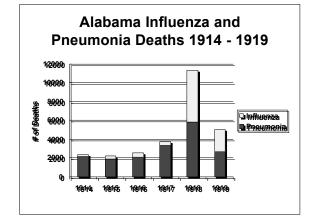
State Health Officer
Alabama Department of Public Health



#### 1918 – 1919 Pandemic in Alabama

- 9/28/1918 first case reported in AL (Huntsville).
- 10/05/1918 More than 1100 cases in Huntsville.
- 10/07/1918 Governor issues proclamation calling for "closing of schools, churches, theatres & picture shows...."
- 10/13/1918 2367 cases @ Camp Sheridan (outside Montgomery).

- 10/13/1918 All physicians, druggists and prescription clerks in Huntsville, except one, ill with influenza.
- 10/15/1918 Huntsville: Business demoralized; Postal Service crippled; Alabama Power having difficulty finding employees; and Business ordered to curtail hours of operation.
- 10/22/1918 12,000 cases reported in Montgomery.



### **Federal Planning Assumptions**

- Susceptibility
- Person-to-person transmission
- Clinical attack rate of 30% or higher
  - -40% among school-aged children
  - -20% among working adults
- · Half of those ill will seek care
- Estimates of severity vary 10-fold
  - -Plan for the more severe
  - Extremes of age, pregnancy, chronic conditions

## **Federal Planning Assumptions**

- High rates of absenteeism 40% (?)
  - -Illness
  - -Fear of infection
  - -Care provision
  - -Plus public health measures
    - School closures
    - Quarantining households
    - · "Snow days"

## **Federal Planning Assumptions**

- Incubation period of 2 days
- Shedding of virus
  - -Typically 1 day before to 5 days after illness
  - -Highest during first 2 days of illness
  - -Children shed the most virus
- One infected persons infects 2 others
- Community outbreaks last 6-8 weeks
- Multiple waves of 2-3 months

## Forecasted Impact of Pandemic Influenza

	United States		Alabama	
Characteristic	Moderate (1958/68- like)	Severe (1918-like)	Moderate (1958/68- like)	Severe (1918- like)
Illness	90 million (30%)	90 million (30%)	1.8 million (30%)	1.8 million (30%)
Outpatient medical care	45 million (50%)	45 million (50%)	900,000 (50%)	900,000 (50%)
Hospitalization	865,000	9,900,000	17,300	198,000
ICU care	128,750	1,485,000	2,575	29,700
Mechanical ventilation	64,875	745,500	1,298	14,910
Deaths	209,000	1,903,000	4,180	38,060

#### Interventions

- Plan
- Communicate
- Expand care capacity
- Treat and provide prophylaxis
- Vaccinate
- Exposure avoidance

#### Plan

- Today's summit
- Federal "checklists"
  - -See www.pandemicflu.gov
  - -Business
  - -State and local planning
  - -Individuals and families
  - Community and faith-based organizations
  - -Education

#### Communicate

- Printed messages
  - -Flu and You
  - -Germ Stopper
  - -Cover your Cough
- Video satellite communications
  - Downlink capabilities in all hospitals, county health departments, and county extension offices
- Health alert network
- 800 MHz radio system with hospitals and health departments

## **Expand Care Capacity**

- Extra hospital beds
  - -7000 beds are available
    - 3000 are staffed
    - 4000 require supplies and staff
  - -ADPH has 600 medical cots
- Negative-pressure rooms
  - -Hospitals total of 608 rooms
  - -Community health centers 77 portable isolation equipment

## **Laboratory Testing**

- · Year-round testing for influenza
- Upgraded laboratory testing facilities

## **Auxiliary Work Force**

- Recruited and trained primarily for the Strategic National Stockpile
- 1000 pharmacists
- 300 nurses
- 350 social workers

## **Drugs to Treat or Prophylax**

- Two classes
  - -Drugs like Tamiflu®
    - Thought to be effective against avian influenza
    - Somewhat limited supply
  - -Drugs like Symmetrel®
    - Somewhat more available
    - Not currently recommended for avian influenza
    - BUT might be active against the pandemic strain
- Important for states to be able to purchase at federal, reduced prices

#### **HHS Antiviral Drug Priority Groups**

- Patients admitted to hospital
- Healthcare workers with direct patient contact
- High-risk outpatients
- Pandemic health responders
- Increased-risk outpatients
- Outbreak responders in nursing homes
- Healthcare workers in special units
- Pandemic societal responders
- Other outpatients
- Highest-risk outpatients
- Other healthcare workers with direct patient contact

#### Tamiflu® in Alabama

- Already have 4400 5-day packages for hospital workers
- Federal government offer to purchase and stockpile
  - -44 million doses paid by federal government
  - -37 million doses, \_ paid by state
- Request of conditional state appropriation of \$22 million for Tamiflu® or antivirals

#### **Vaccinate**

- Availability of vaccine will lag behind the pandemic
  - -6 months into pandemic before vaccine available
  - -Dosing uncertain
- Priority groups established by HHS

## **Challenges of Limited Supply**

- · Initial supplies will be limited
  - Not enough for all who would benefit
- How to prioritize vaccine & drugs
  - -Effective communication to the public
  - Differences of opinion about the order of priority

## **Exposure Avoidance**

- Isolation
- Masks
- · Respiratory hygiene/cough etiquette
- Wash hands
- · Increase "social distance"

#### Isolation

- Sick persons should minimize their exposure to others.
- Institutionalized sick persons should be isolated or grouped separately.
- Coughing patients should be masked.

### **Masks**

- · Healthcare workers
  - Surgical or higher mask (N-95) for personnel in close contact (within 3 feet) of person with signs of influenza
- Coughing patients
- · Coughing citizens ?
  - Probably when in public
- · Well citizens ?
  - Probably depending on the extent of illness

#### Masks

- ADPH has purchased
  - -400,000 N-95 masks for healthcare workers
  - -130,000 N-95 masks for community health centers
- ADPH is planning to purchase surgical masks for general public

# Respiratory Hygiene/Cough Etiquette

- Cover nose and mouth when coughing or sneezing.
  - -Use tissues and dispose of properly
  - -Do not use hands
- Wash hands.
  - -Soap and water
  - -Alcohol-based hand rub
- ADPH is planning to purchase waterless hand cleansers for the public.

## **Increase Social Distance**

- Quarantine exposed persons
- Close (?)
  - -Schools
  - -Group gatherings
  - -Sporting events
  - -Churches
  - -Shopping malls
  - -Office buildings
  - -Public transportation