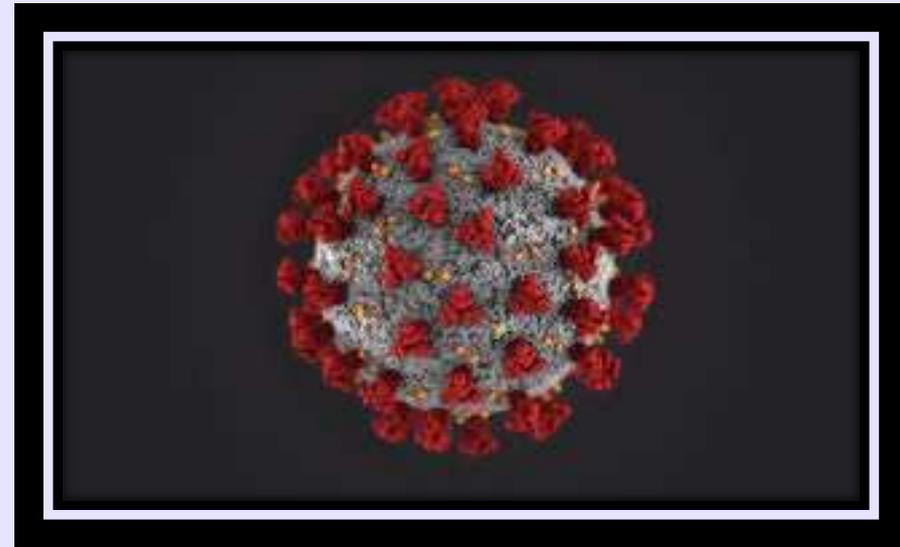
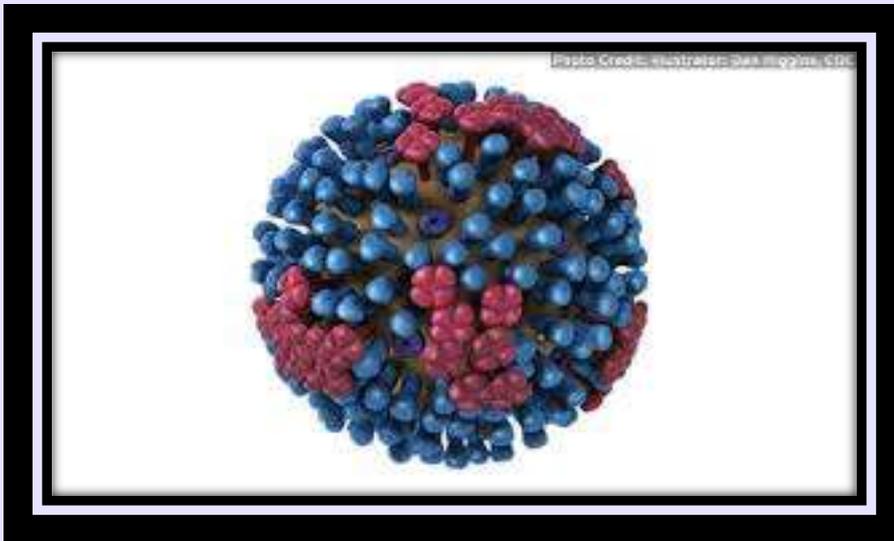


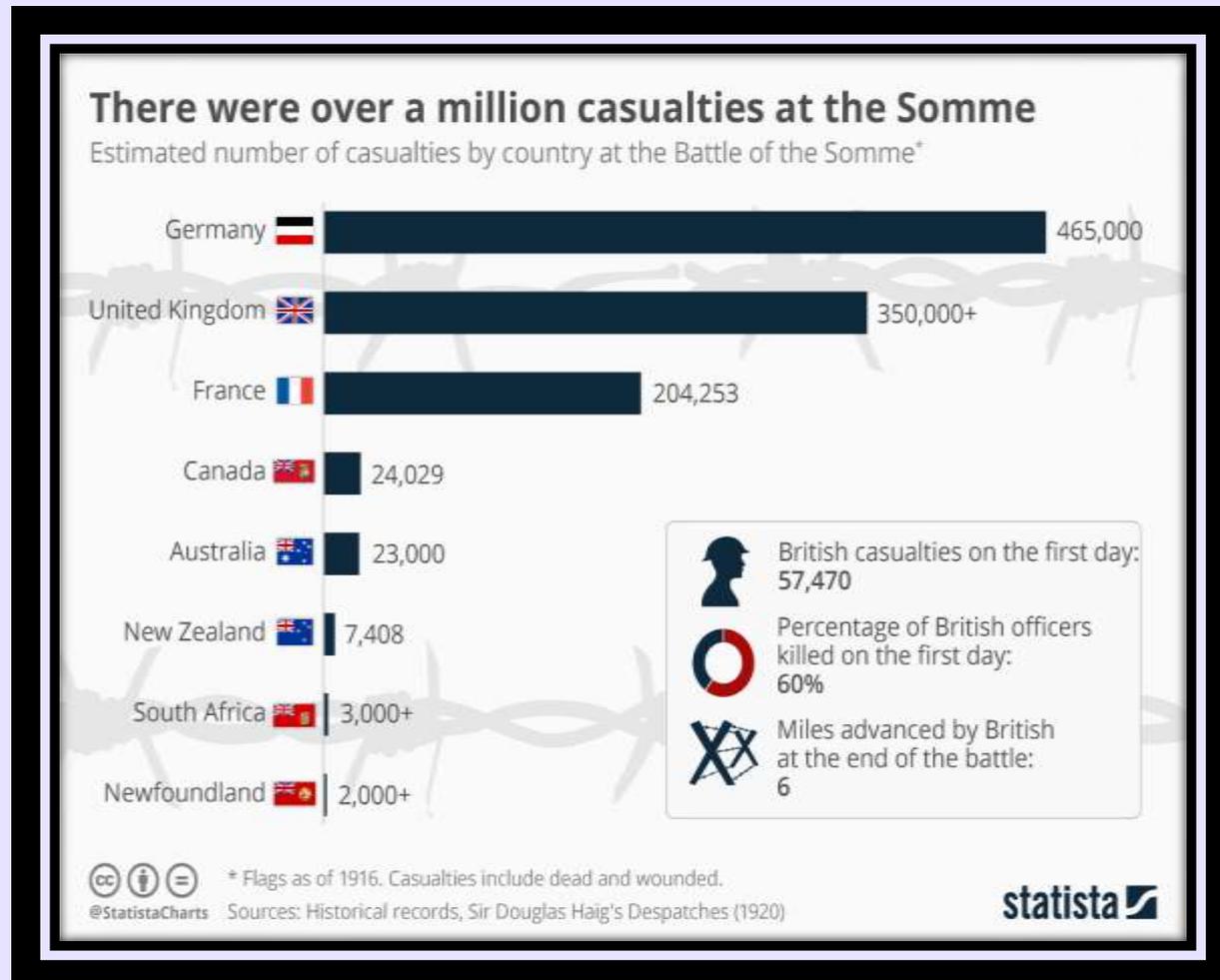
# HN Virus/Covid-19 Virus

**Virus: an infective agent that typically consists of a nucleic acid molecule in a protein coat, is too small to be seen by light microscopy, and is able to multiply only within the living cells of a host.**



# FORGOTTEN PANDEMIC

WW1 deaths overshadow influenza deaths +  
censorship





## **From the Centers for Disease Control**

"An estimated one third of the world's population (or  $\approx 500$  million persons) were infected and had clinically apparent illnesses during the 1918–1919 influenza pandemic. The disease was exceptionally severe. Case-fatality rates were  $>2.5\%$ , compared to  $<0.1\%$  in other influenza pandemics. Total deaths were estimated at  $\approx 50$  million and were arguably as high as 100 million."

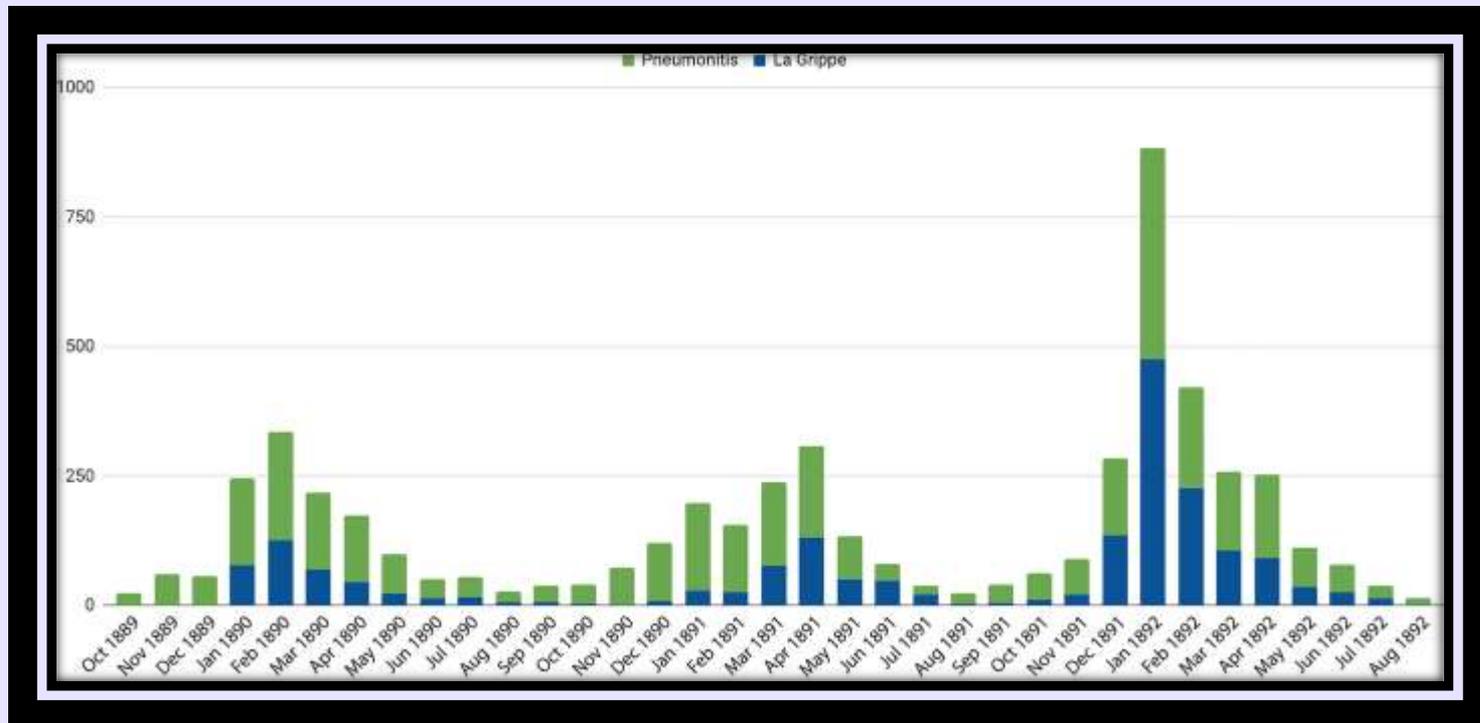
**\*\*INFLUENZA WAS NOT A REPORTABLE DISEASE IN 1918**

# Racist beliefs influence response to pandemics:

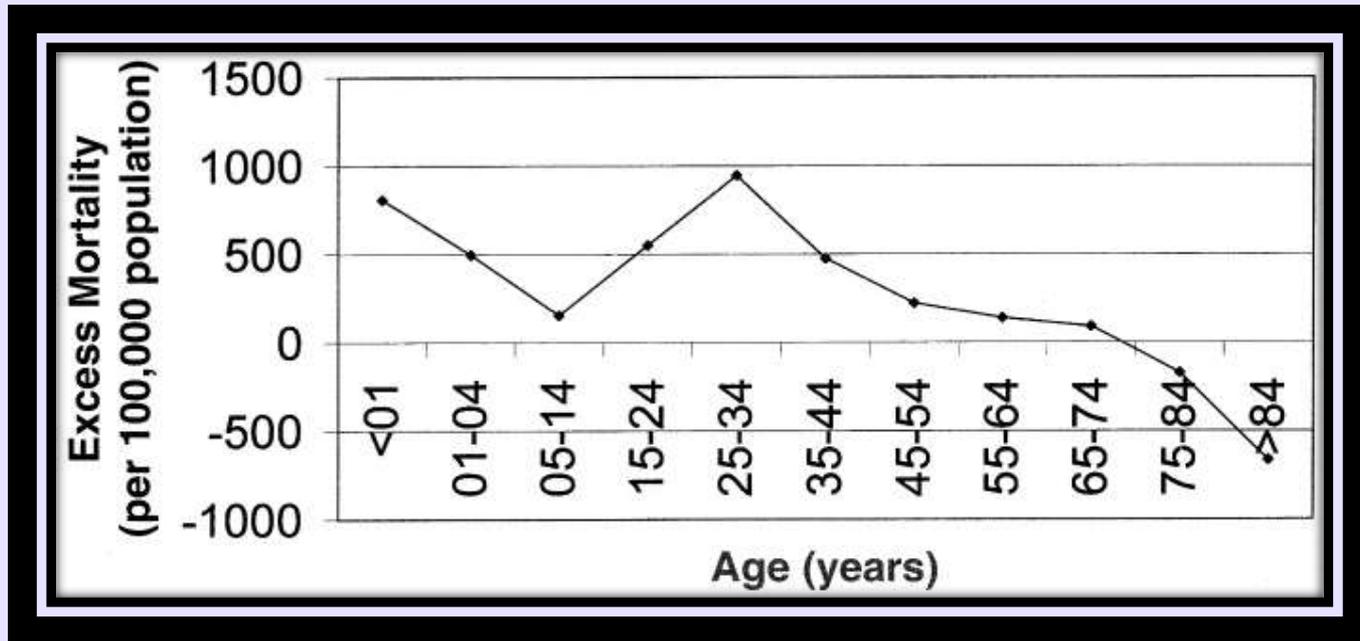
From the Journal of the American Medical Association 1900

In spite of the high mortality and morbidity rates from disease in India and China including the advance of bubonic plague, because of the “infinitely superior sanitary improvements of progressive civilization” in the west, a recurrence of the pestilence would never again assume such dramatic characteristics as displayed during the Middle Ages.

# “Russian Flu” 1899-1900



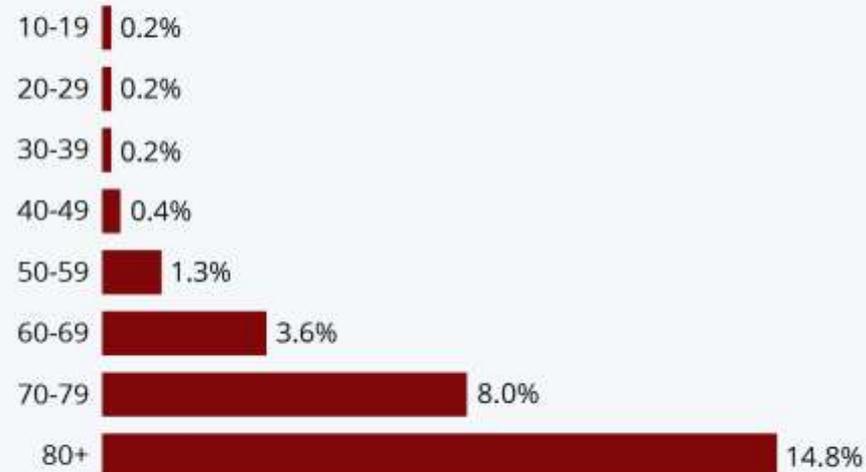
# Mortality By Age, 1918 Pandemic



# 2020 COVID-19

## Study: Elderly Most At Risk From The Coronavirus

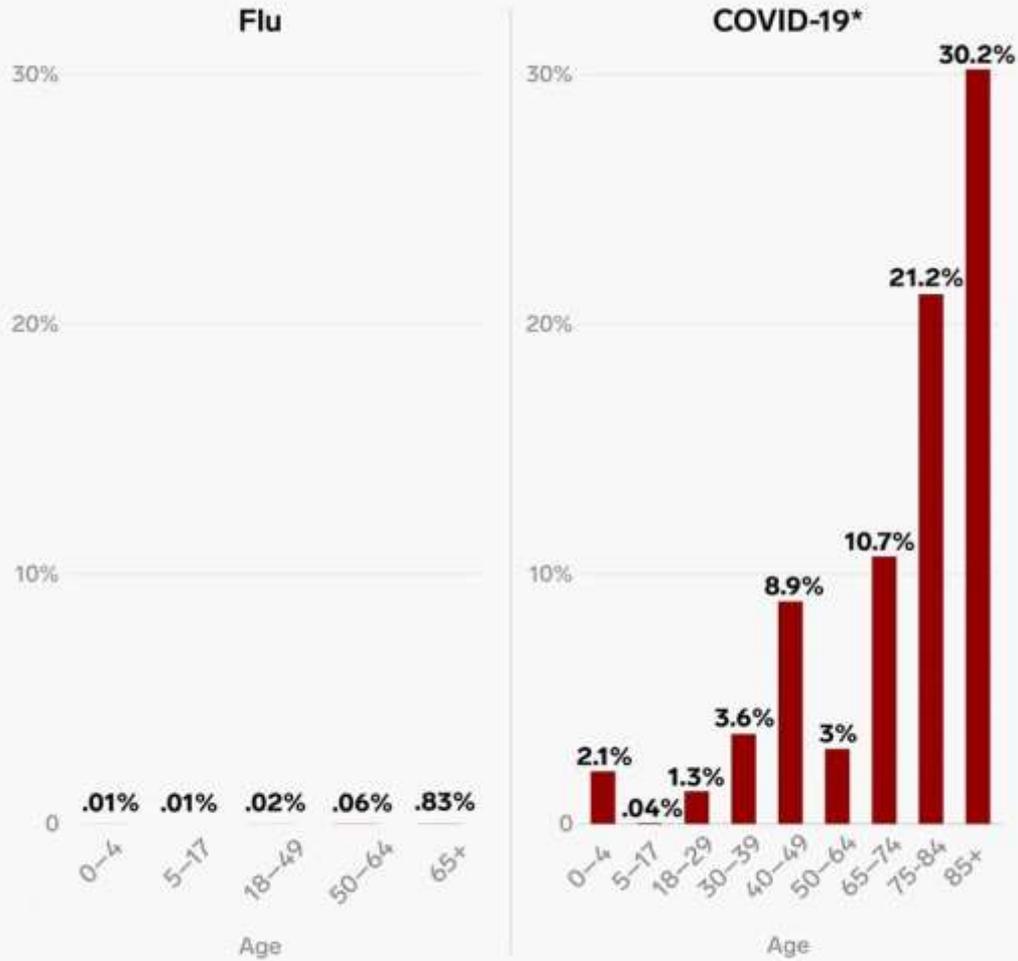
COVID-19 fatality rate by age (as of February 11, 2020)



n=44,672 confirmed COVID-19 cases in Mainland China  
Source: Chinese Centre for Disease Control and Prevention

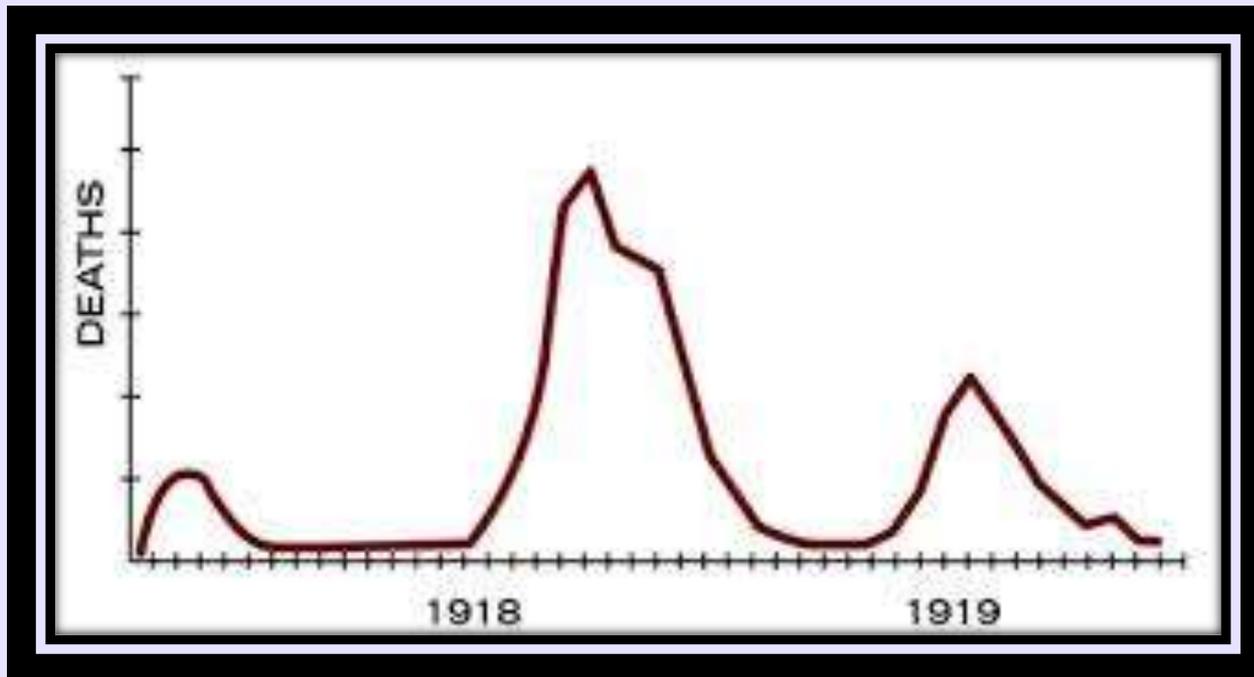


## Flu vs COVID-19 death rate, by age



Source: Centers for Disease Control and Prevention \*Updated as of June 15, 2020. BUSINESS INSIDER

# Influenza Waves 1918-1919



# Blame, 1918



# Blame, 2020

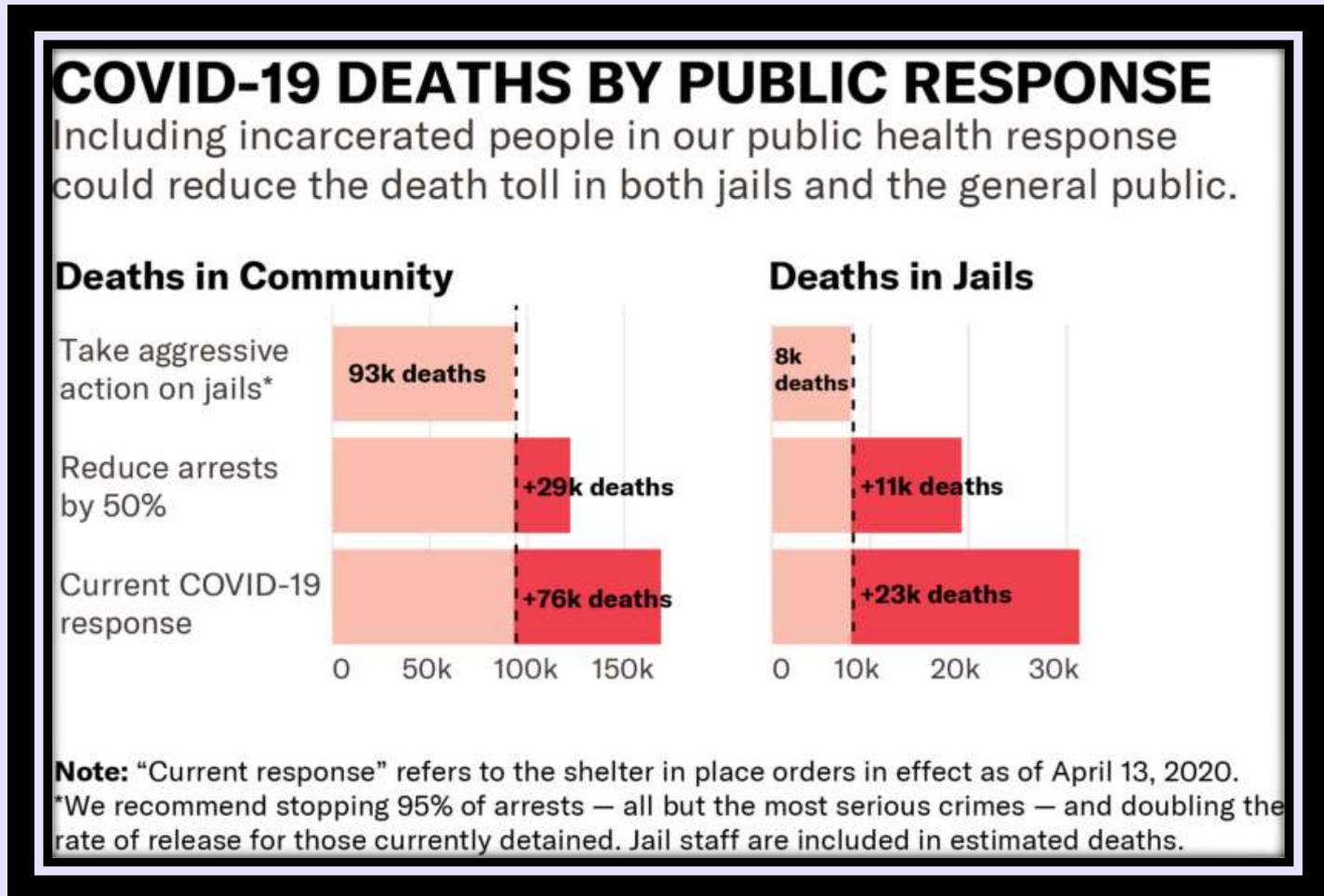
**President Donald Trump defended his habit of calling coronavirus the “Chinese virus.”**

**“It’s not racist at all,” Trump said at a White House press conference to discuss the coronavirus pandemic.**

# Deaths in Congregate Institutions & Among Minorities, 1918

- American Indians and Alaska Natives are among the tens of millions who die in the Spanish Influenza pandemic of 1918. Those living in close quarters, including students in government-run boarding schools and hospitals, are especially hard hit. Native peoples in villages across the U.S., including the territories of Hawai'i and Alaska, sustain staggering death rates. Some communities lose almost all of their residents.
- In November at the Iñupiat village of Brevig Mission, Alaska, 72 of the 80 Iñupiat residents die of Spanish Influenza in five days. The territorial government sends gold miners from Nome to dig a grave for the victims. The miners shoot steam into the permafrost on a hillside, melting an area 6 feet deep, 12 feet wide, and 25 feet long for the mass grave.

# Deaths in Congregate Institutions, 2020



# Advice from the Army Surgeon General, 1918

- Avoid needless crowding--influenza is a crowd disease
- Smother your coughs and sneezes--others do not want the germs which you would throw away
- Your nose, not your mouth, was made to breathe through--get the habit

**COVID**  
CORONAVIRUS  
DISEASE **19**

# STOP THE SPREAD OF GERMS

Help prevent the spread of respiratory diseases like COVID-19.

Avoid close contact with people who are sick.



Cover your cough or sneeze with a tissue, then throw the tissue in the trash.



Avoid touching your eyes, nose, and mouth.



Clean and disinfect frequently touched objects and surfaces.



Stay home when you are sick, except to get medical care.



Wash your hands often with soap and water for at least 20 seconds.



For more information: [www.cdc.gov/COVID19](http://www.cdc.gov/COVID19)

# ANTI-MASK MEETING

TONIGHT (Saturday) JAN. 25

DREAMLAND RINK

To Protest Against the Unhealthy Mask Ordinance

Extracts will be read from State Board of Health  
Bulletin showing compulsory mask wearing to be a failure.

Eugene E. Schmitz and other interesting speakers.

Admission Free.





Mass Grave, NY 2020

Mass Grave, Philadelphia  
1918



# Caring for the Sick, 1918



# Caring for the Sick, 2020



# Volunteerism, 1918

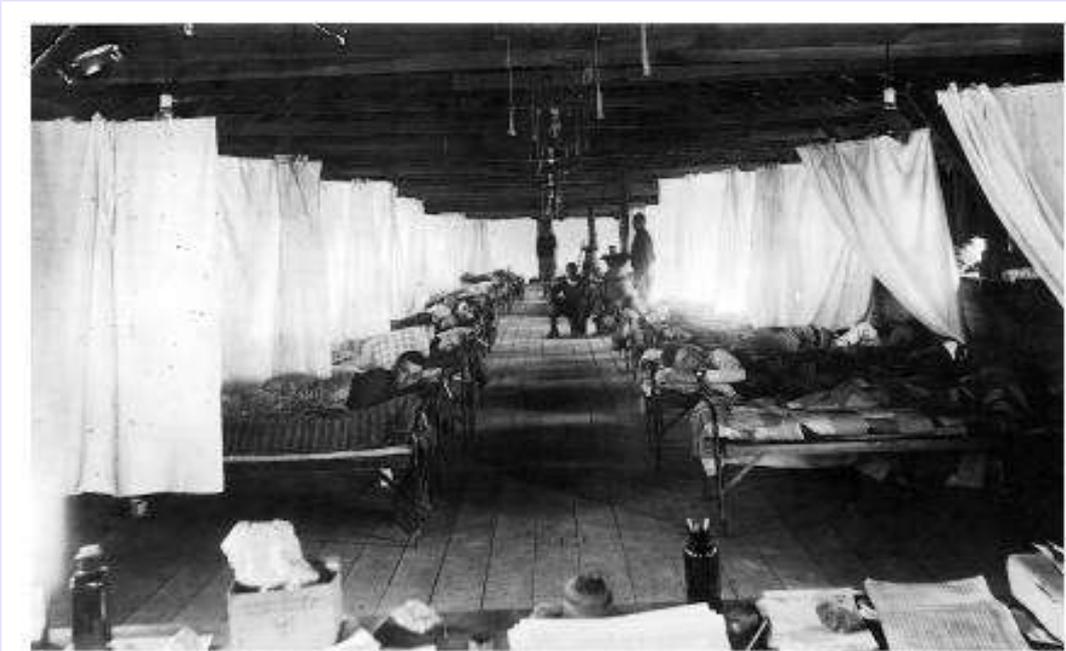
## Colored Women Aid To Battle Influenza

Maysville, Ky., Nov. 4.—The following Colored citizens have volunteered their services in the care of those ill with the influenza: Bessie Higgins, Allie Young, Mrs. Mary Davis, Mrs. L. S. Henderson, Mrs. M. J. Taylor, Mr. Harrison Anderson, to aid in cleaning. E. W. Lane will furnish hospital beds. Mrs. Patton has done more for the relief and care of the flu patients among the Colored people than anyone in town and is at the head of the movement for their relief. Many of the leading Colored citizens of the community, who should have rendered their aid in caring for those who are ill, have done very little in aiding.

The above volunteers, are going to the homes where there are "flu" patients, and are caring for them there.



# Segregated Hospital, 1918



African American orderlies tend to white soldiers recovering from influenza in the isolation barracks at Camp Bowie, Texas. In the American armed forces of WWI, most African Americans eager to serve their country found themselves relegated to support roles as cooks, casket bearers, and orderlies. Those who did serve in combat were assigned to segregated units often led by white officers. Struck by influenza, sick African American soldiers, like their civilian counterparts, were placed in segregated hospitals. Source: RG112, Records of the Army Surgeon General's Office, Box 14, Folder 710 Influenza, Camp Bowie, TX, National Archives and Records Administration, College Park, MD.

# Field Hospital, 1918



# Field Hospital, 2020



# Wards, 1918



# New: The Motorized Ambulance, 1918



Motor Corps and Canteen volunteers from the Detroit chapter of the American Red Cross take a short break from delivering supplies to influenza victims. Source: "History of the Detroit Chapter, American Red Cross, Detroit, Michigan to June 31, 1919, with Short Sketch of Michigan Branch Prior to Formation of Detroit Chapter," Records of the American Red Cross, Record Group 200, Box 637, Folder 736.2 AH Detroit, National Archives and Records Administration, College Park, MD.

# Isolation and Quarantine

- Separating and restricting the movement of those who manifested signs of the disease (this generally occurred at home)
- Separating and restricting the movement of those who might have acquired an infection via contact with a sick person or carrier

# Unproven Remedy, 1918

**PATRIOTIC DRIVE AGAINST THE "FLU"**

An onion car arrived today, Labeled red, white and blue, "Eat onions, plenty, every day, And keep away the 'Flu'!"	Cabbage, too, they read direct there, As the Bessemer Transfer tracks, And heads, three miles the ground, Enough to supply the town.
---	---

So take a trip out withering fit,  
and see what you can buy,  
With what is left from Liberty  
Bonds.  
Lay in your winter supply.

## **Eat More ONIONS**

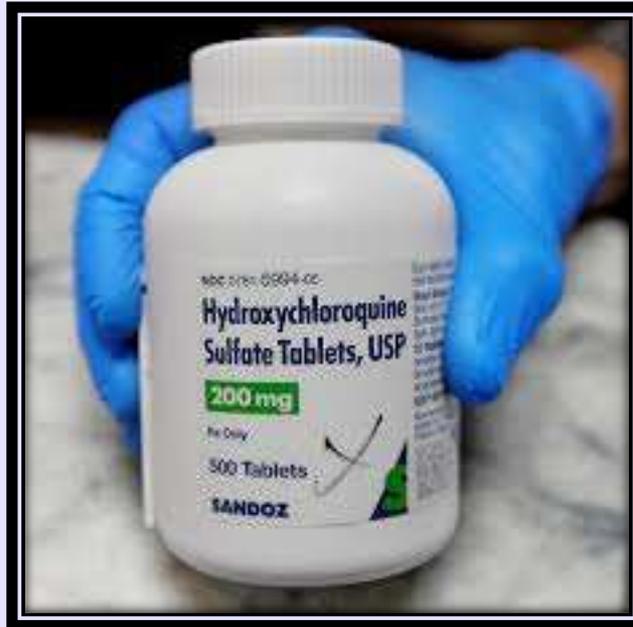
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**One of the Best Preventatives  
for Influenza.**

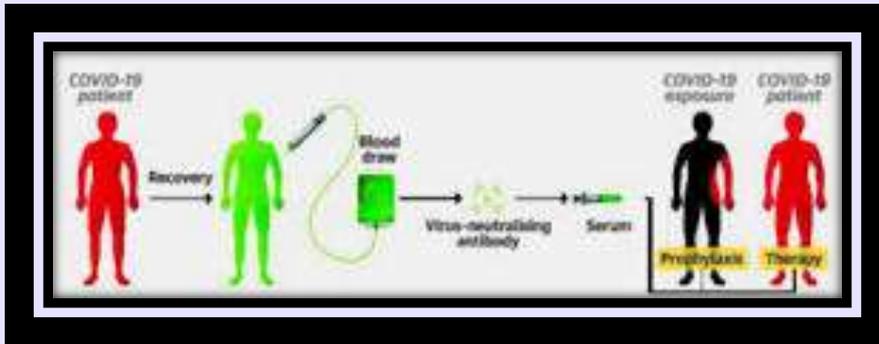
Car Load of Onions will be on sale  
on siding at Bessemer Freight  
Station

**TODAY and TOMORROW  
Will Be Sold Direct from Car**  
Bring Your Own Sacks or Baskets if Possible  
**THE PRICES ARE RIGHT**  
**J. W. GARDOCKY, Grower**

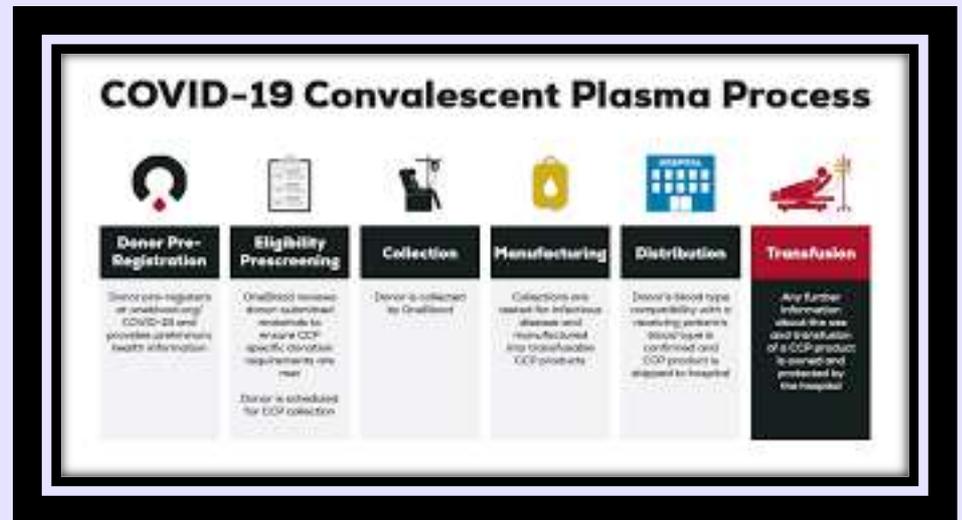
# Unproven Remedy, 2020



# 1918 Convalescent Serum



# 2020



# Lower Influenza Mortality Rate for African-Americans than Euro-Americans

- Under-reported? Unlikely
- More contracted during milder first wave and thus immune by fall?
- Segregation—kept down exposure?

# Response

- African American nursing & medical organizations & practitioners
- Segregated hospitals & clinics
- Health information in African-American press



# Frederick Douglass Hospital, Philadelphia



# African American Nurses, 1918



# High Rates of Death Among Immigrant Populations

- Crowded urban living
- Little previous influenza exposure because they came from rural areas of southern and eastern Europe
- Few physicians and nurses of same ethnic groups though did have ethnic hospitals

# Italian Hospital Philadelphia



FABIANI ITALIAN HOSPITAL

**OSPEDALE ITALIANO  
FABIANI.**

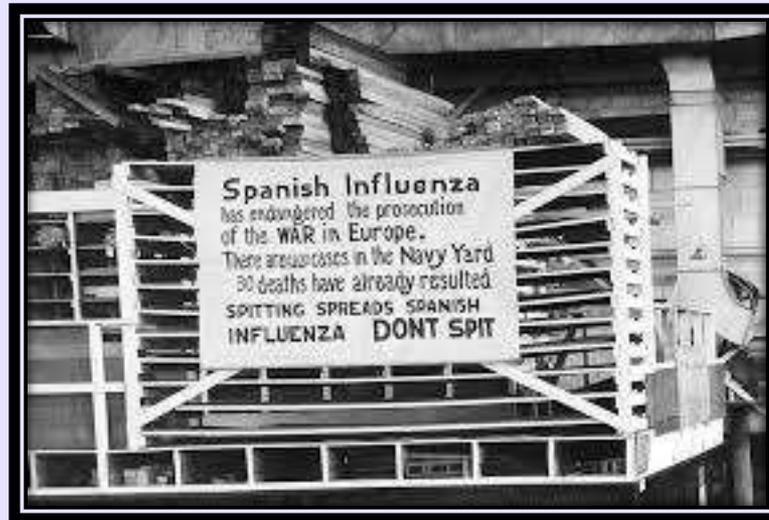
DECIMA STRADA, E. CHRISTIAN STN. PHILADELPHIA, PA.

**ORDINE DI SERVIZIO**  
— DEPARTAMENTI —

MEDICO-CHIRURGICO — MALATTIE NASO, SOLE, ORECCHI  
— MALATTIE di UTERO — MALATTIE OCCHI —  
MALATTIE CENCO-ORRARI — DENTORICO — MALATTIE BOCCA  
— OSTETRICO — FARMACEUTICO (FARMACIA FABIANI)

**UFFICIO E FARMACIA  
APERTI GIORNO E NOTTE.**

# Philadelphia Navy Yard 1918

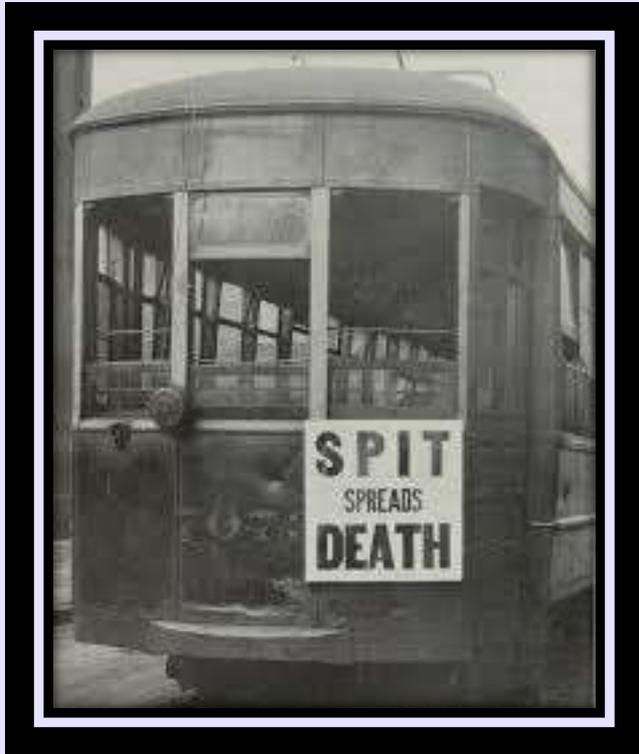


# Liberty Loan Parade 1918



# Social Distancing Through the Closing of Public Gathering Places

- Closing Schools
- Closing Saloons
- Closing Churches
- Closing Sporting Events
- Closing Theaters
- Prohibiting Public Gatherings



**NO DANGER**

To health in going to the polls.

ALL ELECTION BOOTHS have been FUMIGATED and may be visited with perfect safety.

**WEAR YOUR MASK**

Go to the voting booth as early in the day as convenient.

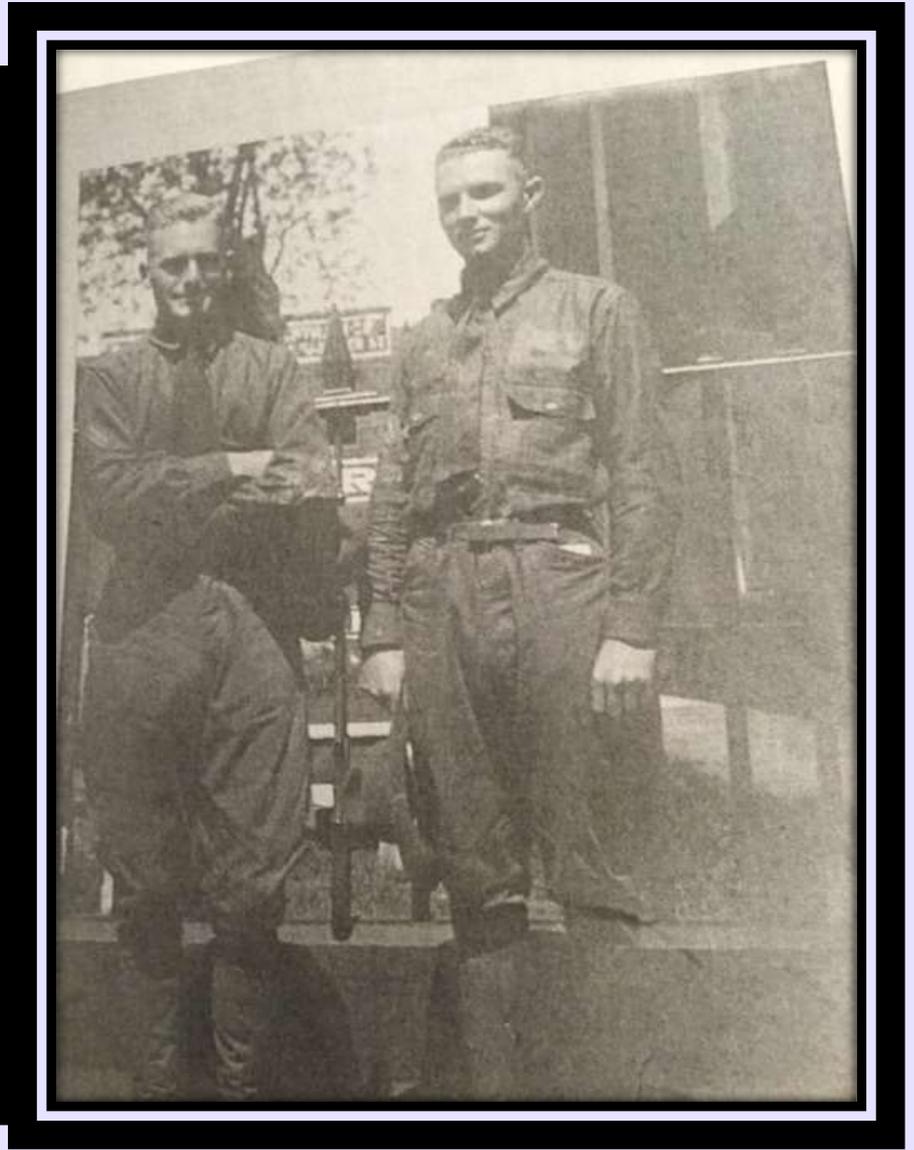
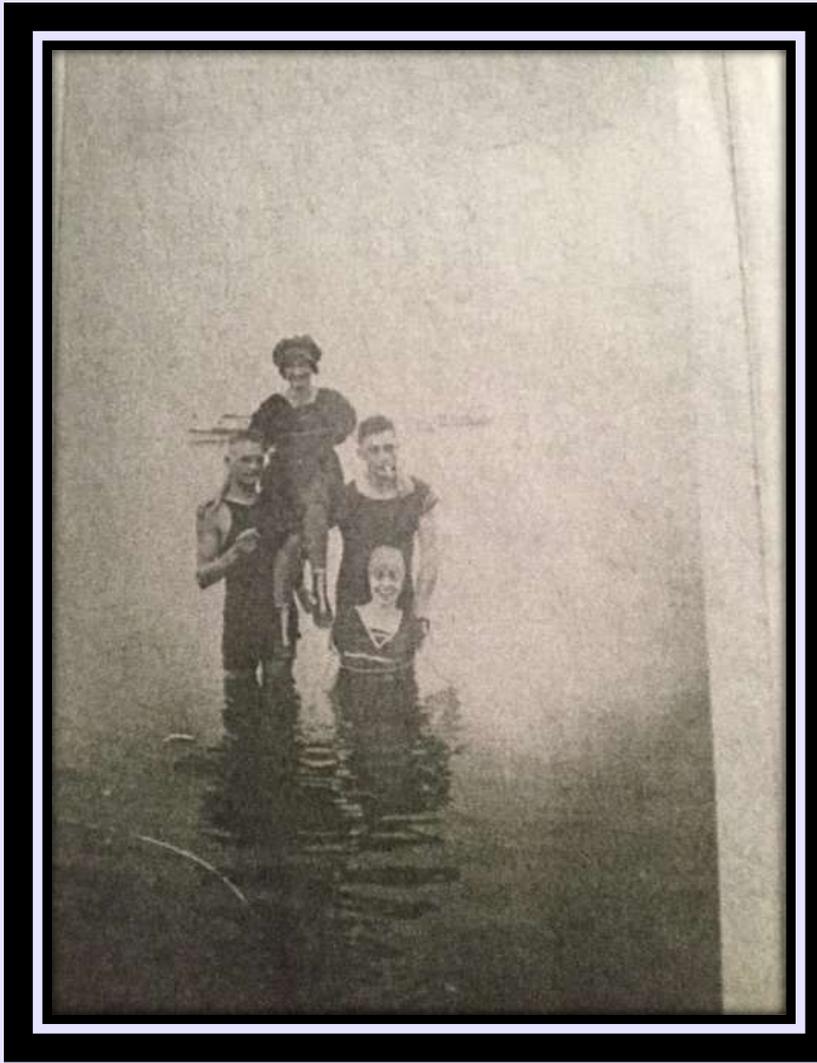
Be not apprehensive, as there is no risk whatever to your health in visiting the polls and casting your ballot.

**Dr. H. W. Kellogg,**  
Secretary State Board of Health

Figure 23. Notice Placed in *Sacramento Bee* 1918 Nov 4. From Johnson L.A. *The invisible enemy: Epidemic influenza in Sacramento, 1918-1919*. California State University, Sacramento; 1994.

# Protective Sequestration

- Some communities took steps before the flu arrived to prevent infection:
- People were prevented from leaving the site
- Outsiders were not permitted to enter until after a period of quarantine
- Often these sites had the advantage of a protective barrier or were naturally isolated



Dear Father -

I rec'd the bag O.K. and surely was surprised at the contents. Who made the knitted things? I got the blanket too. It is just the ticket.

Well, how is everything home. I hope business is rushing. Does Ralph drive much on the job yet. Say, how about Ralph in the draft? Will he have to register? I hope he doesn't because I don't think he could stand the life.

They are getting worse and worse on us here and the Influenza also helps to make things harder as what few privileges we did have are being cut down on.

Don't get frightened but I have had the Influenza for four days but I have not let the authorities know about it yet. I think I can bring myself around if I can keep up long enough. I feel much better now. The worst part of it is, it takes the life right out of you. For a couple of days I thought I would keel over every other step.

Our hospitals are overcrowded here and I think in another week the whole camp will be quarantined. The treatment you get at the hospitals is absolutely rotten they say. It is so crowded that you don't get enough to eat and it is very dirty and most of the nurses and attendants have got it too. So if you once get in you have a hard job getting out. So I am not going to the hospital if I can possibly help it. Are there any cases in Kingston?

Oh! Say! Mama said something about your getting me a razor. It wasn't in the bag. I wish you would look upstairs well and see if I didn't leave my razor there when I was home. I had them there and I thought I might have taken them out and forgotten to put them back in. I left in so much of a hurry.

Well, this is all now. Am going to lie down for awhile.

With love,

Alton

P.S. Tell Mama not to address me 7th Ob., but 15th Training B'try.

15th Tr. B'try.

P.A.C.O.T.S.

Camp Taylor, Ky.

SAT AM, Sept (21st Oct) 5.

Dear Adah -

I hate to be writing rather woeful letters but it seems as though since I have been here I have had one thing to brighten things one minute and another to knock out that bright light the next.

I rec'd the bag and blanket and was very much surprised at the contents of the bag. Who sent all the knitted things? I surely did need that sweater. It is awfully cold down here and very damp too. Well, that is one of the bright things and speaking of influenza I have had it for five days. Now don't get frightened. The Authorities don't know it. In fact, no one knows it but Fritz. And I am not going to that blooming hospital if I can help it. I feel a lot better today. I have only been in bad shape one day and that day luckily I was in charge of quarters which is a nothing to do job but hang around the barracks all day and take care of the orderly room. Well, that is all that saved me from going to the hospital because I was in awful shape. I dropped several times but there was no one around to see me so it was all right but today I feel pretty good and I think by tomorrow I'll be in real good shape. I'll tell you how you feel when you

1. A severe pain in the head and temples throb.
2. Dizziness.
3. Pain in back from kidneys to shoulders.
4. Sore throat and a cold in lungs.
5. Sometimes sick in stomach.
6. Absolutely no ambition.

And I had every one of those good and proper, but today I have nothing but a little pain in the back and a slight cold. I can't say you either get better or you get pneumonia very quick. So you see I am getting better.

There are several other things I want to tell you but I must close for now. I'll write again soon.

15 Training Bty.  
F.A.C.O.T.S.  
Camp Taylor, Ky.  
Sunday, Oct. 6, 1918

Dear Adah -

It is a beautiful morning and I am sitting on my bunk which is outside of the barracks. (We have to carry them out every morning.)

Adah, ambulances are running in every direction out here. They haven't closed the camp yet, but I think they will soon. I am coming in good shape. I am very glad I did not report it and go to the hospital. They say you are lucky if you get out alive if you once get in. I think by tomorrow I will be alright. I hope so because if I have to put in another week like I did last week it will knock me out of my commission.

What did you think of the news this A.M.? I would like to see the war end but I would also like to get to France.

Adah, you can send me some kind of a pillow if you want to. That is something I can have but haven't got. Dark color, kaki preferred.

Well, will have to study now. I have a lot to make up.

With love,

Alton

Write very often.  
Label too.

Oct. 27, 1918

Dear Mr. Miller,

Last evening I met the nurse who attended Al during his last days on earth.

However she could tell me none of the things that I wanted so much to hear as Al passed away quietly but gamely, without leaving a word for anyone. He was conscious to the very end and died with his jaws set, well aware that he was going to his Maker, but going without fear. That he left no message was due no doubt to the fact that he was waiting for me, for whom they had sent 24 hours before. But the careless messenger had mailed the letter instead of carrying it to me as he should have done. And so Al passed away without saying the thousand and one things that he would have said had I been there.

Miss McBride told me that Al had every attention and toward the end special efforts were made to save him by blood transfusions and injections which was an unusual occurrence. She said both doctors and nurses seemed to be gripped with the idea that "Miller must not die". But God decided that Miller must die and we must submit to his decision hard though it is.

No doubt it is disappointing to you and Mrs. Miller to hear no word directly from Al. But rest assured, Mr. Miller, what he didn't say he thought and the day will come when, united again in the Land of Rest, Al can tell his Mother and Dad the things he wanted so much to say on his death.

Let me know if you received in good condition the box containing Al's effects.

Remember me to Mrs. Miller, Ralph and Marjorie and believe me,

Sincerely,

Wallace G. Fitzgerald

**“We do not know what the virus is that will cause pandemic 'flu. What we do know is that Mother Nature has the recipe book and its just a matter of time before she starts cooking.”**

**Sir Liam Donaldson  
Royal College of Pathologists,  
London, 21 July 2006.**