

COVID-19 and Beaverhead County: An Overview

July 10, 2020

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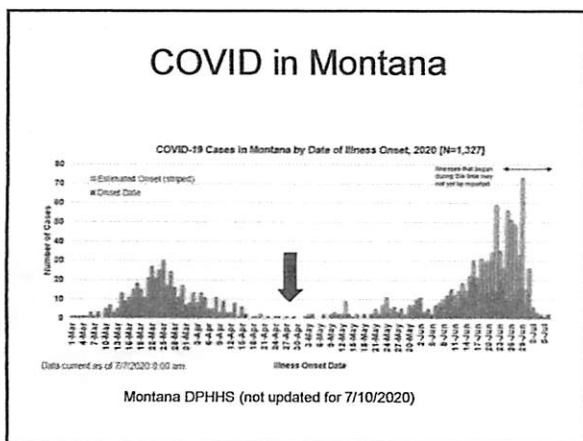
SARS-CoV-2 AKA COVID-19

- An imminent threat to Beaverhead County

	Infected	Deaths
World-wide	12,268,630	554,924 (4.52%)
United States	3,165,058	135,094 (4.27%)
Montana	1,327	25 (1.7%)

Montana DPHHS - July 10, 2020

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COVID in Montana

- Recent increase in cases due to:
 - Group gatherings
 - Weddings
 - Travel
- Increase in testing only accounts for a portion of increased number of cases

Current Status of Cases	Number of Cases (% of total)
Hospitalized	24 (2%)
Deceased	25 (2%)
Recovering	621 (42%)
Recovered and released	776 (54%)
Total number of cases	1466

Montana DPHHS - July 10, 2020

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COVID-19

- Incubation period
 - 2-14 days before viremia is detected
- Asymptomatic individuals can carry and transmit the virus
- Risk factors:
 - Age (children are less affected)
 - Obesity
 - Hypertension
 - Cancer
 - Other pre-existing conditions

COVID-19 death rate by age group
Death rate due to COVID-19 (all cases)

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Herd Immunity Unlikely

- Herd immunity may not be the answer
 - Requires >70% individuals immune
 - Natural infection
 - Vaccination
- Problems:
 - Not everyone develops protective antibodies
 - Not all antibodies are protective
 - Immunity can wane
 - Virus can mutate

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How do we stop spread of the virus??

- Mechanisms of spread:
 - Airborne particles
 - Droplets
 - Speaking
 - Singing
 - Coughing
 - Sneezing
 - Contact
 - Touching contaminated surface
 - Physical contact with infected individual



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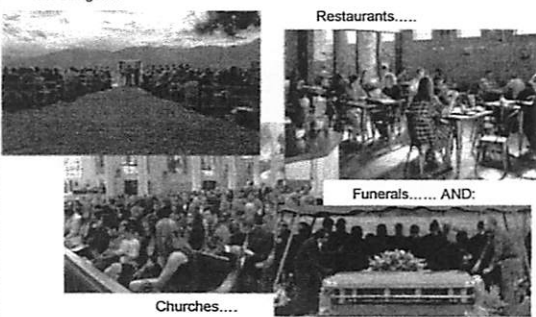
“Super-spreader” Events

Weddings.....

Restaurants.....

Funerals..... AND:

Churches....

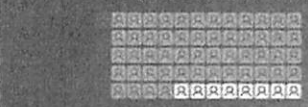


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“Health authorities say choir practice caused ‘super spread’ of 52 coronavirus cases”

<https://www.classicfm.com/music-news/coronavirus/choir-rehearsal-52-cases-super-spreader-study/>

After choir practice with one symptomatic person, 87% of group developed COVID-19.



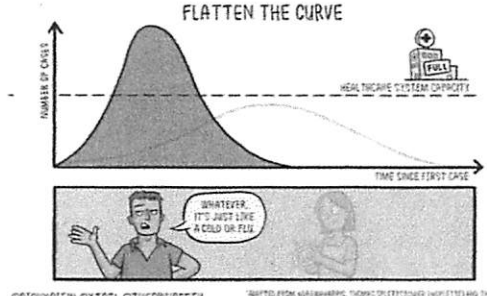
COVID-19 spreads easily

- Avoid groups
- Stay at least 6 feet apart
- Wear face coverings

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Help Stop the Spread (be part of the solution, not part of the problem)

FLATTEN THE CURVE

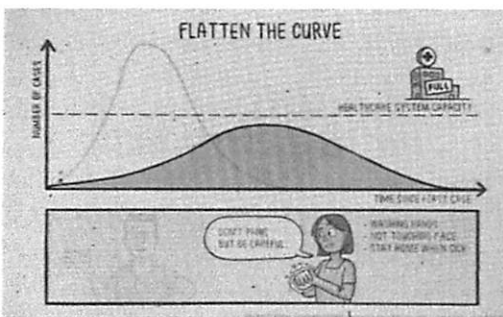


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Help Stop the Spread (be part of the solution, not part of the problem)

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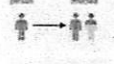

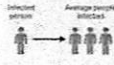



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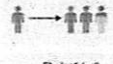
How Rapidly Can It Spread?

The average number of people that one person with a virus infects, based on the R0 scale

<p>HINT: 1.2-1.6</p> <p>Infected person → Average people infected</p> 	<p>Ebola: 1.5-2</p> <p>Infected person → Average people infected</p> 
<p>SARS: 2-4</p> <p>Infected person → Average people infected</p> 	<p>MERS: 2.5-72**</p> <p>Infected person → Average people infected</p> 

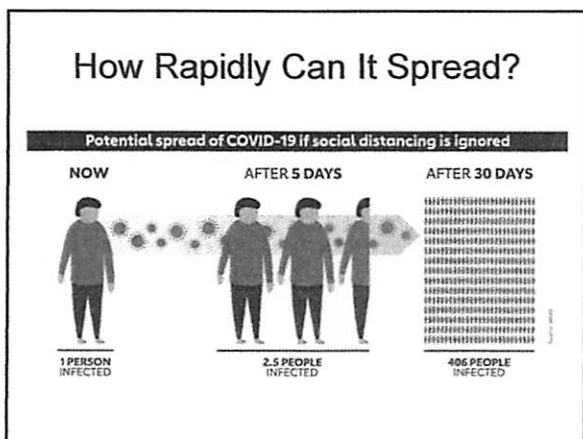
COVID-19: 2-2.5*

Infected person → Average people infected



*Source: Infectious Disease Journal, 2020. **Source: Journal of Travel Medicine, 2020. ***Source: Lancet, 2020. ****Source: Nature, 2020.

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Recommendations for Prevention

COVID-19

Help prevent the spread of respiratory disease like COVID-19

- WASH YOUR HANDS**
Wash your hands with soap and water regularly.
- COVER A COUGH OR SNEEZE**
Cover your mouth or nose with your elbow, or tissue. Dispose of tissue and wash your hands afterward.
- DON'T TOUCH**
Avoid touching eyes, nose or mouth, especially with unclean hands.
- KEEP YOUR DISTANCE**
Avoid close contact with people who are sick.
- STAY HOME**
If you experience respiratory symptoms like a cough or fever, stay home.
- GET HELP**
If you experience symptoms of COVID-19 (cough, fever, difficulty breathing), call your health care provider or local health department before seeking care.

WHO and CDC
U.S. Department of Health and Human Services

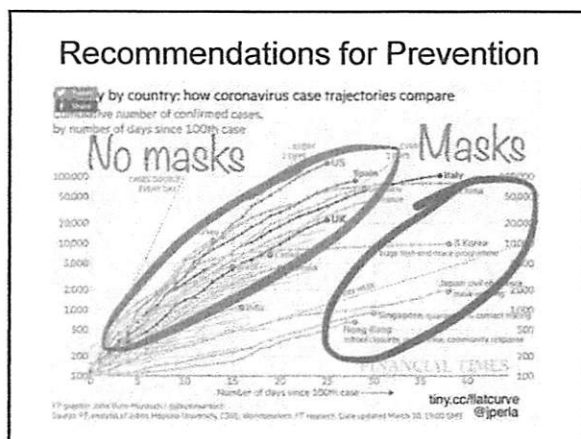
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Recommendations for Prevention

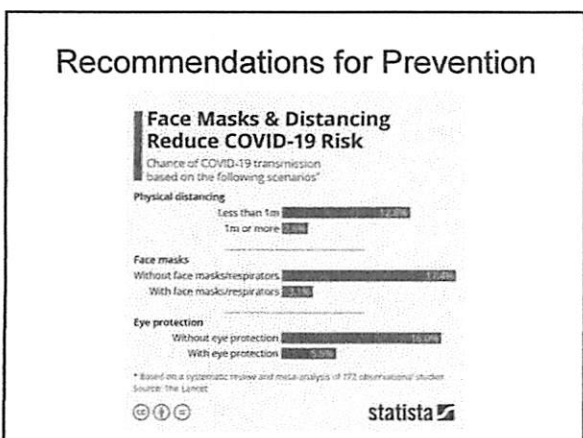
BENEFITS OF HAND WASHING WITH SOAP & WATER

- Stomach-related illnesses**
like diarrhea & worms
↓ 50%
- Respiratory illnesses**
like cold & flu
↓ 33%
- Protects against the spread of:**
Pneumonia, Cholera, Covid-19

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Economic impact of COVID-19 varies around U.S.

How has the coronavirus crisis impacted your personal financial situation? (%described) and severely hurt.

State	Percentage
Alabama	23%
Arizona	27%
Arkansas	22%
California	24%
Colorado	29%
Connecticut	32%
Delaware	25%
District of Columbia	25%
Florida	25%
Georgia	25%
Hawaii	25%
Idaho	25%
Illinois	25%
Indiana	25%
Iowa	25%
Kansas	25%
Kentucky	25%
Louisiana	25%
Maine	25%
Maryland	25%
Massachusetts	25%
Michigan	25%
Minnesota	25%
Mississippi	25%
Missouri	25%
Montana	25%
Nebraska	25%
Nevada	25%
New Hampshire	25%
New Jersey	25%
New Mexico	25%
New York	25%
North Carolina	25%
North Dakota	25%
Ohio	25%
Oklahoma	25%
Oregon	25%
Pennsylvania	25%
Rhode Island	25%
South Carolina	25%
South Dakota	25%
Tennessee	25%
Texas	25%
Utah	25%
Vermont	25%
Virginia	25%
Washington	25%
West Virginia	25%
Wisconsin	25%
Wyoming	25%

Recent research by Goldman-Sachs suggests that "a national mask mandate would slow the growth rate of new coronavirus infections and prevent a 5%GDP loss caused by additional lockdown measures"

- Hansen, June 2020


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Economic impact must be balanced with public health concerns.

- Recommendations:
 - Encourage physical distancing
 - Encourage facial coverings
 - Encourage hand washing and surface disinfection
 - Avoid large gatherings of people



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Questions?

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