

MINUTES

THE REGULAR MEETING OF THE
BOARD OF ALDERMEN
CITY OF BRANSON, MISSOURI
October 13, 2020

INTRODUCTORY

The Board of Aldermen of the City of Branson, Missouri, met in regular session in the Council Chambers of the City Hall on October 13, 2020, at 6:00 p.m. Mayor Akers called the meeting to order with the "Pledge of Allegiance," the Preamble of the Missouri Constitution and Ted Martin gave the invocation.

ROLL CALL

City Clerk Lisa Westfall called roll: Mayor Akers presiding, Julia King, Jamie Whiteis, Bob Simmons, Bill Skains, Larry Milton and Jeff Seay.

AWARDS / RECOGNITIONS

Employee of the Month

Alderman Skains presented Stephanie Crawford of the Utilities Department as the October Employee of the Month in recognition for displaying City of Branson Values.

PUBLIC COMMENT

Mayor Akers made a statement regarding decorum and stated in order to give a chance for people to speak tonight, I would like to ask if you are speaking on an item that you keep your comments succinct, to the topic and as short as possible. You will be allowed to only speak once on an item. Please do not repeat what has already been said by another speaker. Once public discussion has ended on an item and the Board starts their discussion, no additional comments will be taken from the audience, unless a Board member chooses to invite someone back to the podium. Please remember to speak into the mic, state your name and address and there is a five minute limit.

Doug Clark, 121 A Saint Andrews Street, Branson, Missouri, expressed concerns over COVID-19 and what's directing traffic on all of the things people are doing which he's mentioned before. He explained it's coming down as recommendations from the World Health Organization (WHO). He's done quite a bit of research on the United Nations for 30 years and they are not a friend of the United States. He added, when the chips are down they vote against the U.S. every time. He reported it's the main instigator of the United States' drug policy that President Nixon put in, the new policing system and education system. He noted what's going on currently in this country and explained the gentleman who instigated this has said in order to achieve a world government, it's necessary to remove from the minds of men their individualism, loyalty to family, traditions, national patriotism and religious dogmas. Mr. Clark feels COVID-19 is doing this in conjunction with all of the anarchists protesting and people who would really like to get rid of our country. He commented the guy is a psychiatrist who specializes in behavior modification which is what the World Health Organization is all about. He explained it uses all kinds of psychological programs to do that and is primarily what UNESCO is doing in our schools. There isn't any question that they aren't doing it, but people

have to dig in and read a bunch of minutia. He doesn't believe it's a coincidence Alger Hiss was involved in writing the United Nations' Charter and was caught as a spy, sitting right next to President Franklin Roosevelt practically the whole time he was in office. He pointed out that's the undercurrent that's going on under our noses and COVID-19 is being used in conjunction with everything else they've done. He feels the worst thing about it is the inconsistencies in the information provided for making decisions. He noted the first media statement on the role of mask wearing during COVID-19 was on March 6th, which said if a person is healthy they do not need to wear a mask. This was the World Health Organization's recommendation that went straight to the Centers for Disease Control and Prevention (CDC) which is where the policy goes. On April 6th the CDC changed it and said; however, the use of a mask alone is insufficient to provide an adequate level of protection and hand measures should also be adopted. He commented this stuff can be found right on its website in plain sight and he takes the time to look at it because he knows who these people are and how they operate. He recapped, on March 20th they said if a person is healthy they don't need a mask, on April 6th they said masks alone can't protect people and aren't sufficient in all cases. The CDC said COVID-19 tests have 90% false positives; 90,000 cases and only 9,000 could be verified that people had a positive test, the rest of them were false positives. He reported on September 3rd the CDC said people without symptoms do not need testing according to the New York Times and July 25th the World Health Organization emergency code definition was changed on how to record a COVID-19 death. He commented the criteria for labeling somebody who dies from ingrown toenails is going to be COVID-19 and the vital statistics part of this has reported this stuff three or four times, changing the criteria on how they count all of this stuff. Mr. Clark stated the smoking gun here is an instruction for use of diagnostic tests for the PCR tests and explained it's about a 50-page document and page 39 states they do not have a specimen of the COVID-19 virus and he asked the Board how they're telling people they have a valid virus. He feels what's being done here is out-of-bounds, because people aren't reading the documentation right. He would feel embarrassed if he were in the position of using false data to do what the City's doing.

Cynthia Carley, 301 Prairie Drive, Branson, Missouri, explained she's here tonight about the special permit that was issued to Wild World Branson to begin exhibiting large animals such as lions, tigers, ligers and servals in the facility next to the Walmart on 76 Country Boulevard. She feels this would be a huge embarrassment for the City of Branson to allow this to go on with the event of the Tiger King documentary. She explained she uses the word documentary loosely and feels it's a black eye because the City of Branson is mentioned in it specifically as someone in the City of Branson paid \$5,000 for illegal animals from Joe Exotic when he was on the run. She feels if it's allowed to exhibit these animals, Branson is going to become a laughingstock while it's trying to bring tourists back. She explained she doesn't work for anybody related to the animals, but volunteers with Turpentine Creek Wildlife Refuge in Eureka Springs, Arkansas. She's seen the animals that come in, including the eight that were just rescued two weeks ago; one lion near death from total lack. She did some undercover work on Wynnewood Park which was where Joe Exotic was in Oklahoma and she saw the animals hurt up front. She was also in the courtroom when Mr. Exotic was on trial and saw the pictures of the five tiger bodies on a tarp that was pulled out of a garbage pile. She feels people cannot allow that image to come to Branson, because it's not right to exhibit these animals. Ms. Carley believes they don't deserve to be in cages and a 10 foot by 10 foot cage isn't a great amount of space for a 450 pound tiger to spend nine hours a day in. She commented, ligers more than anything should never be exhibited; they are a hybrid animal that people breed just because they wanted to play God. They paid no attention to what happens to those animals as they age as most ligers die very young and die painful deaths. They don't have the gene that stops growth, so it's much like dwarfism in people and at a certain point their organs and their structure can't support each other and they have problems with their immune systems. Ms. Carley realizes at this point no one's said they would be doing any cub petting, but that's often the next step. She's trying to get it across to people that they may pay to handle a tiger cub, but when it's three months old and too big and dangerous to handle, it's either killed or put in a cage and never looked at again for 20 years. She added, tigers can live over 20 years and it's just not right and she compared it to if Branson tried to open a Sea World with all the bad press that's come to Sea World. Its stock has bottomed out because of it and she feels Branson is next for that if it encourages exhibiting these animals. Ms. Carley reported at Turpentine Creek they give these animals a place to live and every single animal has a grass enclosure and space and it's worked very hard to do that. It's taken 28 years to correct the mistakes people have allowed to happen in towns all around the country and she would love for Branson to be a leader and say no; it will not exhibit these animals. She reported the zoo on

Highway 248 broke this violation when they bought cubs upon opening and mentioned when someone buys a lion or tiger cub from a dealer, it's similar to a drug dealer. It's telling them if they continue to breed them, somebody's going to buy them and they're going to get money from it. She expressed she would really like Branson to stop this before it gets too out of hand. In response to the Board's questions, she explained she's talked to the Animal Control Officers, but unfortunately there aren't good regulations in place. They're trying to correct that, but is behind and the State of Missouri is also behind. She reported there are still five states in this country that don't have laws against being able to buy a lion or tiger. In Missouri, people can do it because there is a law, but it has a giant loophole in it. She explained people just need to have an enclosure, pay \$200 to \$500 or whatever the permit fee is this week and that's it. It's very true that there are more carnivores in the backyards of the United States than there are in the wild. Branson may not have the laws against it at this point, but it needs to be able to say this isn't right; we shouldn't do it. Ms. Carley mentioned there's a Big Cat Safety Act which people are trying to get on the federal level, but with everything else going on it's not getting out of committee. Since it's something that's going on in the City of Branson she believes it's something the City shouldn't turn its back on. People don't want that in the City of Branson because they're trying to bring tourism back. She asked the Board to not put another black eye on it. She reported so far the business isn't doing anything illegal according to the Animal Control Officers; it got its permit approved which is where she would have liked to stop it. It still has to meet United States Department of Agriculture (USDA), United States Fish and Wildlife Service requirements and one other regulatory agency. Ms. Carley expressed she would love to see an attitude of it may not be illegal, but let's try and not do this. Discussion.

CONSENT AGENDA

Mayor Akers asked if there were any citizens who had any items they wished to have removed from the Consent Agenda for further discussion. Hearing none, Mayor Akers asked if any member of the Board had any items they wished to have removed from the Consent Agenda. Mayor Akers requested Item Numbers 15, 16, 17 and 18 be removed from the Consent Agenda and placed as the first, second, third and fourth items on the Regular Agenda. Mayor Akers asked City Clerk Lisa Westfall to read the items on the Consent Agenda as amended. City Clerk Lisa Westfall read the following Consent Agenda items by title.

Approval of Board of Aldermen Minutes:

- a) September 22, 2020 Regular Meeting
- b) September 24, 2020 Joint Meeting

Acknowledge Receipt of Minutes:

- a) Planning Commission Regular Meeting of August 4, 2020

BILL NO. 5863

Ord. No. 2020-0107

Approving the contract renewal with WCA Waste Corporation pertaining to trash removal for the City of Branson.

Final Reading of Bill No. 5863, an ordinance approving the contract renewal with WCA Waste Corporation pertaining to trash removal for the City of Branson and authorizing the Mayor to execute the contract was read by title by City Clerk Lisa Westfall. Voting aye: King, Whiteis, Simmons, Skains, Milton and Seay. Nays: None. Motion carried. Ordinance No. 2020-0107 was duly enacted.

BILL NO. 5864
Ord. No. 2020-0108

Approving the contract renewal with John Morris Equipment & Supply Company for furnishing and maintaining coin-operated laundry equipment in the Branson Lakeside RV Park.

Final Reading of Bill No. 5864, an ordinance approving the contract renewal with John Morris Equipment & Supply Company for furnishing and maintaining coin-operated laundry equipment in the Branson Lakeside RV Park and authorizing the Mayor to execute the contract was read by title by City Clerk Lisa Westfall. Voting aye: King, Whiteis, Simmons, Skains, Milton and Seay. Nays: None. Motion carried. Ordinance No. 2020-0108 was duly enacted.

BILL NO. 5865
Ord. No. 2020-0109

Approving the contract with Snellgrove Outdoor Services LLC pertaining to mowing and weed eating services.

Final Reading of Bill No. 5865, an ordinance approving the contract with Snellgrove Outdoor Services LLC pertaining to mowing and weed eating services and authorizing the Mayor to execute the contract was read by title by City Clerk Lisa Westfall. Voting aye: King, Whiteis, Simmons, Skains, Milton and Seay. Nays: None. Motion carried. Ordinance No. 2020-0109 was duly enacted.

BILL NO. 5866
Ord. No. 2020-0110

Approving the contract of Prolawn and Landscape pertaining to tree trimming for the City of Branson.

Final Reading of Bill No. 5866, an ordinance approving the contract of Prolawn and Landscape pertaining to tree trimming for the City of Branson and authorizing the Mayor to execute the contract was read by title by City Clerk Lisa Westfall. Voting aye: King, Whiteis, Simmons, Skains, Milton and Seay. Nays: None. Motion carried. Ordinance No. 2020-0110 was duly enacted.

BILL NO. 5867
Ord. No. 2020-0111

Amending the adopted 2020 Budget for the City of Branson to adjust monies for the Parks Internal Service Fund.

Final Reading of Bill No. 5867, an ordinance amending the adopted 2020 Budget for the City of Branson to adjust monies for the Parks Internal Service Fund was read by title by City Clerk Lisa Westfall. Voting aye: King, Whiteis, Simmons, Skains, Milton and Seay. Nays: None. Motion carried. Ordinance No. 2020-0111 was duly enacted.

BILL NO. 5868
Ord. No. 2020-0112

Amending the adopted 2020 Budget for the City of Branson to adjust monies for the Water Sewer Capital Fund.

Final Reading of Bill No. 5868, an ordinance amending the adopted 2020 Budget for the City of Branson to adjust monies for the Water Sewer Capital Fund was read by title by City Clerk Lisa Westfall. Voting aye: King, Whiteis, Simmons, Skains, Milton and Seay. Nays: None. Motion carried. Ordinance No. 2020-0112 was duly enacted.

BILL NO. 5869
Ord. No. 2020-0113

Approving a reimbursement with Aldi Inc. pertaining to the installation of a Sewer Main Extension.

Final Reading of Bill No. 5869, an ordinance approving a reimbursement with Aldi Inc. pertaining to the installation of a Sewer Main Extension and authorizing the Mayor to execute the contract was read by title by City Clerk Lisa Westfall. Voting aye: King, Whiteis, Simmons, Skains, Milton and Seay. Nays: None. Motion carried. Ordinance No. 2020-0113 was duly enacted.

BILL NO. 5870
Ord. No. 2020-0114 **Approving the renewal of a contract with PDC Laboratories, Inc. for wastewater analysis for the City's Wastewater Treatment Facilities.**

Final Reading of Bill No. 5870, an ordinance approving the renewal of a contract with PDC Laboratories, Inc. for wastewater analysis for the City's Wastewater Treatment Facilities and authorizing the Mayor to execute the contract was read by title by City Clerk Lisa Westfall. Voting aye: King, Whiteis, Simmons, Skains, Milton and Seay. Nays: None. Motion carried. Ordinance No. 2020-0114 was duly enacted.

BILL NO. 5871
Ord. No. 2020-0115 **Approving the renewal of a contract with Central Power Systems & Services for generator and backup pump maintenance for the Utilities and Fire Departments.**

Final Reading of Bill No. 5871, an ordinance approving the renewal of a contract with Central Power Systems & Services for generator and backup pump maintenance for the Utilities and Fire Departments and authorizing the Mayor to execute the contract was read by title by City Clerk Lisa Westfall. Voting aye: King, Whiteis, Simmons, Skains, Milton and Seay. Nays: None. Motion carried. Ordinance No. 2020-0115 was duly enacted.

BILL NO. 5872
Ord. No. 2020-0116 **Approving the third renewal of the services contract with Specialty Air Conditioning Services, Inc. pertaining to HVAC maintenance services for the City.**

Final Reading of Bill No. 5872, an ordinance approving the third renewal of the services contract with Specialty Air Conditioning Services, Inc. pertaining to HVAC maintenance services for the City and authorizing the Mayor to execute the contract was read by title by City Clerk Lisa Westfall. Voting aye: King, Whiteis, Simmons, Skains, Milton and Seay. Nays: None. Motion carried. Ordinance No. 2020-0116 was duly enacted.

BILL NO. 5873
Ord. No. 2020-0117 **Approving the second renewal of the services contract with Bill's Electric, Inc. pertaining to electrical maintenance services for the City.**

Final Reading of Bill No. 5873, an ordinance approving the second renewal of the services contract with Bill's Electric, Inc. pertaining to electrical maintenance services for the City and authorizing the Mayor to execute the contract was read by title by City Clerk Lisa Westfall. Voting aye: King, Whiteis, Simmons, Skains, Milton and Seay. Nays: None. Motion carried. Ordinance No. 2020-0117 was duly enacted.

BILL NO. 5874
Ord. No. 2020-0118 **Approving the first renewal of the services contract with D.H. Pace Company, Inc. d/b/a Overhead Door Company of Springfield pertaining to overhead door maintenance services for the City of Branson facilities.**

Final Reading of Bill No. 5874, an ordinance approving the first renewal of the services contract with D.H. Pace Company, Inc. d/b/a Overhead Door Company of Springfield pertaining to overhead door maintenance services for the City of Branson facilities and authorizing the Mayor to execute the contract was read by title by City Clerk Lisa Westfall. Voting aye: King, Whiteis, Simmons, Skains, Milton and Seay. Nays: None. Motion carried. Ordinance No. 2020-0118 was duly enacted.

Mayor Akers opened the floor for a motion to approve all items on the Consent Agenda as amended. Alderman Skains so moved, seconded by Alderman Milton. Voting aye: King, Whiteis, Simmons, Skains, Milton and Seay. Nays: None. Motion carried.

REGULAR AGENDA

Mayor Akers left the meeting at 6:24 p.m. He disclosed his conflict of interest pertaining to the next four items due to his son's involvement in the insurance business. Acting President Simmons presided over the meeting.

BILL NO. 5875

Ord. No. 2020-0119

Approving the 2021 Medical Insurance Premiums from Anthem Blue Cross and Blue Shield for the City of Branson.

Final Reading of Bill No. 5875, an ordinance approving the 2021 Medical Insurance Premiums from Anthem Blue Cross and Blue Shield for the City of Branson and authorizing the Mayor to execute the contract was read by title by City Clerk Lisa Westfall. Human Resources Director Jan Fischer was available to answer questions. Acting President Simmons asked for a motion approving Bill No. 5875. Alderman Skains so moved, seconded by Alderman Milton. Acting President Simmons asked for anyone in the audience wishing to speak regarding this matter. Hearing none, Acting President Simmons asked for comments from the Board. Discussion. Voting aye: King, Whiteis, Simmons, Skains, Milton and Seay. Nays: None. Absent: Akers. Motion carried. Ordinance No. 2020-0119 was duly enacted.

BILL NO. 5876

Ord. No. 2020-0120

Approving the 2021 Life & AD&D Insurance Premiums from Anthem Life Insurance Company for the City of Branson.

Final Reading of Bill No. 5876, an ordinance approving the 2021 Life & AD&D Insurance Premiums from Anthem Life Insurance Company for the City of Branson and authorizing the Mayor to execute the contract was read by title by City Clerk Lisa Westfall. Human Resources Director Jan Fischer was available to answer questions. Acting President Simmons asked for a motion approving Bill No. 5876. Alderman Skains so moved, seconded by Alderman Milton. Acting President Simmons asked for anyone in the audience wishing to speak regarding this matter. Hearing none, Acting President Simmons asked for comments from the Board. Discussion. Voting aye: King, Whiteis, Simmons, Skains, Milton and Seay. Nays: None. Absent: Akers. Motion carried. Ordinance No. 2020-0120 was duly enacted.

BILL NO. 5877

Ord. No. 2020-0121

Approving the 2021 Dental Insurance Premiums from Delta Dental of Missouri for the City of Branson.

Final Reading of Bill No. 5877, an ordinance approving the 2021 Dental Insurance Premiums from Delta Dental of Missouri for the City of Branson was read by title by City Clerk Lisa Westfall. Human Resources Director Jan Fischer was available to answer questions. Acting President Simmons asked for a motion approving Bill No. 5877. Alderman Skains so moved, seconded by Alderman Milton. Acting President Simmons asked for anyone in the audience wishing to speak regarding this matter. Hearing none,

Acting President Simmons asked for comments from the Board. Discussion. Voting aye: King, Whiteis, Simmons, Skains, Milton and Seay. Nays: None. Absent: Akers. Motion carried. Ordinance No. 2020-0121 was duly enacted.

BILL NO. 5878
Ord. No. 2020-0122

Approving the City of Branson's Employer and Employee Costs for 2021 Medical, Dental and Life Insurance Coverages and the City's contributions to Employee Health Savings Accounts.

Final Reading of Bill No. 5878, an ordinance approving the City of Branson's Employer and Employee Costs for the 2021 Medical, Dental and Life Insurance Coverages and the City's contributions to Employee Health Savings Accounts was read by title by City Clerk Lisa Westfall. Human Resources Director Jan Fischer was available to answer questions. Acting President Simmons asked for a motion approving Bill No. 5878. Alderman Skains so moved, seconded by Alderman Milton. Acting President Simmons asked for anyone in the audience wishing to speak regarding this matter. Hearing none, Acting President Simmons asked for comments from the Board. No discussion. Voting aye: King, Whiteis, Simmons, Skains, Milton and Seay. Nays: None. Absent: Akers. Motion carried. Ordinance No. 2020-0122 was duly enacted.

Mayor Akers returned to the meeting at 6:32 p.m.

RESOLUTION NO.
2020-R019

Certifying the 2020 LAGERS Delegates.

A Resolution certifying the 2020 LAGERS Delegates was read by title by City Clerk Lisa Westfall and a staff report was provided by Human Resources Director Jan Fischer. Mayor Akers asked for a motion adopting the resolution. Alderman Skains moved to adopt, seconded by Alderman Milton. Mayor Akers asked for anyone in the audience wishing to speak regarding this matter. Hearing none, Mayor Akers asked for comments from the Board. Discussion. Mayor Akers called for a vote on the resolution. Voting aye: King, Whiteis, Simmons, Skains, Milton and Seay. Nays: none. Motion carried. Resolution No. 2020-R019 was adopted.

RESOLUTION NO.
2020-R020

Resolution of the City of Branson, Missouri, stating intent to seek funding through the Community Development Block Grant Program and authorizing the Mayor to pursue activities in an attempt to secure funding.

Public Hearing and a Resolution of the City of Branson, Missouri, stating intent to seek funding through the Community Development Block Grant Program and authorizing the Mayor to pursue activities in an attempt to secure funding was read by title by City Clerk Lisa Westfall. Mayor Akers opened the public hearing and a staff report was provided by Finance Director Jamie Rouch. She explained the City is attempting to apply for a Community Development Block Grant through the state that would help fund the Flood Protection for the Wastewater Treatment Plant. She introduced Brandon Jenson, Associate Planner of the Southwest Missouri Council of Governments (SMCOG), to provide further information on this item. Mr. Jensen explained the purpose of this hearing is to provide information on the application the City intends to submit for two different pots of funds under the Community Development Block Grant (CDBG) program which is administered through the Missouri Department of Economic Development. Mr. Jensen stated this project is Flood-Proofing the Compton Wastewater Treatment Plant located at 601 Compton Drive, Branson, Missouri, 65616. He stated the CDBG program requires applications meet a national objective and he explained the two objectives for this project are urgent need mitigation and long-term recovery; both of which relate back to the flood of 2017 when the City was forced to erect temporary flood protections to

prevent the wastewater treatment plant from being inundated. The purpose of this project is to design and construct a new flood wall that will completely encompass the wastewater treatment plant. It will be primarily a ring levy wall, nine feet above elevation plus an additional three feet to protect beyond the 100 year floodplain. It will include two flood gates, allowing entrance and exit of the facility during normal events and can also be raised to provide complete waterproof protection at the entrance points of the facility when necessary. It also includes a few dewatering wells for a structure that's not able to be encompassed in the ring levy and the wall length is approximately 2,200 linear feet and could potentially be driven down to bedrock. Mr. Jensen explained he's waiting on final geo-tech work to determine how deep the wall will have to be driven down in order to make sure the water doesn't bubble up underneath and he reiterated the wall would be nine feet above grade plus three feet for protection. The displacement of residents isn't anticipated since it doesn't involve the acquisition of any residential properties. Mr. Jensen reported the estimated total project cost is \$10,752,038.00 and he mentioned a previous application was brought to the Board and Economic Development Administration, which is a federal agency, and the City was awarded \$3 million to go directly towards the construction line item of this project. He explained two other CDBG grant funding pots are being applied for; long-term recovery and mitigation. Mitigation is anticipated to be a \$5 million application, all of which will go to the construction line item and the CDBG long-term recovery is going to be \$2,752,038.00. He commented, \$1,633,538.00 of that will be the construction line item, so that line item is anticipated to be fully funded across the three grant projects. Long-term recovery also includes \$1,112,000.00 for engineering which is also fully funded by that one application. It also includes \$5,000 of administration and \$1,500 of pre-award costs which helps cover the work SMCOG is doing to make sure the City's eligible to apply for these projects. He commented on the timeline for the project and mentioned it's been identified that it will be able to receive environmental clearance and will require an in-depth environmental review which his office has already started. It's anticipated clearance will be received March 2021, construction will start February 2022 and there will be some final design work that needs to occur during the intermediary phase. The project is anticipated to be 50% complete in August 2022, fully complete in February 2023 and the grants closed out April 2023. Mr. Jensen stated the project includes only the City of Branson, but does include his office as a sub-applicant to provide project management and grant administration services. His organization doesn't anticipate any environmental impacts and is currently undergoing environmental review. It's already received a no effect determination from the State Historic Preservation Office and is also beginning consultations with the Fish and Wildlife Service. This project will include the removal of 36 trees, some of which are considered to be potential habitats for two species of endangered bats. He explained his organization is working with that office now to make sure the trees are only torn down when the bats aren't anticipated to be roosting in them. Mr. Jensen reported there are no anticipated environmental impacts to the project from the surrounding environment. He mentioned the required permits include a local flood plain development permit issued by the City, land disturbance permit issued by the state and two federal permits. The first federal permit is called federal 401 which is required under the Clean Water Act when there's any potential change to discharge into navigable waters and since this is a Wastewater Treatment Plant, it's anticipated this will be required. The federal 404 permit is also required under the Clean Water Act whenever there's a possibility of dirt being discharged into navigable water ways. He explained it will be required to make sure that there's silt control fencing and other measures to make sure there's not significant run off into Lake Taneycomo. Mr. Jensen reported there are potential modifications in the allowed timeframe for land clearance, so the project timeline may have to be modified a little to make sure the trees are torn out when it doesn't impact the endangered bat species. It will be required to have general soil erosion and water quality protection measures and the environmental review will begin after the grants are both awarded. He mentioned a preliminary environmental review for the economic development administration grant has been completed which is the \$3 million that the City's already been provisionally awarded. He explained the environmental review will determine which level is required to be analyzed as it basically identifies the type of activities that will be done and determines how in-depth of a study will have to be completed. Construction and design activities are not allowed to be completed until the environmental clearance is completed, which is the March 2021 timeline. It will include the State Historic Preservation Office consultation with any Native American tribes and any other environmental agencies and it will be required to complete an analysis according to statutory checklists. He explained this is looking at the potential of any hazardous materials to be present, the potential impacts to flood plains and wetlands, noise, water quality and all of those environmental factors that need to be considered. Additionally, an eight-step decision making process will be completed; basically making sure there's no other alternative to the project being proposed, which is a ring levy wall. After all of this is

completed, the City's Mayor will sign the environmental review record which will be submitted to the agency and will go through a series of review periods from various state and federal agencies, culminating in the City submitting a request for the release of funds. He explained, it's basically the City saying it's done this analysis, here are the conditions that it'll need to complete and then it will be issued the authorization to use grant funds. That's when it can start to complete those design and construction activities. He explained he's been designated as the City's preparer for the environmental review and restated his name is Brandon Jenson, Associate Planner with Southwest Missouri Council of Governments (SMCOG). He offered to answer any questions.

Mayor Akers asked for anyone in the audience wishing to speak regarding this matter. Hearing none, Mayor Akers asked for comments from the Board. Discussion. Mayor Akers closed the public hearing and asked for a motion adopting the resolution. Alderman Skains so moved, seconded by Alderman Milton. Mayor Akers asked for anyone in the audience wishing to speak regarding this matter. Hearing none, Mayor Akers asked for comments from the Board. Discussion. Voting aye: King, Whiteis, Simmons, Skains, Milton and Seay. Nays: none. Motion carried. Resolution No. 2020-R020 was adopted.

**RESOLUTION NO.
2020-R021**

Approving a Special Event Permit Application for Branson's Adoration Parade.

A Resolution approving a Special Event Permit Application for Branson's Adoration Parade was read by title by City Clerk Lisa Westfall and a staff report was provided by Planning and Development Director Joel Hornickel. Mayor Akers asked for a motion adopting the resolution. Alderman Skains moved to adopt, seconded by Alderman Simmons. Mayor Akers asked for anyone in the audience wishing to speak regarding this matter. Hearing none, Mayor Akers asked for comments from the Board. Discussion. Mayor Akers called for a vote on the resolution. Voting aye: King, Whiteis, Simmons, Skains, Milton and Seay. Nays: none. Motion carried. Resolution No. 2020-R021 was adopted.

**RESOLUTION NO.
2020-R022**

Support for a Housing Development by North Star Housing, LLC, located at 325 Wildwood Drive, Branson, Missouri.

A Resolution of Support for a Housing Development by North Star Housing, LLC, located at 325 Wildwood Drive, Branson, Missouri, was read by title by City Clerk Lisa Westfall and a staff report was provided by Planning and Development Director Joel Hornickel and Andrew Danner of North Star Housing, LLC. Mayor Akers asked for a motion adopting the resolution. Alderman King moved to adopt, seconded by Alderman Skains. Mayor Akers asked for anyone in the audience wishing to speak regarding this matter. Hearing none, Mayor Akers asked for comments from the Board. Discussion. Mayor Akers called for a vote on the resolution. Voting aye: King, Whiteis, Simmons, Skains, Milton and Seay. Nays: none. Motion carried. Resolution No. 2020-R022 was adopted.

**BILL NO. 5879
Ord. No. 2020-0123**

Extending Ordinance 2020-0072 to combat the community spread of COVID-19.

First Reading of Bill No. 5879, an ordinance extending Ordinance 2020-0072 to combat the community spread of COVID-19 was read by title by City Clerk Lisa Westfall and a staff report was presented by City Attorney Chris Lebeck, Dr. David Barbe of Mercy Hospital, Dr. Art Hale of Mercy Hospital, William Mahoney, President and CEO of Cox Medical Center, Dr. Shawn Usery of Cox Medical Center and Lisa Marshall, Director of the Taney County Health Department. Mayor Akers asked for a motion approving Bill No. 5879. Alderman King so moved, seconded by Alderman Skains. Discussion.

The meeting recessed at 8:02 p.m. and reconvened at 8:08 p.m.

Mayor Akers asked for anyone in the audience wishing to speak regarding this matter. Mayor Akers asked speakers to limit their comments to three minutes or less and please don't repeat what everyone else has said. If you agree with someone, say I agree with him or whatever. I would ask you that if you're a citizen of Branson, live in Branson or are a Branson tax payer, you get a tax bill that you pay, you can be involved at the podium. Otherwise, that's the only speakers we'll allow.

Brian Seitz, 1805 Miller Drive, Branson, Missouri, introduced himself as the Republican Candidate for the 156th District State Representative. He stated over the past eight months, Americans have seen hardship, Branson citizens have seen hardship and most of it has been caused by government overreach and unnecessary mandates. Since sin entered the world, disease, calamities and viruses have affected billions of people. This latest calamity primarily affects those with pre-existing conditions, like any virus, but is not being fought with science or factual data, but with fear driven by the news and social media. People continue coming to the Board with real-life data and statistics and the Aldermen choose to ignore facts in favor of pushing an agenda. As Vice President Pence so eloquently stated recently, you are entitled to your own opinion, but you're not entitled to your own facts. The difference between COVID-19 and the bird flu, H1N1 and other viruses, is that healthy people are now being forced through coercion to limit business activity and put ineffective masks over their faces. People are being told this is the new normal which he saw here this evening, but he hopes it's only a temporary insanity. As he's said in previous meetings, he's not anti-mask; he's anti-government control and interference. If a person decides to wear a mask that's their right; conversely, if they choose not to wear a mask that is also their right. Area businesses are doing a great job encouraging tourists to be safe and many protective measures have been put in place. He commented though people have never cured the common cold, a vaccine will be released soon as a cure-all for COVID-19. He asked the Board if it will continue with the mandates and try to force people to be injected with a minimally-tested final solution. He clarified that wasn't a rhetorical question because the Board owes citizens an answer. Mr. Seitz stated it's time to remove the shackles and let people be free to make their own decisions regarding health. There is a political mindset that rationalizes the slogan government knows best and those of this mindset are also willing to give up essential liberty to purchase temporary safety. He's of the opinion that good government promotes freedom and liberty, not restriction. He urged the Board to stop the perpetual mask mandate, take its foot off of the throat of local businesses and let the people who live in Branson breathe the free air. Let them make their own decisions about wearing and requiring masks at their businesses, because the American people are a free people and the Aldermen are public servants. He asked the Board to serve people their freedoms and hold the government overreach; let businesses open and remove itself from the equation.

Audrey Richards, 265 Buzz Street, Branson, Missouri, introduced herself as a write-in candidate for representing Missouri's 7th District in Congress which is Billy Long's seat. She's currently running a federal campaign and for the fourth time now, she's taken an entire day out of her campaign to come here and represent the pro-mask people. She recalled last time there were only two people in favor and she knows there's a hefty majority of people in Branson who don't want to come here because it's scary and tough to go outside. She added, especially in an enclosed space with a lot of people and she believes one side is more heavily represented than the other. She feels an obligation to be here and has met with City Council members all over this district in 10 different counties. She addressed Alderman Milton's questions to doctors about how the information is presented. During one of her meetings, a Joplin City Council Member showed her a graph that trended downward, but went up once the mask mandate ended. She explained they are getting the same information this Board is getting about the effectiveness of masks. Ms. Richards pointed out the difference is whenever this Board makes decisions, it's not doing it out of politics, but out of care and concern for the citizens of this City. She knows it's hard to do in front of a lot of people who oppose this and she thanked the Board for caring about the people of the City. She's impressed the Board is showing spine and integrity when so many other communities have been loathed to do so. She's been to 10 different counties and feels the safest here in Branson because of the mask mandate. In places that don't have it she doesn't feel safe and she hopes the Board extends it because it makes her feel better. Ms. Richards believes businesses are hurting because people aren't traveling which is hurting the tourism industry. She doesn't feel it's due to the mask mandate, but that the mask mandate is actually promoting

Branson's sales. She thinks it shows Branson cares about people which is really important and says a lot. Ms. Richards believes if people choose not to wear a mask that says a lot about them and their priorities as a person. She thanked the Board for its time.

Joshua Pope, 1812 Neihardt Street, Branson, Missouri, believes people have heard his speeches before and his account of having COVID-19. Dr. Barbe answered quite a few questions he didn't have the answers to which he appreciates and he reported there's no legal, moral or scientific basis to not wear a mask. Mr. Pope explained it's allowed legally, is within the law and Constitution and what isn't specifically protected in the Constitution is up to the states. What's not specifically in a state's Constitution and law is up to local government, depending on the state's government type. He reported Missouri is one of those government types, giving a municipal city the right to do things as long as it doesn't violate the Missouri Constitution or law. The Supreme Court has stated several times that so long as a law is rational to protect the people it can be upheld. He explained rationality tests and recalled when public smoking was banned it went to the Supreme Court because people were arguing that it infringed on their Constitutional rights. They did a rationality test of medical professionals and scientists, asking whether or not secondhand smoke was dangerous. They all said it's dangerous, kills people and they felt it was a rational decision to ban public smoking. Mr. Pope feels it's the same thing here; there are scientists, medical professionals, experts and people more educated and credible than him coming here saying the same thing. They believe it's a rational decision to make these mandates. He reported an N95 mask blocks up to 0.3 microns in size and while traveling on droplets, COVID-19 is around 1 micron in size. Oxygen is 0.0005 microns in size, so he doesn't believe people can have their oxygen cut off due to wearing a mask. Cloth masks block droplets up to around 2.5 inches away from a person's face according to USA Today and he doesn't see how people can believe this is a choice when their personal choice is potentially killing other people. He mentioned losing his job at Rib Crib in March when the shutdown happened and said he wouldn't be up here telling everyone masks work if he didn't believe it. He expressed concerns about another shutdown if there weren't masks and people would be in the same position as him. He believes the mask mandate needs to be kept in place until a vaccine arrives, because even if it's eradicated from Branson it will come back.

Bo DeJager, South Drive, Branson, Missouri, said he lives in Ward I and he provided a handout to the Board. He mentioned making a note on page four about what he's addressing which is directly from the CDC's website. He thanked the Board for its time and asked if the Board considers masks personal protective equipment (PPE) or medical devices. He stated if it claims a mask is a form of PPE, the only governing authority on PPE is the Occupational Safety and Health Administration (OSHA). He asked the Board if it has contacted OSHA for guidance on this matter, because when someone is occupationally required to wear a mask they must undergo several fitness tests to make sure they're physically fit enough to wear a mask. Additionally, masks must fit properly to be effective and according to FDA.gov, face masks when they are intended for medical purposes such as source control, including uses related to COVID-19, surgical masks are medical devices. When qualified as medical devices, then only a medical provider can legally prescribe them and he asked the Mayor and Aldermen if any of them were practicing physicians authorized to prescribe medical devices. He recalled the Mayor had stated that he takes his direction from Mr. William Mahoney, President and CEO of Cox Medical Center. However, according to the Missouri Division of Professional Registration and his own words, Mr. Mahoney does not hold any type of medical license, so he's not qualified to prescribe a medical device. The Director of the Taney County Health Department, Lisa Marshall, has been asked to give her opinion regarding face masks, but according to the Missouri Division of Professional Registration she is a registered dietician, not a physician. Mr. DeJager asked if she and the Board are prescribing this medical device, because if they are without the authority to do so, they're practicing medicine without a license. By law, that's a punishable offense carrying a penalty of a misdemeanor to a felony and he asked the Board to vote no to practicing medicine without a license. (See attached handout)

Marcy Kerr, Spring Creek Road, Branson, Missouri, recalled at the July 28th Board of Aldermen meeting, William Mahoney said this is a mask, it won't hurt you. If you don't wear it, there could be negative effects on people. Take the risk, wear it and be a little inconvenienced. Ms. Kerr commented, however, there are many more qualified professionals who contradict Mr. Mahoney's statement. Dr. Russell Blaylock, nationally-recognized, board-certified neurosurgeon and health practitioner says wearing masks for extended periods of time can cause hypoxia and many other serious health conditions. Studies have shown

that hypoxia can inhibit immune cells that fight viral infections. This sets the stage for contracting infections, including COVID-19, and makes the consequences much graver. In essence, masks may put people at an increased risk of infections with a much worse outcome. She stated, so yes, these masks can hurt people. Ms. Kerr addressed the efficacy of masks and pointed out on the CDC's website a systematic review of randomized controlled trials was published in May 2020. In the systematic review, the CDC identified 10 randomized controlled trials that reported estimates of the effectiveness of face masks in reducing laboratory-confirmed influenza virus infections in the community from literature published between 1946 and 2018. An analysis found no significant reduction in influenza transmission with the use of face masks. She pointed out over 70 years of studies in which masks have been evaluated and have shown there's no decrease in viral transmission to make it worth the risk. Even Dr. Robert Redfield, Director of the CDC, was asked under oath if a healthy person should wear a mask and his answer was a definitive no. This data is clearly contrary to what Mr. Mahoney says, yet Mayor Akers has decided to take direction from Mr. Mahoney, President and CEO of Cox Hospital Branson. She feels if the Board understood that masks can actually put the wearer in greater danger of contracting several illnesses including COVID-19, and if it had the public's best interest in mind, it would not mandate healthy individuals to wear masks. According to Senator and Physician Scott Jensen from Minnesota, insurance companies monetize each positive COVID-19 case by paying \$13,000 extra to the hospital. She asked the Board who it trusts; Mr. Mahoney who has no medical license or the scientists of the CDC? She added, should we not then question the motives of the president of the business that stands to gain the most by encouraging the passing of this mandate? She asked the Board to vote no to mask mandates as there's no real science backing them.

Caroline DeJager, Branson, Missouri, said she's a citizen of the United States of America and its Founding Fathers established a society dedicated to civil and religious liberty, purposed to perfection in the Declaration of Independence. She reminded the Board America's government was never intended to be ran through coercions or mandates. Muslims have the religious belief of covering their faces, but she is a Christian. They do not cover their faces according to a much higher authority than the Mayor. She referenced 2 Corinthians 3:18 of the Bible and explained it says whenever anyone turns to the Lord, the veil over our faces and hearts is taken away. Where the spirit of the Lord is there is freedom and we all with unveiled faces reflect the Lord's Glory. Ms. DeJager told the Mayor and Aldermen they were elected to protect her free religious rights, but it has made a big mistake that's hurt many people and businesses. She asked the Board to do the right thing and vote no more mandates.

Carla Eggman-Garrett, Concord Avenue, Branson, Missouri, commented on the memorial in front of City Hall which states it's dedicated to all the men and women of our Armed Forces who served to defend our freedoms and our country. She stated her progenitors are great patriots including people from the Mayflower, Patrick Henry, John Adams the second President and John Quincy Adams the sixth President. Her ancestors fought in wars to protect everyone's Constitutional rights and freedoms; her father fought in World War II and her uncles, cousins and sons fought for this country and the Constitution. When the Board members were elected to office, they took an oath to support the United States Constitution. This oath is important because it reminds them they are public servants and failure to take the oath with bond automatically vacates the office. As a fourth class city, Section 79.260 of the Revised Statutes of Missouri (RSMo) requires the Board to support the Constitution of the United States, the State of Missouri and to faithfully demean themselves while in office. She feels this would be a reasonable picture of a public servant, yet the Board has treated the citizens of Branson with disdain, disrespect and disregard. The Board members have served themselves while continuing to deposit their paychecks, while many businesses close because of their mandate. Ms. Eggman-Garrett feels this crisis multiplies into more than the performers or business owners; it also affects the people who work in box offices, concessions, ushers and theaters. These people have lost their jobs and benefits and she asked the Board if it knows or even cares. She shared from the Bible, Luke 11:46 which says: Jesus replied, and you experts in the law, woe to you liars and rulers you load people down with burdens that are hard to bear and you yourselves will not lift one finger to help them. Ms. Eggman-Garrett commented the Mayor and Board have made some mistakes, but tonight is their chance to make it right before their forgiving citizenry. She asked the Board to vote no on the mask mandates and told the Mayor and Aldermen that Jesus loves them.

Mark Chapen, Stanley Boulevard, Branson, Missouri, stated the Founding Fathers believed that men are moral beings for a call to do right, but sometimes fail. Government is necessary to restrain an incorrect man's moral failings, but at the same time those in charge of government are human too and subject to the same moral failings. As a result, government needs to be controlled by the governed in order to prevent those who rule from becoming tyrants. The dictionary defines a tyrant as an absolute ruler who is unrestrained by law or Constitution or one who has usurped a legitimate ruler's sovereignty. The Roman emperor Caesar Caligula's model was, let them hate me so long as they fear and obey. Mr. Chapen recalled Adolf Hitler suppressed political opposition in Germany, established the Gestapo, a secret state police, and a system of concentration camps. He started mass Jew baiting, which later grew into genocide of the Jews throughout Europe. Hitler managed to wipe out one third of the world's Jewish population in an event known as the Holocaust. Mr. Chapen commented, we don't want to repeat history so we can choose to return to the forefathers' wisdom, that government needs to be controlled by the governed. He added, we the people, law abiding citizens with the character to sustain a free society, have been given by God sovereign rule. He added, our great country originated by dedication to God Almighty who is the highest authority in this great nation. He shared, Proverbs 29:1 from the Bible which says, whoever remains stiff necked after many rebukes will suddenly be destroyed without remedy. He commented, this happens time and time again throughout history and the kind of leaders God chooses according to Exodus 18:21, are men and women who fear God, are trustworthy, hate bribes and lying. As a law abiding citizen, he implored the Board to vote no on mask mandates.

Dallin Hughes, 150 Tyler Street, Branson, Missouri, stated the Declaration of Independence is the most famous expression of natural rights and natural law that made the American Revolution distinct. People demand freedom to govern themselves as to whether a mask is worn or not and they demand the mask mandate be lifted tonight without fail. He added, because all men are free and equal and human beings have a natural right to liberties from which all other rights are derived. The principal of equality can be understood as a moral claim in two ways; it provides the foundation for the natural rights and obligations humans owe to each other and establishes that no man has a right to rule another without their consent. According to our Founding Fathers, government by consent is established through a social compact in which a group of people agreed to form a government and accepted rules. People do not accept this mask mandate as being necessary for the saving of lives. In fact, more lives have been crushed because of the mandate and upon Missouri announcing to be fully reopened on June 16th, Governor Parson said for people to take extra precautions to protect themselves and those around them. Mr. Hughes said people know how to do this and it's up to them to take responsibility for their own actions. Governor Parson's Executive Order 20-12 that was extended to December 30th, says nothing about mandating masks. In fact, he says people wear a mask if they want to. The CDC only suggests mask use and has rescinded its findings that the virus is contracted via aerosol particles in the air. Further, the FDA carefully reports a PPE mask is unable to prevent any illness and has since required manufacturers to label their packaging accordingly. After the social compact consent of the governed is maintained through regular elections, the overreach of power in Branson has caused more harm than good through isolation, intimidation, humiliation degradation and distortion of the truth. Mr. Hughes feels if the Board's vote tonight is to continue the violation of inalienable rights of constituents, its decision will indeed have dire consequences in the next election. It is time for the Board to vote no to mask mandates.

Barbara Melham, Heritage Estates Road, Branson, Missouri, said according to the Declaration of Independence, our government must be based on consent and governed by its secure and natural rights of the American citizens. She commented if there were a proper vote of the people of Branson to wear or not wear masks, it would be interesting to derive at some level of truth rather than the limited and somewhat distorted view of City officials. A minority faction is easily solved by a majority vote and a majority faction is dealt with in two ways. It first eliminates cause and destroys the very liberty and freedom awarded us by our forefathers, by demanding all citizens have the same opinions, passions and interests. The second is to control the factions effects, representatives are elected in power to represent the will of their constituents, meaning they check and balance each other's ambitions. This acts as a filter of the people's passions and allows reason overall. However, these mechanisms of government are only precautions; the main check or control of government is the people themselves. She's not only a citizen of the State of Missouri, but a daughter of a United States Army Purple Heart and granddaughter of an Army veteran who served in World War II. Ms. Melham stated she is a United States Marine and her son currently serves as a chemical,

radiological, biological, nuclear specialist overseas. She's a citizen not only of the State of Missouri, but is also self-governing in a free society. To secure her natural rights as an American citizen, the Mayor and Board of Aldermen must promote morality and support religious freedom. Morality includes virtues like courage and being against government oppression and prudence. When religious freedom is supported, morality is promoted and mandated masks crush religious liberty and cause neighbors to judge one another, even to the point of policing and harassing law abiding citizens. Ms. Melham referenced a photograph she presented the Board earlier of the Mayor and explained for those who did not receive a copy, it's of a block party that the Mayor attended on October 6th. In the photograph, the Mayor is standing no more than 16 inches from another constituent, not wearing a mask or social distancing. Such distasteful policing has literally been demonstrated in this very room by the Mayor and Aldermen, but they did nothing to stop it. She felt it was so disturbing that the Mayor instructed the cameras be turned off. It wasn't the citizens acting out causing embarrassment and disturbance, but City Officials acting against citizens who possess God-given, natural and Constitutional rights to be present at this public meeting. She feels the mandated mask ordinance must be voted no and clarified she's not anti-masks, but pro-choice on whether or not to wear one. She expressed the mandated mask ordinance must be voted down by all of the Board tonight, without fail to restore the trust and faith of a forgiving citizenry before elections in 2021, because the citizens are watching. (See attached handout)

Brant Gray, 730 State Hwy 165, Branson, Missouri, commented he has a master's degree in physical therapy from University of Texas Southwestern Medical Center and almost 20 years of clinical experience. As a citizen of the United States, he's not accustomed to having his civil and religious rights trampled, because closed-minded City Officials are determined to maintain their power to control citizens following distorted data. He stated the data is constantly changing concerning a virus that's been established to be no more deadly than the yearly influenza. In fact, the CDC has updated its report on how one actually contracts COVID-19 and it's the exact same wording it uses to explain how the flu is contracted. Mr. Gray pointed out it's word for word with what the U.S. Department of Health and Human Services has to say and he read, the flu is contagious that means it's spread from person to person often through the air. You can pass on the infection before you feel sick, you're contagious for several days after you get sick, you can catch the flu when someone near you coughs or sneezes. You can touch a surface, then your nose and catch the flu. The flu can live on surfaces for a few hours, remember to wash your hands often when you're around someone who is sick. Make a point of washing your hands before eating or touching your eyes, nose or mouth. If you can, stay away from sick people that will help stop the flu. Mr. Gray stated this is the exact same wording they use for COVID-19, but noted it says nothing about wearing a mask year after year. He stated people have managed to survive the flu without masks by using these basic precautions and those at higher risk taking extra steps just like the Governor has said to do with COVID-19. He asked what the difference is now, what the difference is in these verbiage wars and what is being hidden from the American public. The media and our local government have entrenched the masses with a fear, that without a mask they will breathe in and suddenly die. This is not true and he asked why Cox Health would tell people to stay home when they are sick or to wait and only seek medical help at the point that they can barely breathe. Mr. Gray reported there are licensed, practicing medical doctors who are successfully treating patients and have said the key to recovery is to seek medical help immediately upon experiencing the first symptoms, take any culmination of prescribed and inexpensive prescriptions that have been safely used and tested for decades. Yet, around the nation doctors are being threatened with loss of licensure if they prescribe these successful treatments and don't follow the mantra of wearing a mask. He believes the answer to all these questions is as simple as it is scary; deception and fear. The truth is, there's over a 98% survival rate for COVID-19, if a person catches COVID-19. He asked the Mayor if the picture of him is to do as I say, but not as I do. As far as the hospital goes, those people take a fits test and if they fail a fits test, they're not allowed to treat droplet precaution patients. He reported he failed the fits test 15 times, and that's an N95 mask sealed, he's not allowed to treat because it's not effective.

Heather Tankersley, 3000 Green Mountain Drive, Branson, Missouri, introduced herself as a citizen of the United States of America who takes full responsibility for her own health. She's law abiding and possesses the character to govern herself to sustain a free society. Unfortunately, people die every year from sickness, age, accidents, automobile crashes and crime and in each situation, although indeed sad, life goes on. She pointed out masks aren't mandated for all other sickness and people don't stop living because of age or accidents. They don't stop driving cars because of crashes or stop defending themselves

from criminals, because these are risks of being alive. People also don't live in fear or buy into deception when counter science and facts are out there and every citizen must take personal responsibility and keep living. She reported globally, the flu has killed 290,000 to 650,000 people annually since 2010. Missouri's Health Department reports 135,651 confirmed cases of COVID-19 in 2020 and 236 deaths attributed to COVID-19, which is 1.63% of deaths of the confirmed cases. She added, and confirmed cases in the entire State of Missouri is 2.2% and credibly reports have exposed that some of the .03% to 7% of Missouri's population may have died from comorbidity, but tested positive for COVID-19. So the death certificate reads COVID-19 which is a whole other level of deception and simple research will bear out. Ms. Tankersley commented scientific facts prove very low numbers for Missouri and these low numbers in no way depict a COVID-19 pandemic that the media and other fear-mongers would have people believe. She added, however there is a pandemic of fear brought on by the media, by fearful people who choose to wear masks everywhere and by government officials who refuse to lead and relieve the population of this deception. Fear is not a trait of the American, nor of people in Missouri, so what's really going on? She asked why any government body of officials would risk the devastation of Branson's entire economy for a deception that's not supported by science. She added, no more deception or mandated masks and she asked the Board to vote no on mandated masks.

Peggy Haining, 1440 State Highway 248, Branson, Missouri, feels it's astounding how easily ignorant people can be intimidated into submission, but feels the citizens of Branson are learning quickly and she's here to include the Board in that process. It's already been established or suggested the Board telling people to wear masks as a means of containing a virus, is indeed prescribing medical advice. She explained according to the Revised Statutes of Missouri (RSMo) Title 22, Section 334.010 and 334.250, that's a Class D Felony, punishable by one to seven years and/or \$10,000. Treating each patient is considered a separate offense which means a minimum of approximately 11,000 years and she asked if a member of this Board or the Board as a whole could be indicted on such charges or if sovereign immunity would shield them. Ms. Haining commented those are subjective issues not decided by her, but what is not subjective is any municipal law that would require the violation of pre-existing laws is void of authority and unenforceable. RSMo Title 12, Section 213.065 to 13.070 and 213.075 guarantees that all persons within the jurisdiction of the State of Missouri are free, equal and shall be entitled to the full and equal use and enjoyment within this state of any place of public accommodation. Those rights cannot be discriminated against by any employer, business or by the state or any political subdivision of the state. However, a simple discrimination claim can quickly escalate to harassment which is a Class E felony, or even unlawful restraint which is better known as a 2nd degree kidnapping charge, a Class D Felony. She mentioned it's punishable by one to seven years and/or \$10,000 per offense. This scenario is not only a violation of state law, it's also a federal misdemeanor according to Title 18 of the United States Code, Section 245, punishable by fines and/or one to ten years in prison depending on the circumstances. She explained this means that no place of public accommodation can legally deny access to someone who is not wearing a mask, regardless of the City's ordinance. She added, and attempting to force denial of access under threat of fine for loss of license is not emergency management, but extortion.

Melisa Thurman, 730 State Hwy 165, Branson, Missouri, explained she'll be reading a statement on behalf of Pearl Haining, who has a medical condition which prevents her from wearing a mask and she was denied access to the forum today because she couldn't come in without a mask on and wait. She read, Mr. Mayor, sovereign immunity provides a limited scope of protection; however, no one is above the law and no one including yourself, this Board, the City Administrator or Branson Police Department can attempt to coerce anyone into complying with your unlawful mask ordinance. Title 18 of the United States Code, Section 242 clearly states that whoever under color of any law, statute, ordinance, regulation or custom, willfully suggest any person to the deprivation of any rights secured or protected by the Constitution or laws of the United States, is guilty of a federal misdemeanor or felony, depending on the circumstances. And Section 241 of the United States Code, Title 18 states that two or more people merely conspiring to deprive people of those rights is guilty of a federal felony. Yes, state law does allow you to enact laws to prevent or contain contagious diseases. Perhaps you'd like to consider restrictions on the sale of alcohol or tobacco; get creative and find ways to incentivize healthy lifestyle practices. However, you can neither require nor enforce compulsory wearing of facemasks. Government derives its power by the consent of the governed. Mr. Mayor, the citizens of Branson do not consent to this unlawful deprivation of our rights, and having now

been informed of many of those rights, if you the Board, the Administrator or the Police willfully continue this unlawful behavior, you will be prosecuted accordingly.

Mayor Akers asked for comments from the Board. Discussion. Alderman Milton moved to include churches under the existing exclusions for mask mandate. Motion died for a lack of a second. Alderman Milton moved to amend Bill No. 5879, to read: Section 3, Line 44 Bill Number 5879 is being amended to mandate mandatory masks for essential businesses and non-essential businesses will be exempt from the mask mandate. Motion died for a lack of a second. Discussion. Mayor Akers called for a vote on Bill No. 5879. Voting aye: King, Whiteis, Simmons, Skains and Seay. Nays: Milton. Motion carried. Discussion. Alderman King moved to read Bill No. 5879 for its final reading due to the current ordinance expiring, seconded by Alderman Whiteis. Mayor Akers asked for anyone in the audience wishing to speak regarding this matter. Hearing none, Mayor Akers asked for comments from the Board. No discussion. Voting aye: King, Whiteis, Simmons, Skains and Seay. Nays: Milton. Motion carried. Final Reading of Bill No. 5879, an ordinance extending Ordinance 2020-0072 to combat the community spread of COVID-19 was read by title by City Clerk Lisa Westfall. Mayor Akers asked for a motion approving Bill No. 5879. Alderman King so moved, seconded by Alderman Skains. Mayor Akers asked for anyone in the audience wishing to speak regarding this matter.

Bo DeJager, South Drive, Branson, Missouri, commented everyone's going to pay attention to what's going on and mentioned the files he gave the Board earlier were directly from the CDC. He noted for anyone in the audience or watching live, that even the CDC has its own document showing 70% to 80% of people who wore a mask got COVID-19 compared to 10% to 15% who didn't wear masks. Clearly, the people wearing their masks are still getting COVID-19 and for everyone still saying masks work; they're still getting COVID-19. He mentioned there's a guy in the audience right now who got COVID-19, but has worn his mask the whole time. Mr. DeJager shared he doesn't wear a mask, he thinks they're ridiculous and he hasn't gotten it. He asked if his mask was a medical mask or PPE, because he made a statement earlier and hadn't received clarification from the Board. He requested the mandate only be extended for 30 days rather than indefinitely and asked if people could come in every two weeks during the Board of Aldermen meetings to discuss this topic. He commented he's glad people are being told how they should be masking up, because they obviously aren't responsible for their own actions. He feels it's similar to Nancy Pelosi who can go into businesses, not wearing a mask and is kind of hypocritical. He reiterated he would greatly appreciate it if this could only be for 30 days.

Nathan Horseman, 2550 State Highway 248, Branson, Missouri, explained he wasn't planning on speaking tonight, but would like to address a couple of things because he feels it's become insanity. He thanked all of the Aldermen and medical health professionals in the community. He feels these people are out there risking their lives combatting this virus and there's utter disrespect shown for these career professionals. He feels that up until COVID-19, there's not a time in anyone's lives when people would have went to a hospital because they were sick, asked the doctor what's wrong with them, the doctor tells them what's wrong and then call the doctor a liar. He addressed information he's seen circulating on Facebook the last few days regarding 70% of all people who wear masks get COVID-19 and explained this was a study done by the CDC regarding dining in restaurants. He clarified what's already known about the topic is that community and close contact contribute to the spread of COVID-19. Findings from a case control investigation of symptomatic outpatients from 11 U.S. health care facilities found that close contact with persons with known COVID-19 were going to locations that offered eating and drinking options associated with COVID-19 positivity. Mr. Horseman asked everyone to read the studies and information being provided and said he's sick and tired of hearing about government control. He addressed the people in the audience in opposition to the mask mandate and told them the United States government is run by the people they support and the CDC and FDA is also their government. Mr. Horseman feels the President of the United States' whole white house got COVID-19 because none of them wear masks and he asked if anyone sees Democrats getting sick because they're not wearing masks. He believes the answer is no, because people are doing this for the safety and health of their communities. He feels it's as simple as that and he urged everyone to please get on board.

Alderman Skains left the meeting at 9:18 p.m. and returned at 9:19 p.m.

Mayor Akers called for a vote. Discussion. Alderman Milton announced he is choosing not to vote. Mayor Akers closed the vote. Voting aye: King, Whiteis, Simmons, Skains and Seay. Nays: None. Alderman Milton did not vote. Motion carried. Ordinance No. 2020-0123 was duly enacted.

BILL NO. 5880

Approving the annexation of the properties located at 121 Lenhart Lane, Branson, Missouri.

Public Hearing and First Reading of Bill No. 5880, an ordinance approving the annexation of the properties located at 121 Lenhart Lane, Branson, Missouri, was read by title by City Clerk Lisa Westfall. Mayor Akers opened the public hearing and a staff report was presented by Planning and Development Director Joel Hornickel. Mayor Akers asked for anyone in the audience wishing to speak regarding this matter. Hearing none, Mayor Akers asked for comments from the Board. Discussion. Mayor Akers closed the public hearing. Mayor Akers asked for a motion approving Bill No. 5880. Alderman Skains so moved, seconded by Alderman Seay. Mayor Akers asked for anyone in the audience wishing to speak regarding this matter. Hearing none, Mayor Akers asked for comments from the Board. No discussion. Voting aye: King, Whiteis, Simmons, Skains, Milton and Seay. Nays: None. Motion carried.

BILL NO. 5881

Amending Appendix A of the Branson Municipal Code pertaining to Utilities Fee Schedule.

Public Hearing and First Reading of Bill No. 5881, an ordinance amending Appendix A of the Branson Municipal Code pertaining to Utilities Fee Schedule was read by title by City Clerk Lisa Westfall. Mayor Akers opened the public hearing and a staff report was presented by Utilities Director Mike Ray. Mayor Akers asked for anyone in the audience wishing to speak regarding this matter. Hearing none, Mayor Akers asked for comments from the Board. Discussion. Mayor Akers closed the public hearing. Mayor Akers asked for a motion approving Bill No. 5881. Alderman King so moved, seconded by Alderman Milton. Mayor Akers asked for anyone in the audience wishing to speak regarding this matter. Hearing none, Mayor Akers asked for comments from the Board. No discussion. Voting aye: King, Whiteis, Simmons, Skains, Milton and Seay. Nays: None. Motion carried.

The meeting recessed at 9:41 p.m. and reconvened at 9:51 p.m.

BILL NO. 5882

Approving the renewal of the contract with Affinity Chemical, LLC for the purchase of operational chemicals used in the City's Wastewater Treatment Process.

First Reading of Bill No. 5882, an ordinance approving the renewal of the contract with Affinity Chemical, LLC for the purchase of operational chemicals used in the City's Wastewater Treatment Process and authorizing the Mayor to execute the contract was read by title by City Clerk Lisa Westfall and a staff report was provided by Utilities Director Mike Ray. Mayor Akers asked for a motion approving Bill No. 5882. Alderman King so moved, seconded by Alderman Whiteis. Mayor Akers asked for anyone in the audience wishing to speak regarding this matter. Hearing none, Mayor Akers asked for comments from the Board. Discussion. Voting aye: King, Whiteis, Simmons, Skains, Milton and Seay. Nays: None. Motion carried.

BILL NO. 5883

Approving the renewal of the contract with Brenntag Mid-South, Inc. for the purchase of operational chemicals used in the City's Water and Wastewater Treatment Processes.

First Reading of Bill No. 5883, an ordinance approving the renewal of the contract with Brenntag Mid-South, Inc. for the purchase of operational chemicals used in the City's Water and Wastewater Treatment Processes and authorizing the Mayor to execute the contract was read by title by City Clerk Lisa Westfall and a staff report was presented by Utilities Director Mike Ray. Mayor Akers asked for a motion approving Bill No. 5883. Alderman King so moved, seconded by Alderman Whiteis. Mayor Akers asked for anyone in the audience wishing to speak regarding this matter. Hearing none, Mayor Akers asked for comments from the Board. No discussion. Voting aye: King, Whiteis, Simmons, Skains, Milton and Seay. Nays: None. Motion carried.

BILL NO. 5884

Approving the renewal of the contract with Hawkins, Inc. for the purchase of operational chemicals used in the City's Water and Wastewater Treatment Processes.

First Reading of Bill No. 5884, an ordinance approving the renewal of the contract with Hawkins, Inc. for the purchase of operational chemicals used in the City's Water and Wastewater Treatment Processes and authorizing the Mayor to execute the contract was read by title by City Clerk Lisa Westfall and a staff report was presented by Utilities Director Mike Ray. Mayor Akers asked for a motion approving Bill No. 5884. Alderman King so moved, seconded by Alderman Whiteis. Mayor Akers asked for anyone in the audience wishing to speak regarding this matter. Hearing none, Mayor Akers asked for comments from the Board. No discussion. Voting aye: King, Whiteis, Simmons, Skains, Milton and Seay. Nays: None. Motion carried.

BILL NO. 5885

Approving a contract with CDW Government, LLC pertaining to the purchase of computer hardware and software.

First Reading of Bill No. 5885, an ordinance approving a contract with CDW Government, LLC pertaining to the purchase of computer hardware and software and authorizing the Mayor to execute the contract was read by title by City Clerk Lisa Westfall and a staff report was presented by IT Director Chad Forster. Mayor Akers asked for a motion approving Bill No. 5885. Alderman Whiteis so moved, seconded by Alderman King. Mayor Akers asked for anyone in the audience wishing to speak regarding this matter. Hearing none, Mayor Akers asked for comments from the Board. Discussion. Voting aye: King, Whiteis, Simmons, Skains, Milton and Seay. Nays: None. Motion carried.

BILL NO. 5886

Approving the Memorandum of Understanding with Branson School District pertaining to providing four School Resource Officers, one at each Branson School District Campus.

First Reading of Bill No. 5886, an ordinance approving the Memorandum of Understanding with Branson School District pertaining to providing four School Resource Officers, one at each Branson School District Campus and authorizing the Mayor to execute the contract was read by title by City Clerk Lisa Westfall and a staff report was presented by Police Chief Jeff Matthews. Mayor Akers asked for a motion approving Bill No. 5886. Alderman King so moved, seconded by Alderman Skains. Mayor Akers asked for anyone in the audience wishing to speak regarding this matter. Hearing none, Mayor Akers asked for comments from the Board. Discussion. Voting aye: King, Whiteis, Simmons, Skains, Milton and Seay. Nays: None. Motion carried.

BILL NO. 5887

Approving the renewal of the contract with NRoute Enterprises LLC. to provide vehicle equipment installation and repair services.

First Reading of Bill No. 5887, an ordinance approving the renewal of the contract with NRoute Enterprises LLC. to provide vehicle equipment installation and repair services and authorizing the Mayor to execute the contract was read by title by City Clerk Lisa Westfall and a staff report was presented by Police Chief Jeff Matthews. Mayor Akers asked for a motion approving Bill No. 5887. Alderman King so moved, seconded by Alderman Whiteis. Mayor Akers asked for anyone in the audience wishing to speak regarding this matter. Hearing none, Mayor Akers asked for comments from the Board. No discussion. Voting aye: King, Whiteis, Simmons, Skains, Milton and Seay. Nays: None. Motion carried.

Alderman Simmons left the meeting at 10:06 p.m. He disclosed his conflict of interest pertaining to the next two items due to being the majority owner of Table Rock Asphalt Construction Co.

BILL NO. 5888

Accepting the proposal of Table Rock Asphalt Construction Co., Inc. for the purchase of concrete.

First Reading of Bill No. 5888, an ordinance accepting the proposal of Table Rock Asphalt Construction Co., Inc. for the purchase of concrete and authorizing the Mayor to execute the contract was read by title by City Clerk Lisa Westfall and a staff report was provided by Public Works Director and City Engineer Keith Francis. Mayor Akers asked for a motion approving Bill No. 5888. Alderman Whiteis so moved, seconded by Alderman Skains. Mayor Akers asked for anyone in the audience wishing to speak regarding this matter. Hearing none, Mayor Akers asked for comments from the Board. No discussion. Voting aye: King, Whiteis, Skains, Milton and Seay. Nays: None. Absent: Simmons. Motion carried.

BILL NO. 5889

Accepting the proposal of Table Rock Asphalt Construction Co., Inc. for the purchase of stone and asphalt for the Public Works Streets Department and authorizing the Mayor to execute the contract.

First Reading of Bill No. 5889, an ordinance accepting the proposal of Table Rock Asphalt Construction Co., Inc. for the purchase of stone and asphalt for the Public Works Streets Department and authorizing the Mayor to execute the contract was read by title by City Clerk Lisa Westfall and a staff report was provided by Public Works Director and City Engineer Keith Francis. Mayor Akers asked for a motion approving Bill No. 5889. Alderman Skains so moved, seconded by Alderman Milton. Mayor Akers asked for anyone in the audience wishing to speak regarding this matter. Hearing none, Mayor Akers asked for comments from the Board. Discussion. Voting aye: King, Whiteis, Skains, Milton and Seay. Nays: None. Absent: Simmons. Motion carried.

Alderman Simmons returned to the meeting at 10:10 p.m.

BILL NO. 5890

Approving the first renewal of the services contract with Under the Wire, LLC pertaining to traffic signal maintenance services for the City.

First Reading of Bill No. 5890, an ordinance approving the first renewal of the services contract with Under the Wire, LLC pertaining to traffic signal maintenance services for the City and authorizing the Mayor to execute the contract was read by title by City Clerk Lisa Westfall and a staff report was provided by Public Works Director and City Engineer Keith Francis. Mayor Akers asked for a motion approving Bill No. 5890. Alderman Skains so moved, seconded by Alderman Whiteis. Mayor Akers asked for anyone in the audience wishing to speak regarding this matter. Hearing none, Mayor Akers asked for comments from the Board. No discussion. Voting aye: King, Whiteis, Simmons, Skains, Milton and Seay. Nays: None. Motion carried.

Mayor Akers left the meeting at 10:11 p.m. He disclosed his conflict of interest pertaining to the next two items due to his son's involvement in the insurance business. Acting President Simmons presided over the meeting.

BILL NO. 5891

Approving the 2021 Delta Vision Plan Premiums through Delta Dental of Missouri for the City of Branson.

First Reading of Bill No. 5891, an ordinance approving the 2021 Delta Vision Plan Premiums through Delta Dental of Missouri for the City of Branson and authorizing the Mayor to execute the contract was read by title by City Clerk Lisa Westfall and a staff report was provided by Human Resources Director Jan Fischer. Acting President Simmons asked for a motion approving Bill No. 5891. Alderman King so moved, seconded by Alderman Whiteis. Acting President Simmons asked for anyone in the audience wishing to speak regarding this matter. Hearing none, Acting President Simmons asked for comments from the Board. No discussion. Voting aye: King, Whiteis, Simmons, Skains, Milton and Seay. Nays: None. Absent: Akers. Motion carried.

BILL NO. 5892

Approving payments for the 2021 Supplemental Insurance Premiums, Flexible Spending Accounts and Health Savings Accounts and approving enrollment of all health coverages to be managed through American Fidelity Assurance Company.

First Reading of Bill No. 5892, an ordinance approving payments for the 2021 Supplemental Insurance Premiums, Flexible Spending Accounts and Health Savings Accounts and approving enrollment of all health coverages to be managed through American Fidelity Assurance Company and authorizing the Mayor to execute the contract was read by title by City Clerk Lisa Westfall and a staff report was provided by Human Resources Director Jan Fischer. Acting President Simmons asked for a motion approving Bill No. 5892. Alderman King so moved, seconded by Alderman Milton. Acting President Simmons asked for anyone in the audience wishing to speak regarding this matter. Hearing none, Acting President Simmons asked for comments from the Board. Discussion. Voting aye: King, Whiteis, Simmons, Skains, Milton and Seay. Nays: None. Absent: Akers. Motion carried.

Mayor Akers returned to the meeting at 10:16 p.m.

BILL NO. 5893

Approving the renewal of the contract with Taney County Health Department for Public Health Services.

First Reading of Bill No. 5893, an ordinance approving the renewal of the contract with Taney County Health Department for Public Health Services and authorizing the Mayor to execute the contract was read by title by City Clerk Lisa Westfall and a staff report was provided by Finance Director Jamie Rouch. Mayor Akers asked for a motion approving Bill No. 5893. Alderman King so moved, seconded by Alderman Milton. Mayor Akers asked for anyone in the audience wishing to speak regarding this matter. Hearing none, Mayor Akers asked for comments from the Board. Discussion. Voting aye: King, Whiteis, Simmons, Skains, Milton and Seay. Nays: None. Motion carried.

BILL NO. 5894

Approving the renewal of the contract with Capitol Solutions Consulting pertaining to Lobbying Services.

First Reading of Bill No. 5894, an ordinance approving the renewal of the contract with Capitol Solutions Consulting pertaining to Lobbying Services and authorizing the Mayor to execute the contract was read by title by City Clerk Lisa Westfall and a staff report was provided by Finance Director Jamie Rouch. Mayor Akers asked for a motion approving Bill No. 5894. Alderman Skains so moved, seconded by Alderman Milton. Mayor Akers asked for anyone in the audience wishing to speak regarding this matter. Hearing none, Mayor Akers asked for comments from the Board. Discussion. Voting aye: King, Whiteis, Simmons, Skains, Milton and Seay. Nays: None. Motion carried.

BILL NO. 5895

Approving the amendment to the contract with Taney County, MO pertaining to reimbursement for certain qualified expenses for the Taney County General Aviation Airport.

First Reading of Bill No. 5895, an ordinance approving the amendment to the contract with Taney County, MO pertaining to reimbursement for certain qualified expenses for the Taney County General Aviation Airport and authorizing the Mayor to execute the contract was read by title by City Clerk Lisa Westfall and a staff report was provided by Finance Director Jamie Rouch. Discussion. Mayor Akers asked for a motion approving Bill No. 5895. Alderman Skains so moved, seconded by Alderman Milton. Mayor Akers asked for anyone in the audience wishing to speak regarding this matter. Hearing none, Mayor Akers asked for comments from the Board. Discussion. Voting aye: King, Whiteis, Simmons, Skains, Milton and Seay. Nays: None. Motion carried.

BILL NO. 5896

Approving the Intergovernmental Agreement between Taney County and the City of Branson pertaining to reimbursement for certain qualified expenses from the Coronavirus Aid, Relief and Economic Security Act.

First Reading of Bill No. 5896, an ordinance approving the Intergovernmental Agreement between Taney County and the City of Branson pertaining to reimbursement for certain qualified expenses from the Coronavirus Aid, Relief and Economic Security Act and authorizing the Mayor to execute the contract was read by title by City Clerk Lisa Westfall and a staff report was provided by Finance Director Jamie Rouch. Mayor Akers asked for a motion approving Bill No. 5896. Alderman King so moved, seconded by Alderman Milton. Mayor Akers asked for anyone in the audience wishing to speak regarding this matter. Hearing none, Mayor Akers asked for comments from the Board. Discussion. Voting aye: King, Whiteis, Simmons, Skains, Milton and Seay. Nays: None. Motion carried.

BILL NO. 5897

Approving the amendments to the Lease Agreements with Hughes Entertainment, Inc., Tans Enterprise LLC, Branson's Best, Inc., and Recreational Investment & Management Corp. pertaining to a reduction in base rent for Fiscal Year 2020.

First Reading of Bill No. 5897, an ordinance approving the amendments to the Lease Agreements with Hughes Entertainment, Inc., Tans Enterprise LLC, Branson's Best, Inc., and Recreational Investment & Management Corp. pertaining to a reduction in base rent for Fiscal Year 2020 and authorizing the Mayor to execute the contract was read by title by City Clerk Lisa Westfall and a staff report was provided by Finance Director Jamie Rouch. Mayor Akers asked for a motion approving Bill No. 5897. Alderman Whiteis so moved, seconded by Alderman Seay. Mayor Akers asked for anyone in the audience wishing to speak regarding this matter. Hearing none, Mayor Akers asked for comments from the Board. No discussion. Voting aye: King, Whiteis, Simmons, Skains, Milton and Seay. Nays: None. Motion carried.

BILL NO. 5898

Approving the option agreement for the contract for sale of the property commonly known as the "Old High School" located at 300 S. 6th Street.

First Reading of Bill No. 5898, an ordinance approving the option agreement for the contract for sale of the property commonly known as the "Old High School" located at 300 S. 6th Street and authorizing the Mayor to execute all documents and other actions in connection with the purchase was read by title by City Clerk Lisa Westfall and a staff report was provided by City Attorney Chris Lebeck. Mayor Akers asked for a motion approving Bill No. 5898. Alderman King so moved, seconded by Alderman Simmons. Mayor Akers asked for anyone in the audience wishing to speak regarding this matter. Hearing none, Mayor Akers asked for comments from the Board. Discussion. Voting aye: King, Whiteis, Simmons, Skains and Seay. Nays: Milton. Motion carried.

BILL NO. 5899

Amending Chapter 2 Section 28 of the Branson Municipal Code pertaining to Administrative and Supervisory Committees.

First Reading of Bill No. 5899, an ordinance amending Chapter 2 Section 28 of the Branson Municipal Code pertaining to Administrative and Supervisory Committees was read by title by City Clerk Lisa Westfall and a staff report was provided by City Attorney Chris Lebeck. Mayor Akers asked for a motion approving Bill No. 5899. Alderman Skains so moved, seconded by Alderman Seay. Mayor Akers asked for anyone in the audience wishing to speak regarding this matter. Hearing none, Mayor Akers asked for comments from the Board. Discussion. Voting aye: King, Whiteis, Simmons, Skains, Milton and Seay. Nays: None. Motion carried.

MAYOR/ALDERMEN/ADMINISTRATOR'S REPORTS

Alderman King mentioned attending the National Night Out last week and she thanked the neighborhoods in Ward III for being very hospitable. She added, the neighborhoods were Taneycomo Heights and Heatherbrooke and she'd also like to extend a special thanks and gratitude to the men and women in uniform across police, fire and ambulance. She described how excited the children in the neighborhoods were to see the men and women in uniform and to see the fire truck and how appreciative the communities were for them being there and she thanked City Staff for that. While it's been a tough year and the City's had a tough time budgeting, she feels the men and women in uniform deserve the best equipment and facilities they need to do their jobs. Alderman King would like to see the City prioritize them and get it to them sooner rather than later.

Alderman Whiteis commented he had the pleasure of attending both the events in Ward III along with Alderman King for National Night Out. He felt it was great in those neighborhoods and he'd like to reiterate what Alderman King said. He recalled in the Heatherbrooke Community there was a little boy with a police hat on, walking around with a five gallon bucket collecting donations for the Police Department which he felt was really neat.

Alderman Simmons apologized he wasn't able to attend National Night Out as it's something he's always enjoyed. He feels it's amazing how much the residents appreciate it and enjoy seeing police officers and firefighters in uniform. He added, it's a whole new attitude in the neighborhood when that happens and is a great thing.

Alderman Skains reiterated what Alderman King and Alderman Simmons said and explained that's why people worked so hard on the public safety initiative to get the funding for the City's Police and Fire Departments. It was projected well over ten years ago that 2019 to 2020 revenues and expenditures would run in a sideways relationship so he's glad it passed and things are getting done. He said he wants to see the buildings built before he passes away.

Alderman Milton thanked City Attorney Chris Lebeck and Alderman Skains for all the work done on moving forward with the CVB contract. He explained a lot of hours were put in, progress is being made and he just wanted to say thanks.

Mayor Akers thanked everyone for attending and he appreciates the discussion, but feels it's been another night of folks who don't seem to understand things are trying to be orderly. He commented he was taken back by the picture and mentioned seeing a picture on Facebook he took. He thanked Police Chief Jeff Matthews and mentioned going to four different neighborhoods. He feels the Board has to be careful, because as was mentioned tonight people are watching. It's interesting to him to see people's attitudes and he hopes everyone can get through this process and start looking to the future. Mayor Akers expressed he's hopeful that by passing the mask mandate ordinance now, the Board can come back to it anytime it wants to or when circumstances change. He added, but it will be a decision locally and based on Branson's circumstances and he's glad for the community and Board for what he considers as making a wise decision.

ADJOURN

Mayor Akers asked for a motion to adjourn. Alderman King so moved, seconded by Alderman Skains. Voting aye: King, Whiteis, Simmons, Skains, Milton and Seay. Nays: none. Motion carried. Meeting adjourned at 10:56 p.m.



E. Edd Akers
Mayor



Lisa Westfall
City Clerk

DR. Barbe - Speaker Item No. 23

Feature

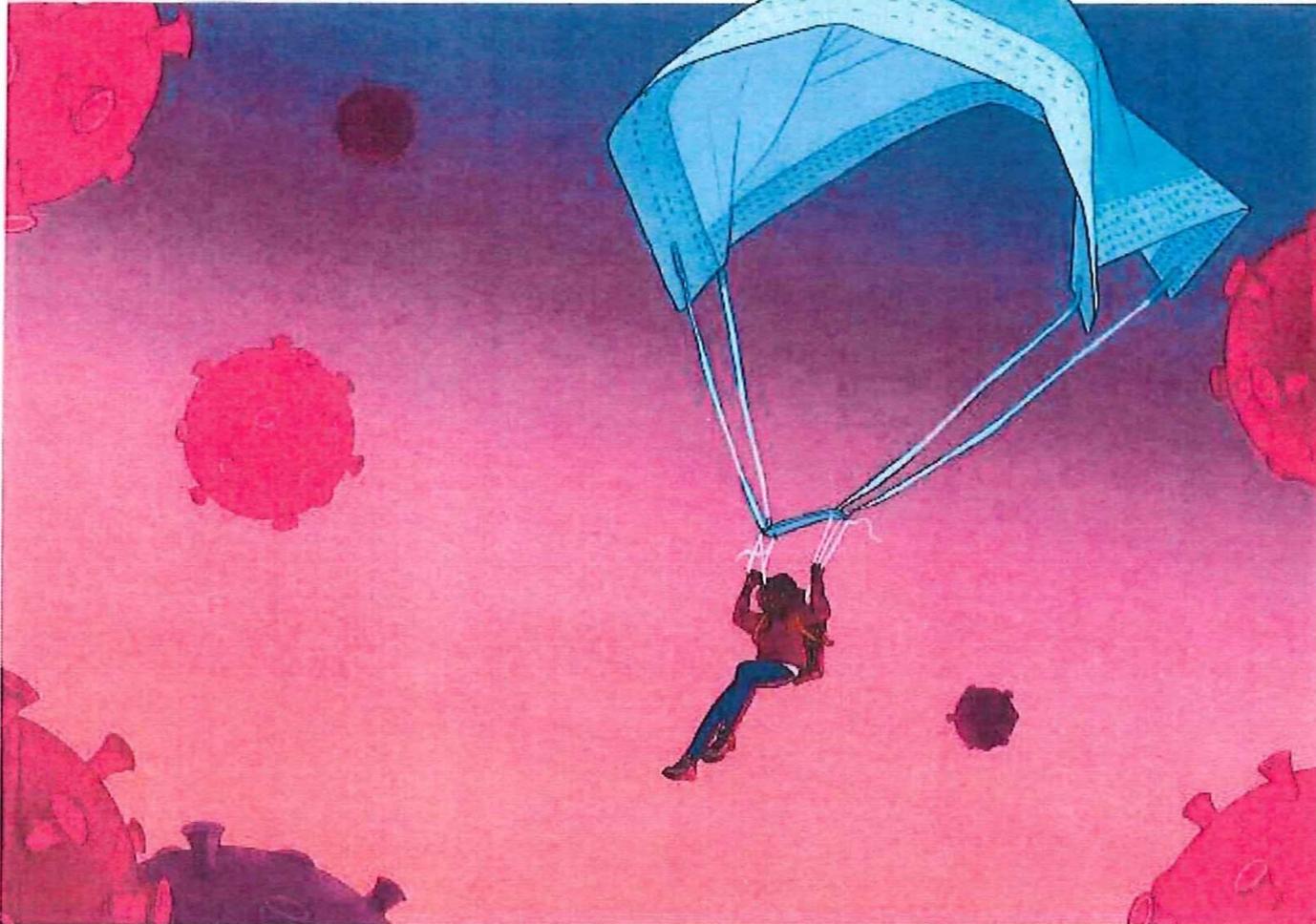


ILLUSTRATION BY BEN GLENDINING

WHAT THE DATA SAY ABOUT WEARING FACE MASKS

The science supports that face coverings save lives, and yet they're still endlessly debated. How much evidence is enough?

By Lynne Peoples

When her Danish colleagues first suggested distributing protective cloth face masks to people in Guinea-Bissau to stem the spread of the coronavirus, Christine Benn wasn't so sure. "I said, 'Yeah, that might be good, but there's limited data on whether face masks are actually effective,'" says Benn, a global health researcher at the University of Southern Denmark in Copenhagen, who for decades has led public health campaigns in the West African country, one of the world's poorest.

That was in March. But by July, Benn and her team had worked out how to possibly provide some needed data on masks, and hopefully help people in Guinea-Bissau. They distributed thousands of locally produced cloth face coverings to people as part of a randomized

controlled trial that might be the world's largest test of masks' effectiveness against the spread of COVID-19.

Face masks are the ubiquitous symbol of a pandemic that has sickened 35 million people and killed more than 1 million. In hospitals and other health-care facilities, the use of medical-grade masks clearly cuts down transmission of the SARS-CoV-2 virus. But for the variety of masks in use by the public, the data are messy, disparate and often hastily assembled. Add to that a divisive political discourse that included a US president disparaging their use, just days before being diagnosed with COVID-19 himself (see page 190). "People looking at the evidence are understanding it differently," says Baruch Fischhoff, a psychologist at Carnegie Mellon University in Pittsburgh, Pennsylvania, who specializes in public policy. "It's legitimately confusing."

To be clear, the science supports using masks, with recent studies suggesting that they could save lives in different ways: research shows that they cut down the chances of both transmitting and catching the coronavirus, and some studies hint that masks might reduce the severity of infection if people do contract the disease.

But being more definitive about how well they work or when to use them gets complicated. There are many types of mask, worn in a variety of environments. There are questions about people's willingness to wear them, or wear them properly. Even the question of what kinds of study would provide definitive proof that they work is hard to answer.

"How good does the evidence need to be?" asks Fischhoff. "It's a vital question."

Beyond gold standards

At the beginning of the pandemic, medical experts lacked good evidence on how SARS-CoV-2 spreads, and they didn't know enough to make strong public-health recommendations about masks.

The standard mask for use in health-care settings is the N95 respirator, which is designed to protect the wearer by filtering out 95% of airborne particles that measure 0.3 micrometres (μm) and larger. As the pandemic ramped up, these respirators quickly fell into short supply. That raised the now-contentious question: should members of the public bother wearing basic surgical masks or cloth masks? If so, under what conditions? "Those are the things we normally [sort out] in clinical trials," says Kate Grabowski, an infectious-disease epidemiologist at Johns Hopkins School of Medicine in Baltimore, Maryland. "But we just didn't have time for that."

So, scientists have relied on observational and laboratory studies. There is also indirect evidence from other infectious diseases. "If you look at any one paper – it's not a slam dunk. But, taken all together, I'm convinced that they are working," says Grabowski.

Confidence in masks grew in June with news about two hair stylists in Missouri who tested positive for COVID-19 (ref. 1). Both wore a double-layered cotton face covering or surgical mask while working. And although they passed on the infection to members of their households, their clients seem to have been spared (more than half reportedly declined free tests). Other hints of effectiveness emerged from mass gatherings. At Black Lives Matter protests in US cities, most attendees wore masks. The events did not seem to trigger spikes in infections², yet the virus ran rampant in late June at a Georgia summer camp, where children who attended were not required to wear face coverings³. Caveats abound: the protests were outdoors, which poses a lower risk of COVID-19 spread, whereas the campers shared cabins at night, for example. And because many

non-protesters stayed in their homes during the gatherings, that might have reduced virus transmission in the community. Nevertheless, the anecdotal evidence "builds up the picture", says Theo Vos, a health-policy researcher at the University of Washington in Seattle.

More-rigorous analyses added direct evidence. A preprint study⁴ posted in early August (and not yet peer reviewed), found that weekly increases in per-capita mortality were four times lower in places where masks were the norm or recommended by the government, compared with other regions. Researchers looked at 200 countries, including Mongolia, which adopted mask use in January and, as of May, had recorded no deaths related to COVID-19. Another study⁵ looked at the effects of US state-government mandates for mask use in April and May. Researchers estimated that those reduced the growth of COVID-19 cases by up to 2 percentage points per day. They cautiously suggest that mandates might have averted as many as 450,000 cases, after controlling for other mitigation measures, such as physical distancing.

"You don't have to do much math to say this is obviously a good idea," says Jeremy Howard, a research scientist at the University of San Francisco in California, who is part of a team that reviewed the evidence for wearing face masks in a preprint article that has been widely circulated⁶.

But such studies do rely on assumptions that mask mandates are being enforced and that people are wearing them correctly. Furthermore, mask use often coincides with other changes, such as limits on gatherings. As restrictions lift, further observational studies might begin to separate the impact of masks from those of other interventions, suggests Grabowski. "It will become easier to see what is doing what," she says.

Although scientists can't control many confounding variables in human populations, they can in animal studies. Researchers led by microbiologist Kwok-Yung Yuen at the University of Hong Kong housed infected and healthy hamsters in adjoining cages, with surgical-mask partitions separating some of the animals. Without a barrier, about two-thirds of the uninfected animals caught SARS-CoV-2, according to the paper⁷ published in May. But only about 25% of the animals protected by mask material got infected, and those that did were less sick than their mask-free neighbours (as measured by clinical scores and tissue changes).

The findings provide justification for the emerging consensus that mask use protects the wearer as well as other people. The work also points to another potentially game-changing idea: "Masking may not only protect you from infection but also from severe illness," says Monica Gandhi, an infectious-disease physician at the University of California, San Francisco.

Gandhi co-authored a paper⁸ published in

late July suggesting that masking reduces the dose of virus a wearer might receive, resulting in infections that are milder or even asymptomatic. A larger viral dose results in a more aggressive inflammatory response, she suggests.

She and her colleagues are currently analysing hospitalization rates for COVID-19 before and after mask mandates in 1,000 US counties, to determine whether the severity of disease decreased after public masking guidelines were brought in.

The idea that exposure to more virus results in a worse infection makes "absolute sense",

"You don't have to do much math to say this is obviously a good idea."

says Paul Digard, a virologist at the University of Edinburgh, UK, who was not involved in the research. "It's another argument for masks."

Gandhi suggests another possible benefit: if more people get mild cases, that might help to enhance immunity at the population level without increasing the burden of severe illness and death. "As we're awaiting a vaccine, could driving up rates of asymptomatic infection do good for population-level immunity?" she asks.

Back to ballistics

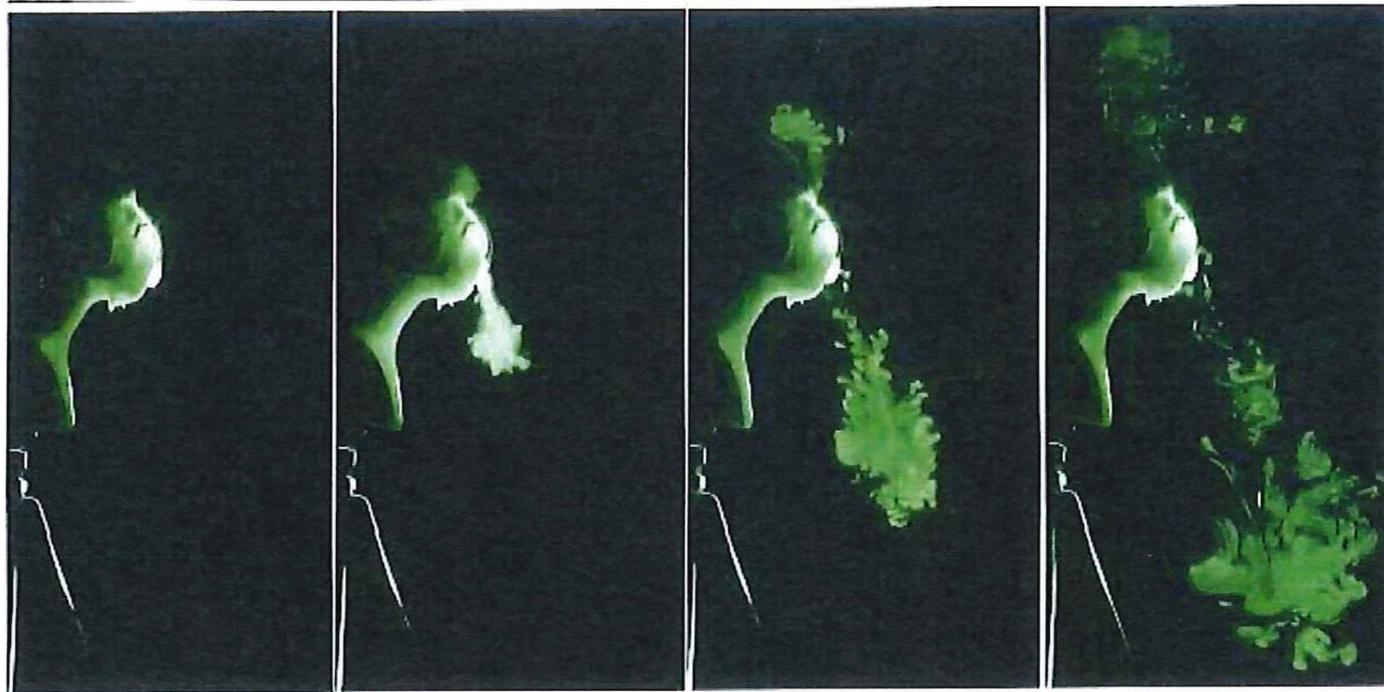
The masks debate is closely linked to another divisive question: how does the virus travel through the air and spread infection?

The moment a person breathes or talks, sneezes or coughs, a fine spray of liquid particles takes flight. Some are large – visible, even and referred to as droplets; others are microscopic, and categorized as aerosols. Viruses including SARS-CoV-2 hitch rides on these particles; their size dictates their behaviour.

Droplets can shoot through the air and land on a nearby person's eyes, nose or mouth to cause infection. But gravity quickly pulls them down. Aerosols, by contrast, can float in the air for minutes to hours, spreading through an unventilated room like cigarette smoke.

What does this imply for the ability of masks to impede COVID-19 transmission? The virus itself is only about 0.1 μm in diameter. But because viruses don't leave the body on their own, a mask doesn't need to block particles that small to be effective. More relevant are the pathogen-transporting droplets and aerosols, which range from about 0.2 μm to hundreds of micrometres across. (An average human hair has a diameter of about 80 μm .) The majority are 1–10 μm in diameter and can linger in the air a long time, says Jose-Luis Jimenez, an

Feature



Time-lapse images show how cough droplets spread from a person wearing an N95 mask that has a valve to expel exhaled air.

environmental chemist at the University of Colorado Boulder. "That is where the action is."

Scientists are still unsure which size of particle is most important in COVID-19 transmission. Some can't even agree on the cut-off that should define aerosols. For the same reasons, scientists still don't know the major form of transmission for influenza, which has been studied for much longer.

Many believe that asymptomatic transmission is driving much of the COVID-19 pandemic, which would suggest that viruses aren't typically riding out on coughs or sneezes. By this reasoning, aerosols could prove to be the most important transmission vehicle. So, it is worth looking at which masks can stop aerosols.

All in the fabric

Even well-fitting N95 respirators fall slightly short of their 95% rating in real-world use, actually filtering out around 90% of incoming aerosols down to 0.3 μm . And, according to unpublished research, N95 masks that don't have exhalation valves – which expel unfiltered exhaled air – block a similar proportion of outgoing aerosols. Much less is known about surgical and cloth masks, says Kevin Fennelly, a pulmonologist at the US National Heart, Lung, and Blood Institute in Bethesda, Maryland.

In a review⁹ of observational studies, an international research team estimates that surgical and comparable cloth masks are 67% effective in protecting the wearer.

In unpublished work, Linsey Marr, an environmental engineer at Virginia Tech in Blacksburg, and her colleagues found that even a cotton T-shirt can block half of inhaled

aerosols and almost 80% of exhaled aerosols measuring 2 μm across. Once you get to aerosols of 4–5 μm , almost any fabric can block more than 80% in both directions, she says.

Multiple layers of fabric, she adds, are more effective, and the tighter the weave, the better. Another study¹⁰ found that masks with layers of different materials – such as cotton and silk – could catch aerosols more efficiently than those made from a single material.

Benn worked with Danish engineers at her university to test their two-layered cloth mask design using the same criteria as for medical-grade ventilators. They found that their mask blocked only 11–19% of aerosols down to the 0.3 μm mark, according to Benn. But because most transmission is probably occurring through particles of at least 1 μm , according to Marr and Jimenez, the actual difference in effectiveness between N95 and other masks might not be huge.

Eric Westman, a clinical researcher at Duke University School of Medicine in Durham, North Carolina, co-authored an August study¹¹ that demonstrated a method for testing mask effectiveness. His team used lasers and smartphone cameras to compare how well 14 different cloth and surgical face coverings stopped droplets while a person spoke. "I was reassured that a lot of the masks we use did work," he says, referring to the performance of cloth and surgical masks. But thin polyester and spandex neck gaiters – stretchable scarves that can be pulled up over the mouth and nose – seemed to actually reduce the size of droplets being released. "That could be worse than wearing nothing at all," Westman says.

Some scientists advise not making too much of the finding, which was based on just

one person talking. Marr and her team were among the scientists who responded with experiments of their own, finding that neck gaiters blocked most large droplets. Marr says she is writing up her results for publication.

"There's a lot of information out there, but it's confusing to put all the lines of evidence together," says Angela Kasmussen, a virologist at Columbia University's Mailman School of Public Health in New York City. "When it comes down to it, we still don't know a lot."

Minding human minds

Questions about masks go beyond biology, epidemiology and physics. Human behaviour is core to how well masks work in the real world. "I don't want someone who is infected in a crowded area being confident while wearing one of these cloth coverings," says Michael Osterholm, director of the Center for Infectious Disease Research and Policy at the University of Minnesota in Minneapolis.

Perhaps fortunately, some evidence¹² suggests that donning a face mask might drive the wearer and those around them to adhere better to other measures, such as social distancing. The masks remind them of shared responsibility, perhaps. But that requires that people wear them.

Across the United States, mask use has held steady around 50% since late July. This is a substantial increase from the 20% usage seen in March and April, according to data from the Institute for Health Metrics and Evaluation at the University of Washington in Seattle (see go.nature.com/30n6kxv). The institute's models also predicted that, as of 23 September, increasing US mask use to 95% – a level observed in Singapore and some other

countries – could save nearly 100,000 lives in the period up to 1 January 2021.

“There’s a lot more we would like to know,” says Vos, who contributed to the analysis. “But given that it is such a simple, low-cost intervention with potentially such a large impact, who would not want to use it?”

Further confusing the public are controversial studies and mixed messages. One study¹³ in April found masks to be ineffective, but was retracted in July. Another, published in June¹⁴, supported the use of masks before dozens of scientists wrote a letter attacking its methods (see go.nature.com/3jpvxpt). The authors are pushing back against calls for a retraction. Meanwhile, the World Health Organization (WHO) and the US Centers for Disease Control and Prevention (CDC) initially refrained from recommending widespread mask usage, in part because of some hesitancy about depleting supplies for health-care workers. In April, the CDC recommended that masks be worn when physical distancing isn’t an option; the WHO followed suit in June.

There’s been a lack of consistency among political leaders, too. US President Donald Trump voiced support for masks, but rarely wore one. He even ridiculed political rival Joe Biden for consistently using a mask – just days before Trump himself tested positive for the coronavirus, on 2 October. Other world leaders, including the president and prime minister of Slovakia, Zuzana Čaputová and Igor Matovič, sported masks early in the pandemic, reportedly to set an example for their country.

Denmark was one of the last nations to mandate face masks – requiring their use on public transport from 22 August. It has maintained

generally good control of the virus through early stay-at-home orders, testing and contact tracing. It is also at the forefront of COVID-19 face-mask research, in the form of two large, randomly controlled trials. A research group in Denmark enrolled some 6,000 participants,

“You can’t do randomized trials for everything – and you shouldn’t.”

asking half to use surgical face masks when going to a workplace. Although the study is completed, Thomas Benfield, a clinical researcher at the University of Copenhagen and one of the principal investigators on the trial, says that his team is not ready to share any results.

Benn’s team, working independently of Benfield’s group, is in the process of enrolling around 40,000 people in Guinea-Bissau, randomly selecting half of the households to receive layer cloth masks – two for each family member aged ten or over. The team will then follow everyone over several months to compare rates of mask use with rates of COVID-like illness. She notes that each household will receive advice on how to protect themselves from COVID-19 – except that those in the control group will not get information on the use of masks. The team expects to complete enrolment in November.

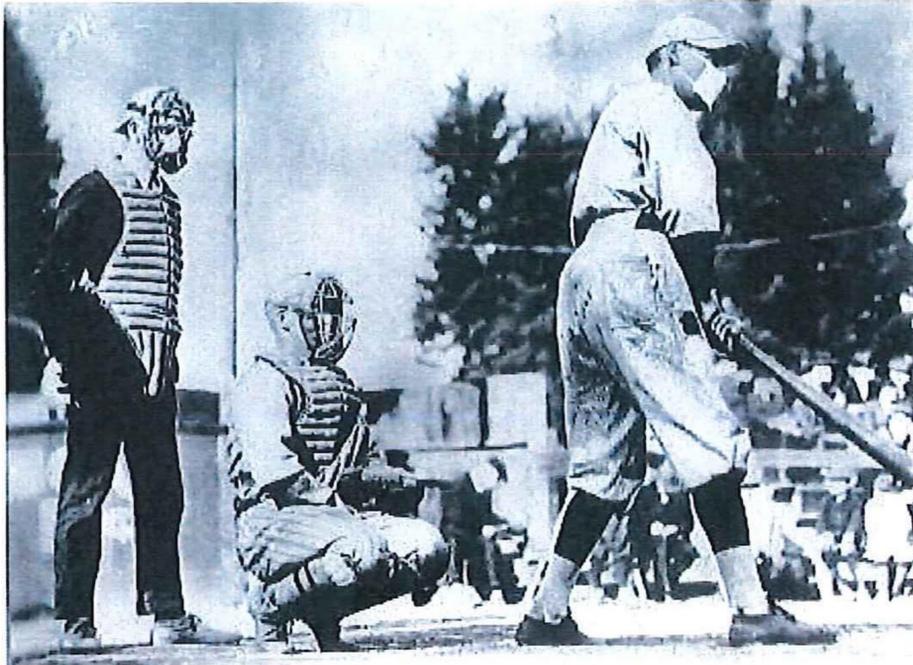
Several scientists say that they are excited to see the results. But others worry that such experiments are wasteful and potentially exploit a vulnerable population. “If this was a gentler pathogen, it would be great,” says Eric Topol, director of the Scripps Research Translational Institute in La Jolla, California. “You can’t do randomized trials for everything – and you shouldn’t.” As clinical researchers are sometimes fond of saying, parachutes have never been tested in a randomized controlled trial, either.

But Benn defends her work, explaining that people in the control group will still benefit from information about COVID-19, and they will get masks at the end of the study. Given the challenge of manufacturing and distributing the masks, “under no circumstances”, she says, could her team have handed out enough for everyone at the study’s outset. In fact, they had to scale back their original plans to enrol 70,000 people. She is hopeful that the trial will provide some benefits for everyone involved. “But no one in the community should be worse off than if we hadn’t done this trial,” she says. The resulting data, she adds, should inform the global scientific debate.

For now, Osterholm, in Minnesota, wears a mask. Yet he laments the “lack of scientific rigour” that has so far been brought to the topic. “We criticize people all the time in the science world for making statements without any data,” he says. “We’re doing a lot of the same thing here.”

Nevertheless, most scientists are confident that they can say something prescriptive about wearing masks. It’s not the only solution, says Gandhi, “but I think it is a profoundly important pillar of pandemic control”. As Digard puts it: “Masks work, but they are not infallible. And, therefore, keep your distance.”

Lynne Peoples is a science journalist in Seattle, Washington.



US baseball players wore masks while playing during the 1918 influenza epidemic.

1. Hendrix, M. J., Walde, C., Findley, K. & Trotman, R. *Arch. Microbiol. Wiley* **192**, 930–937 (2020).
2. Dave, D. M., Friedman, A. I., Matsuzawa, K., Seble, J. J. & Rafford, K. *Black Lives Matter Protests, Social Distancing, and COVID-19* NBER Working Paper 27408 (National Bureau of Economic Research, 2020).
3. Szablewski, C. M. et al. *Arch. Microbiol. Wiley* **192**, 1023–1025 (2020).
4. Laffler, C. I. et al. Preprint at <https://doi.org/10.1101/2020.05.22.20103231> (2020).
5. Lytt, W. & Walshy, G. I. *Health Aff.* <https://doi.org/10.1077/hlthaff.2020.00010> (2020).
6. Howard, J. et al. Preprint at <https://doi.org/10.20944/preprints202004.0203.v1> (2020).
7. Chan, J. F. W. et al. *Clin. Infect. Dis.* <https://doi.org/10.1093/cid/ciaa514> (2020).
8. Gandhi, M., Royce, C. & Goonzy, E. *J. Gen. Intern. Med.* <https://doi.org/10.1007/s11605-020-05067-8> (2020).
9. Chu, D. K. et al. *Lancet* **395**, 1973–1987 (2020).
10. Kondo, A. et al. *ACS Nano* **14**, 6133–6147 (2020).
11. Fischer, T. P. et al. *Sci. Adv.* **6**, eabd3063 (2020).
12. Marchetti, M. Preprint at <https://arxiv.org/abs/2005.12425> (2020).
13. Eea, S. et al. *Ann. Intern. Med.* **173**, W27–W29 (2020); retraction 173, 79 (2020).
14. Zhang, R., Li, Y., Zhang, A. L., Wang, Y. & Molina, M. J. *Proc. Natl. Acad. Sci. USA* **117**, 11832–11833 (2020).

ONLINE REPORT

Effectiveness of Cloth Masks for Protection Against Severe Acute Respiratory Syndrome Coronavirus 2

Abrar A. Chughtai, Holly Seale, C. Raina MacIntyre

Cloth masks have been used in healthcare and community settings to protect the wearer from respiratory infections. The use of cloth masks during the coronavirus disease (COVID-19) pandemic is under debate. The filtration effectiveness of cloth masks is generally lower than that of medical masks and respirators; however, cloth masks may provide some protection if well designed and used correctly. Multilayer cloth masks, designed to fit around the face and made of water-resistant fabric with a high number of threads and finer weave, may provide reasonable protection. Until a cloth mask design is proven to be equally effective as a medical or N95 mask, wearing cloth masks should not be mandated for healthcare workers. In community settings, however, cloth masks may be used to prevent community spread of infections by sick or asymptotically infected persons, and the public should be educated about their correct use.

As a result of the coronavirus disease (COVID-19) pandemic, supplies of medical masks and respirators are limited globally. Medical/surgical masks and respirators are commonly used as protection against respiratory and other infections. The main difference in these 2 products is the intended use. Medical masks are used in both healthcare and community settings to protect from droplet infections and from splashes and sprays of blood and body fluids. They are also used to prevent the spread of infection from sick or asymptomatic persons (also referred to as source control). Respirators are fit around the face, designed for respiratory protection, and used mostly in healthcare settings.

Heated debate surrounds healthcare workers having to either reuse or extend the use of disposable

products, sterilize their respirator, or resort to wearing cloth or other homemade masks (1,2). Historically, cloth masks have been used to protect healthcare workers and the general public from various respiratory infections (3). However, most studies of cloth masks were conducted in vivo and during the first half of the 20th century, before medical masks were developed. To our knowledge, only 1 randomized controlled trial has been conducted to determine the efficacy of cloth masks (4). In this article, we discuss the evidence to inform the use of cloth masks for prevention of respiratory infections and propose strategies for cleaning and decontamination to protect frontline healthcare workers and the general public.

Historical Use of Cloth Masks

During the early 20th century, various types of cloth masks (made of cotton, gauze, and other fabrics) were used in US hospitals. Rates of respiratory infections among healthcare workers who used masks made of 2–3 layers of gauze were low (5). Cloth masks were also used to protect healthcare workers from diphtheria and scarlet fever. During the 1918 Spanish influenza pandemic, masks made of various layers of cotton were widely used by healthcare workers and the general public. Gauze masks were used during the second Manchurian plague epidemic in 1920–1921 and a plague epidemic in Los Angeles in 1924; infection rates among healthcare workers who wore masks were low (6). During the 1930s and 1940s, gauze and cloth masks were also used by healthcare workers to protect themselves from tuberculosis (7). In the middle of the 20th century, after disposable medical masks had been developed, use of cloth masks decreased; however, cloth mask use is still widespread in many countries in Asia. During the outbreak of severe acute respiratory syndrome in China, cotton masks were widely used by healthcare workers and the general public, and observational studies found them to be effective (8).

Author affiliations: University of New South Wales, Kensington, New South Wales, Australia (A. Chughtai, H. Seale, C.R. MacIntyre); Arizona State University, Tempe, Arizona, USA (C.R. MacIntyre)

DOI: <https://doi.org/10.3201/eid2610.200948>

Studies of Cloth Mask Efficacy

In 2015, we conducted a randomized controlled trial to compare the efficacy of cloth masks with that of medical masks and controls (standard practice) among health-care workers in Vietnam (4). Rates of infection were consistently higher among those in the cloth mask group than in the medical mask and control groups. This finding suggests that risk for infection was higher for those wearing cloth masks. The mask tested was a locally manufactured, double-layered cotton mask. Participants were given 5 cloth masks for a 4-week study period and were asked to wash the masks daily with soap and water (4). The poor performance may have been because the masks were not washed frequently enough or because they became moist and contaminated. Medical and cloth masks were used by some participants in the control group, but the poor performance of cloth masks persisted in post hoc analysis when we compared all participants who used medical masks (from the control and the medical mask groups) with all participants who used only a cloth mask (from the control and the cloth mask groups)(4).

We also examined the filtration ability of cloth masks by reviewing 19 studies (3). We found that the filtration effectiveness of cloth masks is generally lower than that of medical masks and respirators. Filtration effectiveness of cloth masks varies widely; some materials filter better than others (9–11). Filtration effectiveness of cloth masks depends on many factors, such as thread count, number of layers, type of fabric, and water resistance (3). One study tested medical masks and several household materials for the ability to block bacterial and viral aerosols. Participants made masks from different materials, and all masks tested showed some ability to block the microbial aerosol challenges although less than that of medical masks (11). Another study found that homemade cloth masks may also reduce aerosol exposure although less so than medical masks and respirators (12). Masks made of cotton and towel provide better protection than masks made of gauze. Although cloth masks are often not designed to fit around the face, some materials may fit snugly against the face. One study found that the use of nylon stockings around the mask improved filtration (A.V. Mueller et al., unpub. data, <https://www.medrxiv.org/content/10.1101/2020.04.17.20069567v2.full.pdf>). Filtration effectiveness of wet masks is reportedly lower than that of dry masks (3).

Policies and Guidelines Associated with Cloth Mask Use

Despite common use of cloth masks in many countries in Asia, existing infection control guidelines do

not mention their use (13). However, some previous infection control guidelines have discussed use of cloth masks when medical masks and respirators are not available. For example, in an infection control guideline developed in 1998, the US Centers for Disease Control and Prevention (CDC) and the World Health Organization (WHO) recommended using cotton masks to protect from viral hemorrhagic fevers in low-resource healthcare settings in Africa if respirators or medical masks were not available (14). Similarly, WHO also discussed the option of using cloth masks to protect wearers from acquiring infection during the 2009 influenza A(H1N1) pandemic (15). In 2006, the US Institute of Medicine, National Academy of Sciences, prepared a report about the reusability of face masks during an influenza pandemic (16). The members were hesitant to advise against the use of cloth masks because of high mask demand during pandemics (16). As a result of the shortage of masks during the recent COVID-19 pandemic, CDC developed strategies for optimizing the supply of masks and recommended using homemade cloth masks when no medical masks are available (1). However, no guidance is provided for cleaning and decontamination of cloth masks, although standard washing in hot water with soap should be adequate.

Factors to Consider when Using Cloth Masks to Protect Wearers and to Prevent Spread of Infection during the COVID-19 Pandemic

The primary transmission routes for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) are thought to be inhalation of respiratory droplets and close contact; therefore, WHO recommends wearing medical masks during routine care and using respirators during aerosol-generating procedures and other high-risk situations (17). However, SARS-CoV-2 is a novel pathogen, and growing evidence indicates the possibility of airborne transmission (18–21). Recommendations to wear masks to protect the wearer from droplet infections are based on the assumption that droplets travel short distances only, generally 1–2 m. However, of 10 studies of horizontal droplet distance, 8 showed that droplets travel >2 m, in some instances ≈8 m (22). A recent study also showed that SARS-CoV-2 may be transmitted up to 4 m (18). Therefore, ideally, all frontline healthcare workers should use a respirator. However, demand for personal protective equipment has increased during the COVID-19 pandemic, and respirator shortages in previous pandemics have also been reported (23–26). If respirators are unavailable, healthcare workers could use a medical mask but may be at increased risk if they do so (2).

CDC and the European Centre for Disease Prevention and Control initially recommended that all healthcare workers use respirators; however, because of shortages, they later recommended respirator use for high-risk situations only (27,28). Some countries also recommend sterilizing and decontaminating respirators for reuse; however, limited evidence supports these practices (29), and they may not be feasible in low- and middle-income countries.

During a pandemic, cloth masks may be the only option available; however, they should be used as a last resort when medical masks and respirators are not available (3). Cloth mask use should not be mandated for healthcare workers, but some may choose to use them if there are no alternatives (30). Protection is affected by proper mask use as well as by selection of fabric and design of the masks for water resistance, filtration, and fit. Current evidence suggests that multilayered masks with water-resistant fabric, high number of threads, and finer weave may be more protective (3,10). Several studies have examined filtration, but fewer have examined fit or water resistance. Surgical masks are normally rated for fluid resistance, and cloth masks should be too. Masks should be able to prevent a stream of fluid flowing at a pressure of up to 160 mm Hg from seeping through the mask and potentially into the mouth. Furthermore, the degree of fit affects effectiveness because air flows in the direction of least resistance; if gaps are present on the sides of the mask, air will flow through those gaps instead of through the mask.

Cloth masks can be made in large quantities in a short time. They can be reused after being decontaminated by various techniques, ideally washing in hot water with soap. Other methods or products include using bleach, isopropyl alcohol, or hydrogen peroxide; autoclaving or microwaving; and application of ultraviolet radiation or dry heat (16). Unlike disposable medical masks and respirators, the material of cloth masks is unlikely to degrade from standard decontamination procedures. However, hospitals will have the extra burden of cleaning and decontaminating used masks. If healthcare workers perform decontamination themselves, they may fail to wash masks frequently enough and may risk self-contamination (31).

The general public can use cloth masks to protect against infection spread in the community. In community settings, masks may be used in 2 ways. First, they may be used by sick persons to prevent spread of infection (source control), and most health organizations (including WHO and CDC) recommend such use. In fact, a recent CDC policy change with regard

to community use of cloth masks (1) is also based on high risk for transmission from asymptomatic or pre-symptomatic persons (32). According to some studies, ≈25%–50% of persons with COVID-19 have mild cases or are asymptomatic and potentially can transmit infection to others. So in areas of high transmission, mask use as source control may prevent spread of infection from persons with asymptomatic, pre-symptomatic, or mild infections. If medical masks are prioritized for healthcare workers, the general public can use cloth masks as an alternative. Second, masks may be used by healthy persons to protect them from acquiring respiratory infections; some randomized controlled trials have shown masks to be efficacious in closed community settings, with and without the practice of hand hygiene (33). Moreover, in a widespread pandemic, differentiating asymptomatic from healthy persons in the community is very difficult, so at least in high-transmission areas, universal face mask use may be beneficial. The general public should be educated about mask use because cloth masks may give users a false sense of protection because of their limited protection against acquiring infection (16). Correctly putting on and taking off cloth masks improves protection (Table). Taking a mask off is a high-risk process (34) because pathogens may be present on the outer surface of the mask and may result in self-contamination during removal (31).

Future Research Directions

More research on cloth masks is needed to inform their use as an alternative to surgical masks/respirators in the event of shortage or high-demand situations. To our knowledge, only 1 randomized controlled trial (4) has been conducted to examine the efficacy of cloth masks in healthcare settings, and the results do not favor use of cloth masks. More randomized controlled trials should be conducted in community settings to test the efficacy of cloth masks against respiratory infections. According to the US Institute of Medicine, National Academy of Sciences, more research on the engineering design of cloth masks to enhance their filtration and fit is needed (16). Moreover, various methods for decontaminating cloth masks should be tested.

Conclusions

The filtration, effectiveness, fit, and performance of cloth masks are inferior to those of medical masks and respirators. Cloth mask use should not be mandated for healthcare workers, who should as a priority be provided proper respiratory protection. Cloth masks are a more suitable option for community use

Table. Recommendations with regard to cloth masks

Activity	Details
Making cloth masks	<ul style="list-style-type: none"> • Select a fabric with high thread count and fine weave. • If using t-shirt material, cotton blend (12) may be better than pure cotton. • Hybrid fabrics such as cotton-silk, cotton-chiffon, or cotton-flannel may be good choices (10). • Select a fabric that is water resistant. • Use a minimum of 2-3 layers, preferably with batting between the layers. • Design a mask that fits and seals around the face. • Use ties rather than ear loops because ties provide better fit.
Putting on a cloth mask	<ul style="list-style-type: none"> • Wash your hands with soap and water or alcohol-based hand sanitizers. • Take a clean and dry cloth mask. • Place and hold the mask over your nose and mouth. Tie upper strings first at the back of your head and then the lower set at the base of your neck. If cloth mask has loops, hold the mask over your nose and mouth and tie ear loops. • If mask has pleats, unfold the mask from top and bottom so it covers your nose, mouth, and chin. • Do not touch the outer layer of face masks during use.
Taking off a cloth mask	<ul style="list-style-type: none"> • Wash your hands • Do not touch the outer surface of the face mask while removing. • Untie the lower strings first and then upper strings. In case of ear loops, remove ear loops first and then remove the mask. • Place the mask in a plastic zipper-sealed bag until it can be decontaminated. • Wash your hands again after removing the mask.
Caring for masks	<ul style="list-style-type: none"> • Have at least 2 masks per person, and wash masks with soap and water daily. • Cloth masks can be used for an extended period as long as they are not wet or soiled, but do not reuse them unless washed and cleaned.

when medical masks are unavailable. Protection provided by cloth masks may be improved by selecting appropriate material, increasing the number of mask layers, and using those with a design that provides filtration and fit. Cloth masks should be washed daily and after high-exposure use by using soap and water or other appropriate methods.

C.R.M. is supported by a National Health and Medical Research Council Principal Research Fellowship, grant no. 1137582. C.R.M. receives funding from The National Health and Medical Research Council (Centre for Research Excellence and Principal Research Fellowship) and Sanofi. More than 5 years ago, she received funding from 3M for face mask research.

In 2011, A.A.C., H.S., and C.R.M. conducted a study that involved testing filtration of masks made by 3M. A.A.C. and C.R.M. have also worked with CleanSpace Technology on research of fit testing of respirators (no funding was involved).

About the Author

Dr. Chughtai is an epidemiologist working as a lecturer in the School of Public Health and Community Medicine, University of New South Wales, Australia. His research interests include epidemiology and control of infectious diseases, focusing on emerging and reemerging infections.

References

1. Centers for Disease Control and Prevention. Strategies for optimizing the supply of facemasks [cited 2020 Mar 25]. <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppp-strategy/face-masks.html>
2. Chughtai AA, Seale H, Islam MS, Owais M, MacIntyre CR. Policies on the use of respiratory protection for hospital health workers to protect from coronavirus disease (COVID-19). *Int J Nurs Stud*. 2020;105:103567. <https://doi.org/10.1016/j.ijnurstu.2020.103567>
3. Chughtai AA, Seale H, MacIntyre CR. Use of cloth masks in the practice of infection control—evidence and policy gaps. *Int J Infect Control*. 2013;9:1-12. <https://doi.org/10.3396/IJIC.v9i3.020.13>
4. MacIntyre CR, Seale H, Dung TC, Hien NT, Nga PT, Chughtai AA, et al. A cluster randomised trial of cloth masks compared with medical masks in healthcare workers. *BMJ Open*. 2015;5:e008577. <https://doi.org/10.1136/bmjopen-2014-008577>
5. Weaver GH. Droplet infection and its prevention by the face mask. *J Infect Dis*. 1919;24:218-30. <https://doi.org/10.1093/infdis/24.3.218>
6. Visellear AJ. The pneumonic plague epidemic of 1924 in Los Angeles. *Yale J Biol Med*. 1974;47:40-54.
7. McNett EL. The face mask in tuberculosis. *Am J Nurs*. 1949;49:32-6.
8. Yang T, Seale H, MacIntyre CR, Zhang H, Zhang Z, Zhang Y, et al. Mask-wearing and respiratory infection in healthcare workers in Beijing, China. *Braz J Infect Dis*. 2011;15:102-8. [https://doi.org/10.1016/S1413-8670\(11\)70153-2](https://doi.org/10.1016/S1413-8670(11)70153-2)
9. Rengasamy S, Lamer B, Shaffer RL. Simple respiratory protection—evaluation of the filtration performance of cloth masks and common fabric materials against 20-1000 nm size particles. *Ann Occup Hyg*. 2010;54:789-98.



Facial Masking for Covid-19 — Potential for “Variolation” as We Await a Vaccine

Monica Gandhi, M.D., M.P.H., and George W. Rutherford, M.D.

As SARS-CoV-2 continues its global spread, it's possible that one of the pillars of Covid-19 pandemic control — universal facial masking — might help reduce the severity of disease

and ensure that a greater proportion of new infections are asymptomatic. If this hypothesis is borne out, universal masking could become a form of “variolation” that would generate immunity and thereby slow the spread of the virus in the United States and elsewhere, as we await a vaccine.

One important reason for population-wide facial masking became apparent in March, when reports started to circulate describing the high rates of SARS-CoV-2 viral shedding from the noses and mouths of patients who were presymptomatic or asymptomatic — shedding rates equivalent to those among symptomatic patients.¹ Universal facial masking seemed to be a possible way to prevent transmission from asymp-

tomatic infected people. The Centers for Disease Control and Prevention (CDC) therefore recommended on April 3 that the public wear cloth face coverings in areas with high rates of community transmission — a recommendation that has been unevenly followed across the United States.

Past evidence related to other respiratory viruses indicates that facial masking can also protect the wearer from becoming infected, by blocking viral particles from entering the nose and mouth.² Epidemiologic investigations conducted around the world — especially in Asian countries that became accustomed to population-wide masking during the 2003 SARS pandemic — have suggested that there is a strong relationship be-

tween public masking and pandemic control. Recent data from Boston demonstrate that SARS-CoV-2 infections decreased among health care workers after universal masking was implemented in municipal hospitals in late March.

SARS-CoV-2 has the protean ability to cause myriad clinical manifestations, ranging from a complete lack of symptoms to pneumonia, acute respiratory distress syndrome, and death. Recent virologic, epidemiologic, and ecologic data have led to the hypothesis that facial masking may also reduce the severity of disease among people who do become infected.³ This possibility is consistent with a long-standing theory of viral pathogenesis, which holds that the severity of disease is proportionate to the viral inoculum received. Since 1938, researchers have explored, primarily in animal models, the concept of the lethal dose of a virus — or the dose at which 50% of exposed hosts die

(LD50). With viral infections in which host immune responses play a predominant role in viral pathogenesis, such as SARS-CoV-2, high doses of viral inoculum can overwhelm and dysregulate innate immune defenses, increasing the severity of disease. Indeed, downregulating immunopathology is one mechanism by which dexamethasone improves outcomes in severe Covid-19 infection. As proof of concept of viral inoculum influencing disease manifestations, higher doses of administered virus led to more severe manifestations of Covid-19 in a Syrian hamster model of SARS-CoV-2 infection.¹

If the viral inoculum matters in determining the severity of SARS-CoV-2 infection, an additional hypothesized reason for wearing facial masks would be to reduce the viral inoculum to which the wearer is exposed and the subsequent clinical impact of the disease. Since masks can filter out some virus-containing droplets (with filtering capacity determined by mask type),² masking might reduce the inoculum that an exposed person inhales. If this theory bears out, population-wide masking, with any type of mask that increases acceptability and adherence,⁷ might contribute to increasing the proportion of SARS-CoV-2 infections that are asymptomatic. The typical rate of asymptomatic infection with SARS-CoV-2 was estimated to be 40% by the CDC in mid-July, but asymptomatic infection rates are reported to be higher than 80% in settings with universal facial masking, which provides observational evidence for this hypothesis. Countries that have adopted population-wide masking have fared better in terms of rates of severe Covid-related illnesses and death, which,

in environments with limited testing, suggests a shift from symptomatic to asymptomatic infections. Another experiment in the Syrian hamster model simulated surgical masking of the animals and showed that with simulated masking, hamsters were less likely to get infected, and if they did get infected, they either were asymptomatic or had milder symptoms than unmasked hamsters.

The most obvious way to spare society the devastating effects of Covid-19 is to promote measures to reduce both transmission and severity of illness. But SARS-CoV-2 is highly transmissible, cannot be contained by syndromic-based surveillance alone,¹ and is proving difficult to eradicate, even in regions that implemented strict initial control measures. Efforts to increase testing and containment in the United States have been ongoing and variably successful, owing in part to the recent increase in demand for testing.

The hopes for vaccines are pinned not just on infection prevention; most vaccine trials include a secondary outcome of decreasing the severity of illness, since increasing the proportion of cases in which disease is mild or asymptomatic would be a public health victory. Universal masking seems to reduce the rate of new infections; we hypothesize that by reducing the viral inoculum, it would also increase the proportion of infected people who remain asymptomatic.³

In an outbreak on a closed Argentinian cruise ship, for example, where passengers were provided with surgical masks and staff with N95 masks, the rate of asymptomatic infection was 81% (as compared with 20% in earlier cruise ship outbreaks without universal masking). In two recent outbreaks

in U.S. food-processing plants, where all workers were issued masks each day and were required to wear them, the proportion of asymptomatic infections among the more than 500 people who became infected was 95%, with only 5% in each outbreak experiencing mild-to-moderate symptoms.⁴ Case-fatality rates in countries with mandatory or enforced population-wide masking have remained low, even with resurgences of cases after lockdowns were lifted.

Variolation was a process whereby people who were susceptible to smallpox were inoculated with material taken from a vesicle of a person with smallpox, with the intent of causing a mild infection and subsequent immunity. Variolation was practiced only until the introduction of the variola vaccine, which ultimately eradicated smallpox. Despite concerns regarding safety, worldwide distribution, and eventual uptake, the world has high hopes for a highly effective SARS-CoV-2 vaccine, and as of early September, 34 vaccine candidates were in clinical evaluation, with hundreds more in development.

While we await the results of vaccine trials, however, any public health measure that could increase the proportion of asymptomatic SARS-CoV-2 infections may both make the infection less deadly and increase population-wide immunity without severe illnesses and deaths. Reinfection with SARS-CoV-2 seems to be rare, despite more than 8 months of circulation worldwide and as suggested by a macaque model. The scientific community has been clarifying for some time the humoral and cell-mediated components of the adaptive immune response to SARS-CoV-2 and the

inadequacy of antibody-based seroprevalence studies to estimate the level of more durable T-cell and memory B-cell immunity to SARS-CoV-2. Promising data have been emerging in recent weeks suggesting that strong cell-mediated immunity results from even mild or asymptomatic SARS-CoV-2 infection,⁵ so any public health strategy that could reduce the severity of disease should increase population-wide immunity as well.

To test our hypothesis that population-wide masking is one of those strategies, we need further studies comparing the rate of asymptomatic infection in areas with and areas without universal masking. To test the variolation hypothesis, we will need more studies comparing the strength and durability of SARS-CoV-2-

specific T-cell immunity between people with asymptomatic infection and those with symptomatic infection, as well as a demonstration of the natural slowing of SARS-CoV-2 spread in areas with a high proportion of asymptomatic infections.

Ultimately, combating the pandemic will involve driving down both transmission rates and severity of disease. Increasing evidence suggests that population-wide facial masking might benefit both components of the response.

Disclosure forms provided by the authors are available at NEJM.org.

From the Center for AIDS Research, Division of HIV, Infectious Diseases, and Global Medicine, Department of Medicine (M.G.), and the Division of Infectious Disease and Global Epidemiology, Department of Epidemiology and Biostatistics (G.W.R.), University of California, San Francisco, San Francisco.

This article was published on September 8, 2020, at NEJM.org.

1. Gandhi M, Yokoe DS, Havlic DV. Asymptomatic transmission, the Achilles' heel of current strategies to control Covid-19. *N Engl J Med* 2020;182:2158-60.
2. van der Sande M, Rusnis E, Sabel R. Professional and home-made face masks reduce exposure to respiratory infections among the general population. *PLoS One* 2008;3(7):e2618.
3. Gandhi M, Beyrer C, Goosby E. Masks do more than protect others during COVID-19: reducing the inoculum of SARS-CoV-2 to protect the wearer. *J Gen Intern Med* 2020 July 31 [Epub ahead of print].
4. Imai M, Iwatsuki-Itoimato K, Hatta M, et al. Syrian hamsters as a small animal model for SARS-CoV-2 infection and countermeasure development. *Proc Natl Acad Sci U S A* 2020;117:16587-95.
5. Sekine T, Perez-Putti A, Rivera-Ballesteros O, et al. Robust T cell immunity in convalescent individuals with asymptomatic or mild COVID-19. *Cell* 2020 August 11 [Epub ahead of print].

DOI: 10.1056/NEJMp2026913
Copyright © 2020 Massachusetts Medical Society.

Handout submitted by Bo DeJager for Item No. 23

Please note: This report has been corrected. An erratum has been published.

Item 23

Morbidity and Mortality Weekly Report

Mr. DeJager handout

Community and Close Contact Exposures Associated with COVID-19 Among Symptomatic Adults ≥ 18 Years in 11 Outpatient Health Care Facilities — United States, July 2020

Kiva A. Fisher, PhD¹; Mark W. Tenforde, MD, PhD^{1,2}; Leora R. Feldstein, PhD¹; Christopher J. Lindsell, PhD^{3,4}; Nathan I. Shapiro, MD^{3,5}; D. Clark Fife, MD^{3,6}; Kevin W. Gibbs, MD^{3,6}; Heidi L. Erickson, MD^{3,7}; Matthew E. Peckler, MD^{3,7}; Jay S. Steingrub, MD^{3,8}; Matthew C. Exline, MD^{3,9}; Daniel J. Henning, MD^{3,10}; Jennifer G. Wilson, MD^{3,11}; Samuel M. Brown, MD^{3,12}; Ihan D. Peltan, MD^{3,12}; Todd W. Rice, MD^{3,4}; David N. Hager, MD, PhD^{3,13}; Adir A. Ginde, MD^{3,14}; H. Keipp Talbot, MD^{3,4}; Jonathan D. Casey, MD^{3,4}; Carlos G. Grijalva, MD^{3,4}; Brendan Flannery, PhD¹; Manish M. Patel, MD¹; Wesley H. Self, MD^{3,4}; IVY Network Investigators; CDC COVID-19 Response Team

Community and close contact exposures continue to drive the coronavirus disease 2019 (COVID-19) pandemic. CDC and other public health authorities recommend community mitigation strategies to reduce transmission of SARS-CoV-2, the virus that causes COVID-19 (1,2). Characterization of community exposures can be difficult to assess when widespread transmission is occurring, especially from asymptomatic persons within inherently interconnected communities. Potential exposures, such as close contact with a person with confirmed COVID-19, have primarily been assessed among COVID-19 cases, without a non-COVID-19 comparison group (3,4). To assess community and close contact exposures associated with COVID-19, exposures reported by case-patients (154) were compared with exposures reported by control-participants (160). Case-patients were symptomatic adults (persons aged ≥ 18 years) with SARS-CoV-2 infection confirmed by reverse transcription–polymerase chain reaction (RT-PCR) testing. Control-participants were symptomatic outpatient adults from the same health care facilities who had negative SARS-CoV-2 test results. Close contact with a person with known COVID-19 was more commonly reported among case-patients (42%) than among control-participants (14%). Case-patients were more likely to have reported dining at a restaurant (any area designated by the restaurant, including indoor, patio, and outdoor seating) in the 2 weeks preceding illness onset than were control-participants (adjusted odds ratio [aOR] = 2.4; 95% confidence interval [CI] = 1.5–3.8). Restricting the analysis to participants without known close contact with a person with confirmed COVID-19, case-patients were more likely to report dining at a restaurant (aOR = 2.8, 95% CI = 1.9–4.3) or going to a bar/coffee shop (aOR = 3.9, 95% CI = 1.5–10.1) than were control-participants. Exposures and activities where mask use and social distancing are difficult to maintain, including going to places that offer on-site eating or drinking, might be important risk factors for acquiring COVID-19. As communities reopen, efforts to reduce possible exposures at locations that offer on-site eating and drinking options should be considered to protect customers, employees, and communities.

This investigation included adults aged ≥ 18 years who received a first test for SARS-CoV-2 infection at an outpatient testing or health care center at one of 11 Influenza Vaccine Effectiveness in the Critically Ill (IVY) Network sites* during July 1–29, 2020 (5). A COVID-19 case was confirmed by RT-PCR testing for SARS-CoV-2 RNA from respiratory specimens. Assays varied among facilities. Each site generated lists of adults tested within the study period by laboratory result; adults with laboratory-confirmed COVID-19 were selected by random sampling as case-patients. For each case-patient, two adults with negative SARS-CoV-2 RT-PCR test results were randomly selected as control-participants and matched by age, sex, and study location. After randomization and matching, 615 potential case-patients and 1,212 control-participants were identified and contacted 14–23 days after the date they received SARS-CoV-2 testing. Screening questions were asked to identify eligible adults. Eligible adults for the study were symptomatic at the time of their first SARS-CoV-2 test.

CDC personnel administered structured interviews in English or five other languages† by telephone and entered data into REDCap software (6). Among 802 adults contacted and who agreed to participate (295 case-patients and 507 control-participants), 332 reported symptoms at the time of initial SARS-CoV-2 testing and were enrolled in the study. Eighteen interviews were excluded because of nonresponse to the community exposure questions. The final analytic sample (314) included 154 case-patients (positive SARS-CoV-2 test results) and 160 control-participants (negative SARS-CoV-2

* Baystate Medical Center, Springfield, Massachusetts; Beth Israel Deaconess Medical Center, Boston, Massachusetts; University of Colorado School of Medicine, Aurora, Colorado; Hennepin County Medical Center, Minneapolis, Minnesota; Intermountain Healthcare, Salt Lake City, Utah; Ohio State University Wexner Medical Center, Columbus, Ohio; Wake Forest University Baptist Medical Center, Winston-Salem, North Carolina; Vanderbilt University Medical Center, Nashville, Tennessee; Johns Hopkins Hospital, Baltimore, Maryland; Stanford University Medical Center, Palo Alto, California; University of Washington Medical Center, Seattle, Washington). Participating states include California, Colorado, Maryland, Massachusetts, Minnesota, North Carolina, Ohio, Tennessee, Utah, and Washington.

† Other languages included Spanish, Arabic, Vietnamese, Portuguese, and Russian.

test results). Among nonparticipants, 470 were ineligible (i.e., were not symptomatic or had multiple tests), and 163 refused to participate. This activity was reviewed by CDC and participating sites and conducted consistent with applicable federal law and CDC policy.[§]

Data collected included demographic characteristics, information on underlying chronic medical conditions,[¶] symptoms, convalescence (self-rated physical and mental health), close contact (within 6 feet for ≥ 15 minutes) with a person with known COVID-19, workplace exposures, mask-wearing behavior, and community activities ≤ 14 days before symptom onset. Participants were asked about wearing a mask and possible community exposure activities (e.g., gatherings with ≤ 10 or >10 persons in a home; shopping; dining at a restaurant; going to an office setting, salon, gym, bar/coffee shop, or church/religious gathering; or using public transportation) on a five-point Likert-type scale ranging from “never” to “more than once per day” or “always”; for analysis, community activity responses were dichotomized as never versus one or more times during the 14 days before illness onset. For each reported activity, participants were asked to quantify degree of adherence to recommendations such as wearing a face mask of any kind or social distancing among other persons at that location, with response options ranging from “none” to “almost all.” Descriptive and statistical analyses were performed to compare case-patients with control-participants, assessing differences in demographic characteristics, community exposures, and close contact. Although an effort was made initially to match case-patients to control-participants based on a 1:2 ratio, not all potential participants were eligible or completed an interview, and therefore an unmatched analysis was performed. Unconditional logistic regression models with generalized estimating equations with exchangeable correlation structure correcting standard error estimates for site-level clustering were used to assess differences in community exposures between case-patients and control-participants, adjusting for age, sex, race/ethnicity, and presence of one or more underlying chronic medical conditions. In each model, SARS-CoV-2 test result (i.e., positive or negative) was the outcome variable, and each community exposure activity was the predictor variable. The first model included the full analytic sample (314). A second model was restricted to participants who did not report close contact to a person with COVID-19 (89 case-patients and 136 control-participants). Statistical analyses were conducted using SAS software (version 9.4; SAS Institute).

[§] Activity was determined to meet the requirements of public health surveillance as defined in 45 CFR 46.102(f)(2).

[¶] Cardiac condition, hypertension, asthma, chronic obstructive pulmonary disease, immunodeficiency, psychiatric condition, diabetes, or obesity.

Compared with case-patients, control-participants were more likely to be non-Hispanic White ($p < 0.01$), have a college degree or higher ($p < 0.01$), and report at least one underlying chronic medical condition ($p = 0.01$) (Table). In the 14 days before illness onset, 71% of case-patients and 74% of control-participants reported always using cloth face coverings or other mask types when in public. Close contact with one or more persons with known COVID-19 was reported by 42% of case-patients compared with 14% of control-participants ($p < 0.01$), and most (51%) close contacts were family members.

Approximately one half of all participants reported shopping and visiting others inside a home (in groups of ≤ 10 persons) on ≥ 1 day during the 14 days preceding symptom onset. No significant differences were observed in the bivariate analysis between case-patients and control-participants in shopping; gatherings with ≤ 10 persons in a home; going to an office setting; going to a salon; gatherings with > 10 persons in a home; going to a gym; using public transportation; going to a bar/coffee shop; or attending church/religious gathering. However, case-patients were more likely to have reported dining at a restaurant (aOR = 2.4, 95% CI = 1.5–3.8) in the 2 weeks before illness onset than were control-participants (Figure). Further, when the analysis was restricted to the 225 participants who did not report recent close contact with a person with known COVID-19, case-patients were more likely than were control-participants to have reported dining at a restaurant (aOR = 2.8, 95% CI = 1.9–4.3) or going to a bar/coffee shop (aOR = 3.9, 95% CI = 1.5–10.1). Among 107 participants who reported dining at a restaurant and 21 participants who reported going to a bar/coffee shop, case-patients were less likely to report observing almost all patrons at the restaurant adhering to recommendations such as wearing a mask or social distancing ($p = 0.03$ and $p = 0.01$, respectively).

Discussion

In this investigation, participants with and without COVID-19 reported generally similar community exposures, with the exception of going to locations with on-site eating and drinking options. Adults with confirmed COVID-19 (case-patients) were approximately twice as likely as were control-participants to have reported dining at a restaurant in the 14 days before becoming ill. In addition to dining at a restaurant, case-patients were more likely to report going to a bar/coffee shop, but only when the analysis was restricted to participants without close contact with persons with known COVID-19 before illness onset. Reports of exposures in restaurants have been linked to air circulation (7). Direction, ventilation, and intensity of airflow might affect virus transmission, even if social distancing measures and mask use are implemented according to current guidance. Masks cannot

TABLE. Characteristics of symptomatic adults ≥ 18 years who were outpatients in 11 academic health care facilities and who received positive and negative SARS-CoV-2 test results (N = 314)^{**} — United States, July 1–29, 2020

Characteristic	No. (%)		P-value
	Case-patients (n = 154)	Control participants (n = 160)	
Age group, yrs			
18–29	44 (28.6)	39 (24.4)	0.18
30–44	46 (29.9)	62 (38.7)	
45–59	46 (29.9)	35 (21.9)	
≥ 60	18 (11.7)	24 (15.0)	
Sex			
Men	75 (48.7)	72 (45.0)	0.51
Women	79 (51.3)	88 (55.0)	
Race/Ethnicity[†]			
White, non-Hispanic	92 (59.7)	124 (77.5)	<0.01
Hispanic/Latino	29 (18.8)	12 (7.5)	
Black, non-Hispanic	27 (17.5)	19 (11.9)	
Other, non-Hispanic	6 (3.9)	5 (3.1)	
Education (missing = 3)			
Less than high school	16 (10.5)	3 (1.9)	<0.01
High school degree or some college	60 (39.2)	48 (30.4)	
College degree or more	77 (50.3)	107 (67.7)	
At least one underlying chronic medical condition[‡]	75 (48.7)	98 (61.2)	0.01
Community exposure 14 days before illness onset[§]			
Shopping	131 (85.6)	141 (88.1)	0.51
Home, ≤ 10 persons	79 (51.3)	84 (52.5)	0.83
Restaurant	63 (40.9)	44 (27.7)	0.01
Office setting	37 (24.0)	47 (29.6)	0.27
Salon	24 (15.6)	28 (17.6)	0.63
Home, > 10 persons	21 (13.6)	24 (15.0)	0.73
Gym	12 (7.8)	10 (6.3)	0.60
Public transportation	8 (5.2)	10 (6.3)	0.68
Bar/Coffee shop	13 (8.5)	8 (5.0)	0.22
Church/Religious gathering	12 (7.8)	8 (5.0)	0.32
Restaurant: others following recommendations such as wearing a face covering or mask of any kind or social distancing (n = 107)			
None/A few	12 (19.0)	1 (2.3)	0.03
About half/Most	25 (39.7)	21 (47.7)	
Almost all	26 (41.3)	22 (50.0)	
Bar: others following recommendations such as wearing a face covering or mask of any kind or social distancing (n = 21)			
None/A few	4 (31.8)	2 (25.0)	0.01
About half/Most	7 (53.8)	0 (0.0)	
Almost all	2 (15.4)	6 (75.0)	

See table footnotes on the next page.

be effectively worn while eating and drinking, whereas shopping and numerous other indoor activities do not preclude mask use.

Among adults with COVID-19, 42% reported close contact with a person with COVID-19, similar to what has been reported previously (4). Most close contact exposures were to family members, consistent with household transmission of SARS-CoV-2 (8). Fewer (14%) persons who received a negative SARS-CoV-2 test result reported close contact with a person with known COVID-19. To help slow the spread of SARS-CoV-2, precautions should be implemented to stay home once exposed to someone with COVID-19,** in addition to adhering to recommendations to wash hands

** <https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/quarantine.html>.

often, wear masks, and social distance.^{††} If a family member or other close contact is ill, additional prevention measures can be taken to reduce transmission, such as cleaning and disinfecting the home, reducing shared meals and items, wearing gloves, and wearing masks, for those with and without known COVID-19.^{§§}

The findings in this report are subject to at least five limitations. First, the sample included 314 symptomatic patients who actively sought testing during July 1–29, 2020 at 11 health care facilities. Symptomatic adults with negative SARS-CoV-2 test results might have been infected with other respiratory

†† <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/index.html>.

§§ <https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/index.html>.

TABLE. (Continued) Characteristics of symptomatic adults ≥ 18 years who were outpatients in 11 academic health care facilities and who received positive and negative SARS-CoV-2 test results (N = 314)* — United States, July 1–29, 2020

Characteristic	No. (%)		P-value
	Case-patients (n = 154)	Control participants (n = 160)	
Previous close contact with a person with known COVID-19 (missing = 1)			
No	89 (57.8)	136 (85.5)	<0.01
Yes	65 (42.2)	23 (14.5)	
Relationship to close contact with known COVID-19 (n = 88)			
Family	33 (50.8)	5 (21.7)	<0.01
Friend	9 (13.8)	4 (17.4)	
Work colleague	11 (16.9)	6 (26.1)	
Other**	6 (9.2)	8 (34.8)	
Multiple	6 (9.2)	0 (0.0)	
Reported use of cloth face covering or mask 14 days before illness onset (missing = 2)			
Never	6 (3.9)	5 (3.1)	0.86
Rarely	6 (3.9)	6 (3.8)	
Sometimes	11 (7.2)	7 (4.4)	
Often	22 (14.4)	23 (14.5)	
Always	108 (70.6)	118 (74.2)	

* Respondents who completed the interview 14–23 days after their test date. Five participants had significant missingness for exposure questions and were removed from the analysis. Patients were randomly sampled from 11 academic health care systems that are part of the Influenza Vaccine Effectiveness in the Critically Ill Network sites (Baystate Medical Center, Springfield, Massachusetts; Beth Israel Deaconess Medical Center, Boston, Massachusetts; University of Colorado School of Medicine, Aurora, Colorado; Hennepin County Medical Center, Minneapolis, Minnesota; Intermountain Healthcare, Salt Lake City, Utah; Ohio State University Wexner Medical Center, Columbus, Ohio; Wake Forest University Baptist Medical Center, Winston-Salem, North Carolina; Vanderbilt University Medical Center, Nashville, Tennessee; John Hopkins Hospital, Baltimore, Maryland; Stanford University Medical Center, Palo Alto, California; University of Washington Medical Center, Seattle, Washington). Participating states include California, Colorado, Maryland, Massachusetts, Minnesota, North Carolina, Ohio, Tennessee, Utah, and Washington.

** Other race includes responses of Native American/Alaska Native, Asian, Native Hawaiian/Other Pacific Islander, and other; these were combined because of small sample sizes.

† Reported at least one of the following underlying chronic medical conditions: cardiac condition, hypertension, asthma, chronic obstructive pulmonary disease, immunodeficiency, psychiatric condition, diabetes, or obesity.

‡ Community exposure questions asked were "in the 14 days before feeling ill about how often did you:" with options of "shop for items (groceries, prescriptions, home goods, clothing, etc.)" (missing = 1); "have people visit you inside your home or go inside someone else's home where there were more than 10 people"; "have people visit you inside your home or go inside someone else's home where there were 10 people or less"; "go to church or a religious gathering/place of worship" (missing = 1); "go to a restaurant (dine-in, any area designated by the restaurant including patio seating)" (missing = 1); "go to a bar or coffee shop (indoors)" (missing = 2); "use public transportation (bus, subway, streetcar, train, etc.)" (missing = 1); "go to an office setting (other than for healthcare purposes)" (missing = 1); "go to a gym or fitness center" (missing = 1); and "go to a salon or barber (e.g., hair salon, nail salon, etc.)" (missing = 1). Response options were coded as never versus at least once in the 14 days prior to illness onset. Some participants had missing data for exposure questions.

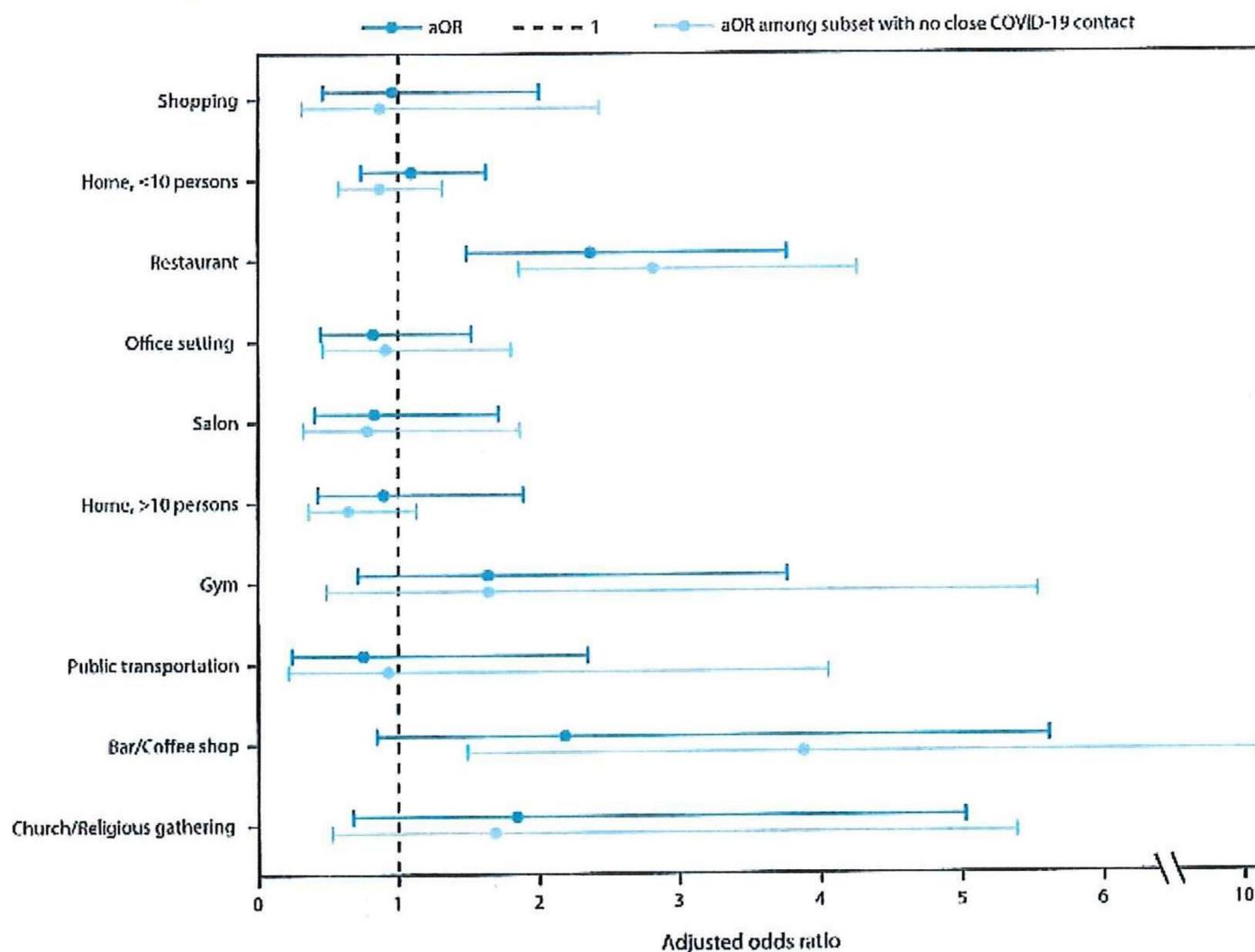
§ Other includes patients of health care workers (9), patron of a restaurant (1), spouse of employee (1), day care teacher (1), member of a religious congregation (1), and unspecified (1).

viruses and had similar exposures to persons with cases of such illnesses. Persons who did not respond, or refused to participate, could be systematically different from those who were interviewed for this investigation. Efforts to age- and sex-match participating case-patients and control-participants were not maintained because of participants not meeting the eligibility criteria, refusing to participate, or not responding, and this was accounted for in the analytic approach. Second, unmeasured confounding is possible, such that reported behaviors might represent factors, including concurrently participating in activities where possible exposures could have taken place, that were not included in the analysis or measured in the survey. Of note, the question assessing dining at a restaurant did not distinguish between indoor and outdoor options. In addition, the question about going to a bar or coffee shop did not distinguish between the venues or service delivery methods, which might represent different exposures. Third,

adults in the study were from one of 11 participating health care facilities and might not be representative of the United States population. Fourth, participants were aware of their SARS-CoV-2 test results, which could have influenced their responses to questions about community exposures and close contacts. Finally, case or control status might be subject to misclassification because of imperfect sensitivity or specificity of PCR-based testing (9,10).

This investigation highlights differences in community and close contact exposures between adults who received a positive SARS-CoV-2 test result and those who received a negative SARS-CoV-2 test result. Continued assessment of various types of activities and exposures as communities, schools, and workplaces reopen is important. Exposures and activities where mask use and social distancing are difficult to maintain, including going to locations that offer on-site eating and drinking, might be important risk factors for

FIGURE. Adjusted odds ratio (aOR)* and 95% confidence intervals for community exposures† associated with confirmed COVID-19 among symptomatic adults aged ≥18 years (N = 314) — United States, July 1–29, 2020



Abbreviation: COVID-19 = coronavirus disease 2019.

* Adjusted for race/ethnicity, sex, age, and reporting at least one underlying chronic medical condition. Odds ratios were estimated using unconditional logistic regression with generalized estimating equations, which accounted for Influenza Vaccine Effectiveness in the Critically Ill Network site-level clustering. A second model was restricted to participants who did not report close contact to a person known to have COVID-19 (n = 225).

† Community exposure questions asked were "In the 14 days before feeling ill about how often did you: shop for items (groceries, prescriptions, home goods, clothing, etc.); have people visit you inside your home or go inside someone else's home where there were more than 10 people; have people visit you inside your home or go inside someone else's home where there were 10 people or less; go to church or a religious gathering/place of worship; go to a restaurant (dine-in, any area designated by the restaurant including patio seating); go to a bar or coffee shop (indoors); use public transportation (bus, subway, streetcar, train, etc.); go to an office setting (other than for healthcare purposes); go to a gym or fitness center; go to a salon or barber (e.g., hair salon, nail salon, etc.)." Response options were coded as never versus at least once in the 14 days before illness onset.

SARS-CoV-2 infection. Implementing safe practices to reduce exposures to SARS-CoV-2 during on-site eating and drinking should be considered to protect customers, employees, and communities^{§§} and slow the spread of COVID-19.

Acknowledgments

Zhanar Haimovich, Northrop Grumman; Sherri Pals, Division of Global HIV & TB, Center for Global Health, CDC.
Corresponding author: Kiva A. Fisher, cocvent1458@cdc.gov.

§§ <https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/personal-social-activities.html#restaurant>; <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/business-employees/bars-restaurants.html>; https://www.cdc.gov/coronavirus/2019-ncov/images/community/Rest_Bars_RiskAssessment.jpg.

Summary**What is already known about the topic?**

Community and close contact exposures contribute to the spread of COVID-19.

What is added by this report?

Findings from a case-control investigation of symptomatic outpatients from 11 U.S. health care facilities found that close contact with persons with known COVID-19 or going to locations that offer on-site eating and drinking options were associated with COVID-19 positivity. Adults with positive SARS-CoV-2 test results were approximately twice as likely to have reported dining at a restaurant than were those with negative SARS-CoV-2 test results.

What are the implications for public health practice?

Eating and drinking on-site at locations that offer such options might be important risk factors associated with SARS-CoV-2 infection. Efforts to reduce possible exposures where mask use and social distancing are difficult to maintain, such as when eating and drinking, should be considered to protect customers, employees, and communities.

¹CDC COVID-19 Response Team; ²Epidemic Intelligence Service, CDC; ³Influenza Vaccine Effectiveness in the Critically Ill (IVY) Network; ⁴Vanderbilt University Medical Center, Nashville, Tennessee; ⁵Beaumont Deaconess Medical Center, Boston, Massachusetts; ⁶Wake Forest University Baptist Medical Center, Winston-Salem, North Carolina; ⁷Hennepin County Medical Center, Minneapolis, Minnesota; ⁸Baystate Medical Center, Springfield, Massachusetts; ⁹Ohio State University Wexner Medical Center, Columbus, Ohio; ¹⁰University of Washington Medical Center, Seattle, Washington; ¹¹Stanford University Medical Center, Palo Alto, California; ¹²Intermountain Healthcare, Salt Lake City, Utah; ¹³Johns Hopkins Hospital, Baltimore, Maryland; ¹⁴University of Colorado School of Medicine, Aurora, Colorado.

IVY Network Investigators

Kimberly W. Hart, Vanderbilt University Medical Center; Robert McClellan, Vanderbilt University Medical Center; Hsi-nien Tan, Vanderbilt University Medical Center; Adrienne Baughman, Vanderbilt University Medical Center.

CDC COVID-19 Response Team

Nora A. Hennesy, CDC COVID-19 Response Team; Brittany Great, CDC COVID-19 Response Team; Michael Wu, CDC COVID-19 Response Team; Kristin Mlynarczyk, CDC COVID-19 Response Team; Luc Marzano, CDC COVID-19 Response Team; Zuwenia Plata, CDC COVID-19 Response Team; Alexis Caplan, CDC COVID-19 Response Team; Samantha M. Olson, CDC COVID-19 Response Team; Constance E. Ogoch, CDC COVID-19 Response Team; Emily R. Smith, CDC COVID-19 Response Team; Sara S. Kim, CDC COVID-19 Response Team; Eric P. Griggs, CDC COVID-19 Response Team; Bridget Richards, CDC COVID-19 Response Team; Sonya Robinson, CDC COVID-19 Response Team; Kaylee Kim, CDC COVID-19 Response Team; Ahmed M. Kassem, CDC COVID-19 Response Team; Courtney N. Sciarratta, CDC COVID-19 Response Team; Paula L. Marcey, CDC COVID-19 Response Team.

All authors have completed and submitted the International Committee of Medical Journal Editors form for disclosure of potential conflicts of interest. Carlos G. Grijalva reports grants from Campbell Alliance, the National Institutes of Health, the Food and Drug Administration, the Agency for Health Care Research and Quality and Sanofi-Pasteur, and consultation fees from Pfizer, Merck, and Sanofi-Pasteur. Christopher J. Lindsell reports grants from National Institutes of Health and the Department of Defense and other support from Marcus Foundation, Endpoint Health, Integriion, bioMericux, and Bioscape Digital, outside the submitted work. Nathan I. Shapiro reports grants from the National Institutes of Health, Rapid Pathogen Screening, Inflammatrix, and Baxter, outside the submitted work. Daniel J. Henning reports personal fees from CytoVale and grants from Baxter, outside the submitted work. Samuel M. Brown reports grants from National Institutes of Health, Department of Defense, Intermountain Research and Medical Foundation, and Janssen and consulting fees paid to his employer from Faron and Sedana, outside the submitted work. Ithan D. Peltan reports grants from the National Institutes of Health, Asahi Kasei Pharma, Immunexpress Inc., Janssen Pharmaceuticals, and Regeneron, outside the submitted work. Todd W. Rice reports personal fees from Cumberland Pharmaceuticals, Inc, Cytovale, Inc, and Avisa, LLC, outside the submitted work. Aditi A. Ginde reports grants from the National Institutes of Health and Department of Defense, outside the submitted work. H. Keipp Talbot reports serving on the Data Safety Monitoring Board for Seqirus. No other potential conflicts of interest were disclosed.

References

1. CDC. Coronavirus disease 2019 (COVID-19): implementation of mitigation strategies for communities with local COVID-19 transmission. Atlanta, GA: US Department of Health and Human Services; 2020. <https://www.cdc.gov/coronavirus/2019-ncov/community/community-mitigation.html>
2. CDC. Coronavirus disease 2019 (COVID-19): community, work, and school: information for where you live, work, learn, and play. Atlanta, GA: US Department of Health and Human Services, CDC; 2020. <https://www.cdc.gov/coronavirus/2019-ncov/community/index.html>
3. Marshall K, Vahey GM, McDonald E, et al.; Colorado Investigation Team. Exposures before issuance of stay-at-home orders among persons with laboratory-confirmed COVID-19—Colorado, March 2020. *MMWR Morb Mortal Wkly Rep* 2020;69:847–9. <https://doi.org/10.15585/mmwr.mm6926e4>
4. Tenforde MW, Billig Rose E, Lindsell CJ, et al.; CDC COVID-19 Response Team. Characteristics of adult outpatients and inpatients with COVID-19—11 academic medical centers, United States, March–May 2020. *MMWR Morb Mortal Wkly Rep* 2020;69:841–6. <https://doi.org/10.15585/mmwr.mm6926e3>
5. Stubblefield WB, Talbot HK, Feldstein L, et al.; Influenza Vaccine Effectiveness in the Critically Ill (IVY) Investigators. Seroprevalence of SARS-CoV-2 among frontline healthcare personnel during the first month of caring for COVID-19 patients—Nashville, Tennessee. *Clin Infect Dis* 2020;ciaa936. <https://doi.org/10.1093/cid/ciaa936>
6. Harris PA, Taylor R, Minor BL, et al.; REDCap Consortium. The REDCap consortium: building an international community of software platform partners. *J Biomed Inform* 2019;95:103208. <https://doi.org/10.1016/j.jbi.2019.103208>

Morbidity and Mortality Weekly Report

7. Lu J, Gu J, Li K, et al. COVID-19 outbreak associated with air conditioning in restaurant, Guangzhou, China, 2020. *Emerg Infect Dis* 2020;26:1628–31. <https://doi.org/10.3201/eid2607.200764>
8. Lei H, Xu X, Xiao S, Wu X, Shu Y. Household transmission of COVID-19—a systematic review and meta-analysis. *J Infect* 2020. Epub August 25, 2020. <https://doi.org/10.1016/j.jinf.2020.08.033>
9. Sethuraman N, Jeremiah SS, Ryo A. Interpreting diagnostic tests for SARS-CoV-2. *JAMA* 2020;323:2249–51. <https://doi.org/10.1001/jama.2020.8259>
10. Tahamtan A, Ardebili A. Real-time RT-PCR in COVID-19 detection: issues affecting the results. *Expert Rev Mol Diagn* 2020;20:453–4. <https://doi.org/10.1080/14737159.2020.1757437>

Handout submitted by Barbara Melham for Item No. 23

10/11/2020 *Item 23 Speaker* received_666220254004541.jpeg

*Galewood block party
10/06/2020*



<https://mail.google.com/mail/u/0/#inbox/FFNDWMtgRgBqnswbKQCNPBHBhMWzdNz?projector=1&messagePartId=0.1>

1/1