

REGULAR CALENDAR

March 8, 2022

HOUSE OF REPRESENTATIVES

REPORT OF COMMITTEE

**The Majority of the Committee on Education to which
was referred HB 1233,**

**AN ACT prohibiting higher education institutions
receiving state funds from requiring face masks and
COVID-19 vaccinations for attendance. Having
considered the same, report the same with the
recommendation that the bill be REFERRED FOR
INTERIM STUDY.**

Rep. Rick Ladd

FOR THE MAJORITY OF THE COMMITTEE

**MAJORITY
COMMITTEE REPORT**

| | |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Committee: | Education |
| Bill Number: | HB 1233 |
| Title: | prohibiting higher education institutions receiving state funds from requiring face masks and COVID-19 vaccinations for attendance. |
| Date: | March 8, 2022 |
| Consent Calendar: | REGULAR |
| Recommendation: | REFER FOR INTERIM STUDY |

STATEMENT OF INTENT

This bill prohibits higher education institutions from requiring a COVID-19 vaccination or face masks for enrollment or attendance. The majority recommends Interim Study as it has been determined that there are a number of higher education studies that rightfully so require masks for the purpose of safety to one's person or others within professions such as engineering, medical, chemistry, and more. This bill requires further study.

Vote 11-7.

Rep. Rick Ladd
FOR THE MAJORITY

Original: House Clerk
Cc: Committee Bill File

REGULAR CALENDAR

Education

HB 1233, prohibiting higher education institutions receiving state funds from requiring face masks and COVID-19 vaccinations for attendance. **MAJORITY: REFER FOR INTERIM STUDY. MINORITY: INEXPEDIENT TO LEGISLATE.**

Rep. Rick Ladd for the **Majority** of Education. This bill prohibits higher education institutions from requiring a COVID-19 vaccination or face masks for enrollment or attendance. The majority recommends Interim Study as it has been determined that there are a number of higher education studies that rightfully so require masks for the purpose of safety to one's person or others within professions such as engineering, medical, chemistry, and more. This bill requires further study. **Vote 11-7.**

Original: House Clerk

Cc: Committee Bill File

REGULAR CALENDAR

March 8, 2022

HOUSE OF REPRESENTATIVES

REPORT OF COMMITTEE

**The Minority of the Committee on Education to which
was referred HB 1233,**

**AN ACT prohibiting higher education institutions
receiving state funds from requiring face masks and
COVID-19 vaccinations for attendance. Having
considered the same, and being unable to agree with
the Majority, report with the following resolution:
RESOLVED, that it is INEXPEDIENT TO LEGISLATE.**

Rep. David Luneau

FOR THE MINORITY OF THE COMMITTEE

**MINORITY
COMMITTEE REPORT**

| | |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Committee: | Education |
| Bill Number: | HB 1233 |
| Title: | prohibiting higher education institutions receiving state funds from requiring face masks and COVID-19 vaccinations for attendance. |
| Date: | March 8, 2022 |
| Consent Calendar: | REGULAR |
| Recommendation: | INEXPEDIENT TO LEGISLATE |

STATEMENT OF INTENT

The bill prohibits state community colleges and universities from requiring students to be vaccinated against COVID-19. Without vaccination policies, deadly viruses like measles, mumps, and rubella, that have been managed well for decades, could spread like wildfire. The bill doesn't deserve further study. What does the majority expect to learn? Maybe the number of student deaths won't be too bad? Or maybe more frequent boosters should be recommended as protection against the increased risk of viral spread. Tell that to families who have lost loved ones to COVID-19. To recommend further study simply ignores how vaccines have reduced disease and increased life expectancy. Vaccination policy should be left to the institution trustees and one only needs to look at modern history to see this bill should be rendered Inexpedient to Legislate.

Rep. David Luneau
FOR THE MINORITY

Original: House Clerk
Cc: Committee Bill File

REGULAR CALENDAR

Education

HB 1233, prohibiting higher education institutions receiving state funds from requiring face masks and COVID-19 vaccinations for attendance. **INEXPEDIENT TO LEGISLATE.**

Rep. David Luneau for the **Minority** of Education. The bill prohibits state community colleges and universities from requiring students to be vaccinated against COVID-19. Without vaccination policies, deadly viruses like measles, mumps, and rubella, that have been managed well for decades, could spread like wildfire. The bill doesn't deserve further study. What does the majority expect to learn? Maybe the number of student deaths won't be too bad? Or maybe more frequent boosters should be recommended as protection against the increased risk of viral spread. Tell that to families who have lost loved ones to COVID-19. To recommend further study simply ignores how vaccines have reduced disease and increased life expectancy. Vaccination policy should be left to the institution trustees and one only needs to look at modern history to see this bill should be rendered Inexpedient to Legislate.

Original: House Clerk

Cc: Committee Bill File

HOUSE COMMITTEE ON EDUCATION

EXECUTIVE SESSION on HB 1233

BILL TITLE: prohibiting higher education institutions receiving state funds from requiring face masks and COVID-19 vaccinations for attendance.

DATE: March 8, 2022

LOB ROOM: 205-207

MOTIONS: REFER FOR INTERIM STUDY

Moved by Rep. Ladd

Seconded by Rep. Cordelli

Vote: 11-7

CONSENT CALENDAR: NO

Statement of Intent: Refer to Committee Report

Respectfully submitted,

Rep Melissa Litchfield, Clerk

OFFICE OF THE HOUSE CLERK



1/10/2022 8:57:50 AM
 Roll Call Committee Registers
 Report

2022 SESSION

Education 1233

Bill #: ~~1233~~ Motion: INT. STUDY AM #: _____ Exec Session Date: 3/8/22

| <u>Members</u> | <u>YEAS</u> | <u>Nays</u> | <u>NV</u> |
|--------------------------------------------|-------------|-------------|-----------|
| Ladd, Rick M. Chairman | 11 | | |
| Cordelli, Glenn Vice Chairman | 1 | | |
| Litchfield, Melissa A. Clerk <u>Wotter</u> | 2 | | |
| Boehm, Ralph G. <u>David Johnson</u> | 3 | | |
| Lekas, Alicia D. | 4 | | |
| Moffett, Michael <u>Berghstein</u> | 5 | | |
| Hobson, Deborah L. | 6 | | |
| Ford, Oliver J. | 7 | | |
| Soti, Julius F. | 8 | | |
| Nelson, Bill G. | 9 | | |
| Myler, Mel-Walz, Mary Beth <u>M. JACK</u> | 10 | | |
| Luneau, David J. | 4 | 1 | |
| Cornell, Patricia | | 2 | |
| Tanner, Linda L. | | 3 | |
| Ellison, Arthur S. | | 4 | |
| Mullen, Sue M. | | 5 | |
| Woodcock, Stephen L. | | 6 | |
| Porter, Marjorie | | | |
| A. Hall, Muriel C. | | 7 | |
| TOTAL VOTE: | 11 | 7 | |

HOUSE COMMITTEE ON EDUCATION

PUBLIC HEARING ON HB 1233

BILL TITLE: prohibiting higher education institutions from receiving state funds from requiring face masks and COVID-19 vaccinations for attendance.

DATE: February 2, 2022

LOB ROOM: 207 **Time Public Hearing Called to Order:** 9:45 am

Time Adjourned: 11:00 am

Rep Peter Torosian, prime sponsor

This bill prohibits higher education institutions from requiring a COVID-19 vaccination or face masks for enrollment or attendance.

Feels that requiring a vaccine passport is discriminatory. Whether or not you are accepted to a higher education institution should be based on merit, and not whether or not you have a vaccination. Students are choosing schools in other states that do not require a vaccination, so there are economic repercussions as well.

At the end of the day, whether or not you get a vaccination should be up to an individual.

Rep Tanner, What is your intent for having this bill?

Response: The intent is to ensure that every student regardless of vaccine status has the right to attend a state funded institution.

Rep Woodcock, Wants clarity on a statement on a statement that he thought he heard him say.

Masks and vaccinations have caused an increase in suicides. He only read increases due to isolation.

Response: Stated that this is an issue of people having their choices denied. Without exception, if you see a commercial for a pharmaceutical they go on and on about side effects. With this vaccine, the side effects have not been publicized.

Tom Cronin, University System in N

No colleges in the UNH system require the vaccine to attend. He opposes this bill.

Rep Lekas, Is he aware how some of his students feel? Some of them had paid their admittance and told that no masks were required, and then the next day they were told they must wear masks. They felt that they were lied to.

Response:

Rep Moffett, What happens if a student refuses to wear a mask?

Response: There is a conduct process. They have not had not students with serious conduct issues regarding masks.

Rep Ladd, Does the masking refer to sporting events.

Response: Athletes do not wear the masks. Spectators wear masks.

Rep Cordelli, As a neighbor, whose daughter was taken out of the nursing program, due to a lack of vaccination.

Response: He is assuming the site where the student was placed at had a vaccination requirement.

Rep Cordelli, Do you have exemptions for this requirement? Or if they have natural antibodies is there an exemption?

Response: That would be up to the facility.

Rep Cordelli, Do you have any facilities that do not require vaccinations or offer exemptions?

Response: He does not know. Historically limited on sites they have to utilize.

Rep Porter, Prime Sponsor, made reference to some students going out of state to colleges without vaccination requirements.

Response: He does not have this data. The NH university system does not have a mask mandate.

Rep Ladd, He has heard the vaccination rate is quite high for students. Do you have it now?

Response: The vaccination rates are in the high 80's.

Sally Staude, Representing self -

Worked for 40 years in transplant and infectious disease. She supports this bill. The true definition of vaccination is to stop the spread and the infection. Yet, the CDC has now changed the definition for this vaccine. The adverse reporting for this vaccine is under-reported and quite significant.

Wearing a face mask is equivalent to using a chain link fence to stop mosquitoes.

She is going to email the committee with all of the scientific data to back up these statements.

Shannon Reid, Community College System of NH, opposed to this bill. Feels masks are necessary at times to keep their campuses open.

Rep Litchfield, Would this bill prohibit a student from wearing a mask if they deemed necessary.

Response: No, it would not.

Ed Groves, Representing self-

He is just here fighting for our freedoms. He is not here about the money, he is not a lobbyist. He is here to save the children. We have tortured them for two years. His daughter spent half her junior and her senior year on a bed doing remote learning. Described isolation situations and protocols at Keene State College. An advocate (Kathy) from the school visited her and pressured her about vaccination for Covid 19. These kids have enough to do studies and this world without worrying about masks and vaccinations.

If you do the research, the cloth masks are fairly useless now.

WE NEED TO MOVE ON, WE ARE THE UNITED STATES OF AMERICA!

If we want NH to get out of the "state we are in with Covid," consider Ivermectin, he took it and it works.

Rep Moffett, How did this advocate know that his daughter was not vaccinated?

Response: He does not know. He is looking into this.

Carla Smith, NH Nurses Association-

She is opposed to this bill. She works for a private institution. It is very strict. They are required to have a vaccination, must mask, and test weekly. She has not lost any students, and her program is growing. She feels safer on campus than being at a gas station or a grocery store.

Equating body armor and bullet proof vests to masks and vaccines.

Rep Lekas, How much of covid have you seen on your campus?

Response: Less than 3%.

Kathleen, Cintavey, Dover NH – Supports

When our kids head off to college, they can drive and make adult decisions day in and day out. This adult group should be able to determine whether or not they want to wear a mask based on research. The only face mask that actually works is an N95 that is properly fitted. The N95s are difficult to come across. A cloth mask is not helpful.

She is concerned about students who are on the autism spectrum, deaf, or other special needs and who need to read lips or cannot wear a mask.

She has two friends that have Omicron who have been triple vaccinated and wear masks. We have a lot of unknown effects for the vaccine. She doesn't know why the government is saying we have to wait 55 year to read the data from Pfizer and Moderna.

Heath Howard, he is a junior at UNH- Opposed

He is quite appalled by it. There are opportunities for students to get translators if needed. Many students go out of state due to our high tuition rates and not due to Covid restrictions.

Jenny Wilson - Supports

She decided to speak to share with us her own personal experience. Her husband came down with Covid and she did not. She feels that masks do not do anything and vaccines are pretty risky.

Sean Locke- NH DOJ-

He is here for informational purposes- does not take a position. Does ask that we keep in mind students with disabilities.

Rep Luneau, would a compromised immune system be considered a disability.

Response: Yes, there are circumstances where that could be a disability.

Rep Luneau, Are all state laws an infringement on personal rights and could you give examples?

Response: Not necessarily. He is more concerned with this law causing confusion.

Rep Porter, We are hearing a lot about Covid vaccines and masks, what if in the future there is another illness knew a vaccine or masks would work. Would this bill prevent the university system from implementing this.

Response: This bill is specific to the COVID vaccine. Regarding masks, yes it could be a concern.

Rep Ladd, the issue of eliminating state funds if masks are required, is there potential for lawsuits to come back for scholarships that are paid through the university system?

Response: If law passes, I highly doubt universities would refuse state funding.

He would really have to think more about the first question.

Rep Ladd, Is there any possible litigation we could end up with in passing this.

Response: Cannot think of any concrete examples. There is always a risk.

Rep Lekas, What about competing disabilities. What if someone needs to see the mouth? Would the class go mask-less?

Response: There are clear masks out there.

Mary Sawich, Rebuild NH, wellness professional -

Worked in the state prison system. Tested herself on an N95. She is usually at 97 to 99. She was just sitting with an N95 and her oxygen level was only at 95. 95 was the resting oxygen rate for her oldest/sickest cardiac client. Thanksgiving all of her family members who were vaccinated and not, all caught Omicron. Her husband who was vaccinated, actually was more sick than she was.

She brought up all the levels of depression within the university system. Yet people cannot speak of this, they want their jobs. We should consider bringing in some nurses who are working in the college university system.

Respectfully submitted,

Rep. Melissa Litchfield, Clerk

House Remote Testify

Education Committee Testify List for Bill HB1233 on 2022-02-02

Support: 461 Oppose: 175 Neutral: 0 Total to Testify: 0

Export to Excel

| <u>Name</u> | <u>City, State</u> <u>Email Address</u> | <u>Title</u> | <u>Representing</u> | <u>Position</u> | <u>Testifying</u> | <u>Non-Germane</u> | <u>Signed Up</u> |
|-------------------|-------------------------------------------------|------------------------|---------------------|-----------------|-------------------|--------------------|--------------------|
| Peterson, Julie | Concord, NH Julie.peterson23@live.com | A Member of the Public | Myself | Support | No | No | 1/24/2022 4:41 PM |
| White, Robert | Merrimack, NH white14@comcast.net | A Member of the Public | Myself | Support | No | No | 1/25/2022 8:07 PM |
| Bedard, Letty | Brentwood, NH lettybedard@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/26/2022 6:42 AM |
| Ceplo, Seana | Danville, NH ceplos@comcast.net | A Member of the Public | Myself | Oppose | No | No | 1/26/2022 3:44 PM |
| Campbell, Nanette | Merrimack, NH nan.campbell@comcast.net | A Member of the Public | Myself | Support | No | No | 1/27/2022 6:32 PM |
| CONNELLY, NAOMI | Dover, NH naomiconnelly@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/27/2022 8:52 PM |
| Wood, Zephan | Pembroke, NH zephanw@gmail.com | A Member of the Public | Myself | Support | No | No | 1/27/2022 10:03 PM |
| Davis, Christie | Contoocook, NH christie.davis@unh.edu | A Member of the Public | Myself | Oppose | No | No | 1/28/2022 11:33 AM |
| Butcher, Suzanne | Keene, NH SuzanneButcherNH@yahoo.com | A Member of the Public | Myself | Oppose | No | No | 1/28/2022 7:57 PM |
| Cahill, Michael | Newmarket, NH michael.cahill@leg.state.nh.us | An Elected Official | Myself | Oppose | No | No | 1/29/2022 7:08 AM |
| LeBlanc, Jennifer | Lebanon, NH workrelated.leblanc@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/29/2022 12:14 PM |
| Hall, Kiersten | Hopkinton, NH khall@sau66.org | A Member of the Public | Myself | Oppose | No | No | 1/29/2022 12:23 PM |
| Pennington, Jill | Manchester, NH msjillpennington@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/29/2022 12:28 PM |

| | | | | | | | |
|---------------------|----------------------------------------------|------------------------|--------|---------|----|----|--------------------|
| Doyle, Kristin | Pembroke, NH kriso_13@yahoo.com | A Member of the Public | Myself | Oppose | No | No | 1/29/2022 12:49 PM |
| Korzen, Lori | Berlin, NH lekorzen@hotmail.com | A Member of the Public | Myself | Support | No | No | 1/29/2022 12:52 PM |
| Scheuch, Sara | New London, NH sscheuch@tds.net | A Member of the Public | Myself | Oppose | No | No | 1/29/2022 12:56 PM |
| Bracy, Sue | Dunbarton, NH marysuebracy@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/29/2022 2:56 PM |
| Dalton, Lee Ann | Brentwood, NH cityofwindows@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/29/2022 3:04 PM |
| Dowe, Corey | North Conway, NH cad256@cornell.edu | A Member of the Public | Myself | Oppose | No | No | 1/29/2022 3:55 PM |
| Rainey, Deborah | Harrisville, NH songrain.rainey@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/29/2022 4:55 PM |
| Scully, Patricia | Greenland, NH patpats@comcast.net | A Member of the Public | Myself | Oppose | No | No | 1/29/2022 7:07 PM |
| Bryant, Marlise | Hollis, NH marlisehome@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/29/2022 7:27 PM |
| Bryant, Michael | Hollis, NH bryantmike322@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/29/2022 7:28 PM |
| Trexler, Larisa | Stoddard, NH trexlah@icloud.com | A Member of the Public | Myself | Support | No | No | 1/29/2022 9:22 PM |
| Trexler, Ryan | Stoddard, NH trexlers@gmail.com | A Member of the Public | Myself | Support | No | No | 1/29/2022 9:29 PM |
| Richardson, Daniel | Nashua, NH daniel6_22@comcast.net | A Member of the Public | Myself | Support | No | No | 1/30/2022 5:55 AM |
| M Lombard, Angie | North Hampton, NH angielombard@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/30/2022 8:32 AM |
| Nadreau, Todd | Deering, NH Toddraymond@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 11:19 AM |
| Dorval, Wendy | Derry, NH wdorval@comcast.net | A Member of the Public | Myself | Support | No | No | 1/30/2022 11:36 AM |
| Cormier, Barbara | Barrington, NH BCormier58@msn.com | A Member of the Public | Myself | Oppose | No | No | 1/30/2022 11:45 AM |
| McCartney, Michelle | Concord, NH Michelleredmond2000@yahoo.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 11:54 AM |

| | | | | | | | |
|--------------------|----------------------------------------------|------------------------|--------|---------|----|----|--------------------|
| Merner, Kelley | Wilton, NH Kellysmerner@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 12:55 PM |
| Smith, Julie | Nashua, NH cantdog@comcast.net | A Member of the Public | Myself | Support | No | No | 1/30/2022 12:58 PM |
| McCartney, Evan | Concord, NH bebop505@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 1:07 PM |
| Neskey, Aaron | Raymond, NH Alneskey@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 1:12 PM |
| Mackie, Danielle | Nashua, NH Daniellenuzzo70@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 1:22 PM |
| Anderson, Shayla | Merrimack, NH Shaylan85@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 1:24 PM |
| Cedolin, Alexandra | Epping, NH ahwhyte@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 1:39 PM |
| Roux, Deb | Manchester, NH bealight2020@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 1:42 PM |
| Fitts, Melodie | Laconia, NH mlfitts@metrocast.net | A Member of the Public | Myself | Support | No | No | 1/30/2022 1:43 PM |
| Cedolin, Bradley | Epping, NH Bbcdolin@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 1:51 PM |
| Wilson, Audra | Alstead, NH h3islife@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 1:57 PM |
| Schwab, Rebecca | CONCORD, NH rebecca.schwab@protonmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 1:59 PM |
| Wilson, Rock | Alstead, NH fullermachine@comcast.net | A Member of the Public | Myself | Support | No | No | 1/30/2022 2:03 PM |
| Leggett, Liz | Litchfield, NH Lzvici@yahoo.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 2:05 PM |
| McKinney, Carolyn | Amherst, NH Carolyn.mckinney@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 2:09 PM |
| Lalone, Edward | Epping, NH lalone.Edward@comcast.net | A Member of the Public | Myself | Support | No | No | 1/30/2022 2:09 PM |
| Cushman, Leah | Weare, NH leah.cushman@leg.state.nh.us | An Elected Official | Myself | Support | No | No | 1/30/2022 2:26 PM |
| Cushman, Stephen | Weare, NH cstephen521@hotmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 2:38 PM |

| | | | | | | | |
|--------------------|-----------------------------------------------|------------------------|--------|---------|----|----|-------------------|
| Dolkart, Vivian | Grantham, NH viviandolkart@comcast.net | A Member of the Public | Myself | Oppose | No | No | 1/30/2022 2:42 PM |
| Rojas, Cali | Manchester, NH calianne321@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 2:43 PM |
| Rojas, Emily | Manchester, NH Emilyrojas27@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 2:48 PM |
| Medeiros, Jackie | Salem, NH Kojackie@hotmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 2:51 PM |
| Nadreau, Courtney | Deering, NH teetsiecast@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 2:53 PM |
| Dontonville, Anne | Enfield, NH Ardontonville@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/30/2022 2:56 PM |
| Moore, Kristen | Milford, NH Kristen_cotsifas@hotmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 2:57 PM |
| Beaudoin, Sherry | Rochester, NH sherrybeaudoin@metrocast.net | A Member of the Public | Myself | Support | No | No | 1/30/2022 3:00 PM |
| Beaudoin, Steve | Rochester, NH Stevebeaudoin@metrocast.net | A Member of the Public | Myself | Support | No | No | 1/30/2022 3:02 PM |
| Bemis, Ashley | Manchester, NH Abemid427@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 3:06 PM |
| Comstocl, Nancy | Litchfield, NH Nico,stock@protonmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 3:25 PM |
| Hodgson, Sherree | Rindge, NH sherreehodgson7@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 3:37 PM |
| Tucker, Katherine | Wilmot, NH katherine.s.tucker@valley.net | A Member of the Public | Myself | Oppose | No | No | 1/30/2022 3:42 PM |
| Dontonville, Roger | Enfield, NH rdontonville@gmail.com | An Elected Official | Myself | Oppose | No | No | 1/30/2022 3:46 PM |
| Panek, Sandra | Pelham, NH Sandypanek@protonmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 4:05 PM |
| Panek, Charles | Pelham, NH Fullmet460@gmail..com | A Member of the Public | Myself | Support | No | No | 1/30/2022 4:09 PM |
| Barker, Carole | Nashua, NH carolebooks@msn.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 4:12 PM |
| Cranage, Amy | Grantham, NH cranhan@comcast.net | A Member of the Public | Myself | Oppose | No | No | 1/30/2022 4:29 PM |

| | | | | | | | |
|----------------------|------------------------------------------------|------------------------|--------|---------|----|----|-------------------|
| Kessler, Michelle | Lee, NH greenturtle22@hotmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 4:31 PM |
| Barker, David | Nashua, NH davidabarker@comcast.net | A Member of the Public | Myself | Support | No | No | 1/30/2022 4:35 PM |
| Smeltzer, Cherie | Salem, NH Csmeltzie@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/30/2022 4:37 PM |
| Hegfield, Laura | Amherst, NH laurahegfield@comcast.net | A Member of the Public | Myself | Oppose | No | No | 1/30/2022 4:46 PM |
| Pargas, Laura | Hudson, NH lpargasrdh@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 4:46 PM |
| Till, Mary | Derry, NH maryforderry@yahoo.com | A Member of the Public | Myself | Oppose | No | No | 1/30/2022 4:50 PM |
| Traver, Jean | New London, NH jbtraver@comcast.net | A Member of the Public | Myself | Support | No | No | 1/30/2022 5:02 PM |
| Felings, Alexandra | Windham, NH alexfelings@hotmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 5:27 PM |
| Telerski, Laura | Nashua, NH Laura.Telerski@Leg.State.NH.US | An Elected Official | Myself | Oppose | No | No | 1/30/2022 5:34 PM |
| Doughty, Patrick | Bethlehem, NH patrickdoughty@roadrunner.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 6:22 PM |
| POLLAK, TRACY | NORTHWOOD, NH TPOLLAK@METROCAST.NET | A Member of the Public | Myself | Support | No | No | 1/30/2022 6:23 PM |
| Descoteaux, Michelle | Gilmanton, NH mdescoteaux3232@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 6:29 PM |
| Reed, Barbara | North Swanzey, NH BDRreed74@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/30/2022 6:42 PM |
| Neil, Amanda | Canterbury, NH Amanda@smgltd.net | A Member of the Public | Myself | Support | No | No | 1/30/2022 6:50 PM |
| Peternel, Catherine | Wolfeboro, NH katypeternel@pm.me | A Member of the Public | Myself | Support | No | No | 1/30/2022 6:56 PM |
| Nardino, Marie | Andover, NH mdnardino@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/30/2022 7:07 PM |
| Beatrice, Donna | Nashua, NH Dbjb1314@comcast.net | A Member of the Public | Myself | Support | No | No | 1/30/2022 7:31 PM |
| Beatrice, John | Nashua, NH Dbjb1314@comcast.net | A Member of the Public | Myself | Support | No | No | 1/30/2022 7:32 PM |

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|------------------|-------------------------------------------------|------------------------|--------|---------|----|----|-------------------|
| Beatrice, Angela | Nashua, NH Dbjb1314@comcast.net | A Member of the Public | Myself | Support | No | No | 1/30/2022 7:32 PM |
| BEATRICE, GIANNA | NASHUA, NH Dbjb1314@comcast.net | A Member of the Public | Myself | Support | No | No | 1/30/2022 7:32 PM |
| Barassi, Tina | Brookline, NH Tinams1012@yahoo.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 7:33 PM |
| Knapp, Amy | Wolfeboro Falls, NH GgProductionsinc@mac.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 7:53 PM |
| Cheek, Sarah | Dover, NH sarbare444@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 7:54 PM |
| Mertz, Robert | Somersworth, NH mertz75bfd@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 7:54 PM |
| Gioia, Catherine | Danville, NH Catherinegioia87@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 7:55 PM |
| Adams, Koallie | Milford, NH koallieadams04@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 7:55 PM |
| Marcoux, Joseph | Northfield, NH Joeymarcoux@yahoo.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 7:55 PM |
| Darrow, Linda | Ctr. Barnstead, NH lindard.1956@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 7:55 PM |
| Marcoux, Daniel | Northfield, NH danmarcoux90@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 7:57 PM |
| BRAUER, DEBORAH | Manchester, NH DEBORAHBRAUER14@YAHOO.COM | A Member of the Public | Myself | Support | No | No | 1/30/2022 7:57 PM |
| Marcoux, Sarah | Northfield, NH marcouxhouse@yahoo.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 7:58 PM |
| Carney, Debra | Allenstown, NH 5carneys@comcast.net | A Member of the Public | Myself | Support | No | No | 1/30/2022 7:59 PM |
| Mossey, Karen | Merrimack, NH kmmossey@comcast.net | A Member of the Public | Myself | Support | No | No | 1/30/2022 8:00 PM |
| Boyle, Tim | Portsmouth, NH Timothyboyle@hotmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 8:00 PM |
| Ehl, Alyssa | Hooksett, NH aehl@comcast.net | A Member of the Public | Myself | Support | No | No | 1/30/2022 8:00 PM |
| Levavi, David | Manchester, NH david.levavi@protonmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 8:04 PM |

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|-------------------------|-------------------------------------------------|------------------------|--------|---------|----|----|-------------------|
| Perry, Ellen | Jaffrey, NH perryellen@ymail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 8:06 PM |
| Lerner, Lori | Bridgewater, NH llerner01@comcast.net | A Member of the Public | Myself | Support | No | No | 1/30/2022 8:06 PM |
| Holmes, Kathy | Chichester, NH rlkcholmes@TDS.et | A Member of the Public | Myself | Support | No | No | 1/30/2022 8:06 PM |
| Jensen, Gary | Newmarket, NH Garyjensen997@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 8:07 PM |
| Graham, John | Danville, NH johnnybgoon@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 8:08 PM |
| Arredondo, Jennifer | Londonderry, NH craving.08-bedbug@icloud.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 8:08 PM |
| deMartelly, E. | Nelson, NH libde@myfairpoint.net | A Member of the Public | Myself | Support | No | No | 1/30/2022 8:08 PM |
| Morin, Eric | Hollis, NH Ewmorin@yahoo.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 8:09 PM |
| Robinson, Ellis | Grantham, NH ellismmrobinson@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/30/2022 8:11 PM |
| D'Agostino, Kimberly | Bedford, NH Kdagostino@protonmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 8:13 PM |
| Mac Donald, Christine | Lancaster, NH cmacondonald667@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 8:16 PM |
| Barbanti, Charles | EXETER, NH cbarbanti@borregosolar.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 8:16 PM |
| Beachum, Melissa | Loudon, NH mebeachum@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 8:18 PM |
| Watts-Hettinger, Rhonda | Wilton, NH sidesaddle5@yahoo.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 8:21 PM |
| Athens, Natasha | Keene, NH zipidedooda07@hotmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 8:21 PM |
| Schlottmann, Catherine | Dunbarton, NH Cloudycow@hotmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 8:21 PM |
| Surman, Elizabeth | Hampton Falls, NH hellolibby@comcast.net | A Member of the Public | Myself | Support | No | No | 1/30/2022 8:23 PM |
| Jensen, Jean | Dover, NH bookend-guards-00@icloud.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 8:23 PM |

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|---------------------|----------------------------------------------|------------------------|--------|---------|----|----|-------------------|
| Molinaro, Linda | Campton, NH molinaro.linda@gmail.com | An Elected Official | Myself | Support | No | No | 1/30/2022 8:25 PM |
| Ellison, Laurie | Portsmouth, NH ellison_laurie@hotmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 8:25 PM |
| Borisko, Pamela | Atkinson, NH pjborisko@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 8:26 PM |
| Dunlap, Elisabeth | Lisbon, NH dunlapme@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 8:26 PM |
| Somero, Caleb | New Ipswich, NH calebsomero@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 8:28 PM |
| Cohen, Paul | Glen, NH Paul.cohen27@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 8:28 PM |
| Tourigny, Brett | Moultonborough, NH tourigny936@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 8:30 PM |
| Stinson, Benjamin | Concord, NH benrkstinson@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/30/2022 8:33 PM |
| Szymansky, Melissa | Salem, NH Meszymansky@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 8:34 PM |
| Szymansky, Ken | Salem, NH ken@stoveshoppe.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 8:34 PM |
| Guyen, Taci | Windham, NH taci.guyen@yahoo.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 8:36 PM |
| Twomey, Steven | Manchester, NH TwomeyFamily7@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 8:37 PM |
| T, Joe | Concord, NH nejester@comcast.net | A Member of the Public | Myself | Support | No | No | 1/30/2022 8:39 PM |
| OKeefe, Bonnie | Stratham, NH okeehome@comcast.net | A Member of the Public | Myself | Support | No | No | 1/30/2022 8:41 PM |
| LaPointe, Susan | Epping, NH suelap16@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 8:41 PM |
| Cusack, Nicole | Keene, NH nandrcusack@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 8:47 PM |
| Economakis, Melissa | Newton, NH Meliscsj@protonmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 8:49 PM |
| Couture, Laurie A. | Newmarket, NH LAC@LaurieACouture.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 8:50 PM |

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|-------------------|----------------------------------------------|------------------------|--------|---------|----|----|-------------------|
| Libby, Heather | Merrimack, NH hmwilson04@aol.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 8:54 PM |
| Lenzi, Scott | Auburn, NH banph2@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 8:54 PM |
| graustein, alan | sanbornton, NH alangraustein@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 8:54 PM |
| Cartier, Darlene | Derry, NH msdarlene@comcast.net | A Member of the Public | Myself | Support | No | No | 1/30/2022 8:55 PM |
| White, Melissa | PETERBOROUGH, NH marino_melissa@yahoo.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 8:57 PM |
| Marino, John | PETERBOROUGH, NH techlon11@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 9:00 PM |
| Cucci, Rachel | Loudon, NH rachelcucci@juno.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 9:00 PM |
| Fay, Chris | Litchfield, NH loyalx3@aol.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 9:02 PM |
| Porter, Jandee | Acworth, NH jandeeper@live.com | A Member of the Public | Myself | Oppose | No | No | 1/30/2022 9:03 PM |
| Shultz, Tammy | Merrimack, NH Tammy.shultz@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 9:04 PM |
| Merrill, Linda | Pelham, NH lj_merrill@comcast.net | A Member of the Public | Myself | Support | No | No | 1/30/2022 9:06 PM |
| Reed, Christie | Temple, NH christiereed333@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 9:06 PM |
| Dudak, Breanna | Marlow, NH bdudak8820@icloud.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 9:08 PM |
| Dudak, Colemann | Marlow, NH dudak93@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 9:11 PM |
| Swiderski, Ed | Chester, NH wa2wsx@yahoo.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 9:12 PM |
| Siegars, Linette | Greenfield, NH earthandstones@aol.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 9:14 PM |
| Siegars, Kathleen | Greenfield, NH kseigars5@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 9:15 PM |
| Adams, Jarvis | Greenfield, NH jarvis45@myfairpoint.net | A Member of the Public | Myself | Support | No | No | 1/30/2022 9:18 PM |

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|---------------------|-------------------------------------------------|------------------------|--------|---------|----|----|-------------------|
| Jones, Jennifer | BRENTWOOD, NH jennjones123@hotmail.com | A Member of the Public | Myself | Oppose | No | No | 1/30/2022 9:22 PM |
| Chalifour, Tamara | LOUDON, NH tamara@chalifourgroup.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 9:23 PM |
| Jones, Nate | BRENTWOOD, NH nate_jones@hotmail.com | A Member of the Public | Myself | Oppose | No | No | 1/30/2022 9:24 PM |
| Etlinger, David | Lyndeborough, NH yogev_87@protonmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 9:26 PM |
| Martin, Valerie | Nashua, NH valscustomsigns@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 9:27 PM |
| Albrecht, Tom | Candia, NH jetfuel123@yahoo.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 9:27 PM |
| Martin, Kurt | Nashua, NH advanced.graphic.design@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 9:29 PM |
| Brown, Phyllis | DERRY, NH phyllis@stevebrownshomes.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 9:33 PM |
| Perencevich, Ruth | Concord, NH rperence@comcast.net | A Member of the Public | Myself | Oppose | No | No | 1/30/2022 9:33 PM |
| Martel, Maria | New Ipswich, NH riamartel@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 9:33 PM |
| Brown, Stephen | DERRY, NH steve@stevebrownshomes.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 9:35 PM |
| Methot, Jennifer | Milford, NH jennifer.s.methot@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 9:39 PM |
| Niehaus, Matt | Wilton, NH matt@niehaus.us | A Member of the Public | Myself | Support | No | No | 1/30/2022 9:40 PM |
| Pauer, Eric | Brookline, NH secretary@BrooklineGOP.org | A Member of the Public | Myself | Support | No | No | 1/30/2022 9:41 PM |
| Strycharz, Sarah | Concord, NH Sarah@nhforever.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 9:44 PM |
| Bartholomew, Phoebe | Manchester, NH phoebe.nabil@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 9:46 PM |
| Conti, Laura | Nashua, NH Lauraconti@hotmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 9:48 PM |
| Nicholson, Alicia | Londonderry, NH rex-alicia@hotmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 9:56 PM |

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|----------------------|-------------------------------------------|------------------------|--------|---------|----|----|--------------------|
| Sylvester, Constance | Manchester, NH connies1249@yahoo.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 10:01 PM |
| Manuse, Andrew J. | Derry, NH amanuse@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 10:05 PM |
| Nicholson, Rex | Londonderry, NH rex-alicia@hotmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 10:11 PM |
| Turcotte, Angela | Dover, NH daredfam217@yahoo.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 10:16 PM |
| Seigars, Linette | Greenfield, NH Earthandstones@aol.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 10:16 PM |
| Fixler, Tammy | Hampton, NH F513225@aol.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 10:18 PM |
| Frink, Heather | Salisbury, NH hrfrink@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 10:18 PM |
| Fleming, Elizabeth | New Hampton, NH eamf1@hotmail.co.uk | A Member of the Public | Myself | Support | No | No | 1/30/2022 10:19 PM |
| Glass, Jonathan | Cornish, NH jglass1063@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/30/2022 10:22 PM |
| Russell, Leslie | Salem, NH lesliarussell@live.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 10:24 PM |
| Stevenson, Linnea | Hillsborough, NH bubba9399@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 10:27 PM |
| Crandell-Glass, Jane | Cornish, NH bostonjane@me.com | A Member of the Public | Myself | Oppose | No | No | 1/30/2022 10:29 PM |
| Plannette, Miles | Farmington, NH MPlannette@aol.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 10:31 PM |
| Tavanyar, Yvonne | Nashua, NH ytavanyar@yahoo.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 10:33 PM |
| Gullage, John | Hillsborough, NH gullagej@aol.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 10:37 PM |
| Kaminski, Marie | Bridgewater, NH Martkam4492@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 10:40 PM |
| Perry, Joseph | Canterbury, NH Oldskoolsouljaz@aol.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 10:44 PM |
| Barth, Katherine | Berlin, NH boobblue39@yahoo.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 10:46 PM |

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|---------------------|---------------------------------------------|------------------------|--------|---------|----|----|--------------------|
| Jorgensen, Patricia | NORTHFIELD, NH yellaboat@aol.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 10:57 PM |
| Boyle, Mary | Cornish, NH mary.n.boyle@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/30/2022 11:08 PM |
| chapman, kevin | marlborough, NH denoet103@yahoo.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 11:23 PM |
| Gage, Lisa | Merrimack, NH Lggage@comcast.net | A Member of the Public | Myself | Support | No | No | 1/30/2022 11:34 PM |
| Smith, sarrah | Nashua, NH serbear85@gmail.com | A Member of the Public | Myself | Support | No | No | 1/30/2022 11:38 PM |
| Saunders, Joanne | Manchester, NH jmslinmarpa@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 1:20 AM |
| Cembalisty, Clara | Rochester, NH Cqsc43@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 2:11 AM |
| Gardner, James | Keene, NH yourgardner@protonmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 2:48 AM |
| Moulton, Sue | Hampton, NH suevaliq@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 4:07 AM |
| Schwab, Henriette | Penacook, NH hmarieschwab@protonmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 4:12 AM |
| Gaudette, Sheryl | Hudson, NH sgaudette1@outlook.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 4:20 AM |
| Garcia, Jacqueline | Meredith, NH Jackiem156@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 4:53 AM |
| Moschetto, Grace | Derry, NH gracemariestyle@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 5:09 AM |
| Martin, Katie | Derry, NH katiemartiann@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 5:33 AM |
| SALAMANCA, DAVID | SALEM, NH pzzboy1@comcast.net | A Member of the Public | Myself | Support | No | No | 1/31/2022 5:37 AM |
| Remillard, Eric | Manchester, NH errem00@yahoo.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 5:43 AM |
| Wood, James | Merrimack, NH fairlanejim@comcast.net | A Member of the Public | Myself | Support | No | No | 1/31/2022 5:43 AM |
| Stefanile, Thomas | Derry, NH Thomasstefanile@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 5:46 AM |

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|----------------------|---------------------------------------------|------------------------|--------|---------|----|----|-------------------|
| White, Christina | Concord, NH c.white5192@sbcglobal.net | A Member of the Public | Myself | Support | No | No | 1/31/2022 5:46 AM |
| Plourde, Monica | Londonderry, NH Plourdem10@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 5:50 AM |
| Denny, Mellisa | Londonderry, NH Mellisa.denny@icloud.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 6:00 AM |
| Cartier, John | Derry, NH jmcartier@comcast.net | A Member of the Public | Myself | Support | No | No | 1/31/2022 6:05 AM |
| Peacock, Courtney | Concord, NH sixpeacocks@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 6:07 AM |
| Jellison, Carherine | Amherst, NH Cathyjello@comcast.net | A Member of the Public | Myself | Support | No | No | 1/31/2022 6:08 AM |
| Holbrook, Michele | Loudon, NH Michelespopcorn@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 6:09 AM |
| Hoffman, Joshua | Dover, NH nhfireman14@comcast.net | A Member of the Public | Myself | Support | No | No | 1/31/2022 6:16 AM |
| Hand, Cathy | Hudson, NH Cathyhand@comcast.net | A Member of the Public | Myself | Support | No | No | 1/31/2022 6:18 AM |
| Keane, Karen | Lyme, NH Karenwkeane@me.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 6:39 AM |
| Dacey, Monique | Brookfield, NH Moniquedacey@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 6:39 AM |
| McBride, Rose | MEREDITH, NH mcbdrose@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 6:43 AM |
| Goodwin, Kendra | Sandown, NH kenj86rdes@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 6:52 AM |
| Carbaugh, Josh | Salem, NH joshcarbaugh198@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 6:58 AM |
| Maillet, Brenda | Ashland, NH brendamaillet7@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 6:58 AM |
| Severino, Lindsey | Sandown, NH xlindseymariex@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 6:59 AM |
| Hauswirth, Christine | Salem, NH crhausy@yahoo.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 7:00 AM |
| Hauswirth, Ronald | Salem, NH crhausy@yahoo.com | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 7:00 AM |

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|------------------|-----------------------------------------------|------------------------|--------|---------|----|----|-------------------|
| Cody, Michael | Dover, NH codysolopiano@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 7:01 AM |
| Kras, Krzysztof | FREMONT, NH kkrashnh@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 7:01 AM |
| Goodwin, Cathy | Hampton, NH free_bird870@msn.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 7:02 AM |
| Malm, Patsy | RAYMOND, NH tpmalm@myfairpoint.net | A Member of the Public | Myself | Support | No | No | 1/31/2022 7:04 AM |
| Martin, Diane | Hampton Falls, NH 79thirdparty@comcast.net | A Member of the Public | Myself | Support | No | No | 1/31/2022 7:05 AM |
| Bender, Lorie | Hopkinton, NH lorie.bender@comcast.net | A Member of the Public | Myself | Support | No | No | 1/31/2022 7:12 AM |
| Owens, Laura | Loudon, NH Joshandlauraowens@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 7:25 AM |
| Maillet, Ivan | Ashland, NH im45us@yahoo.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 7:27 AM |
| matta, mauretta | Bedford, NH mauretta.tanner@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 7:30 AM |
| Diggins, Margie | Fremont, NH montanamargie1@aol.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 7:33 AM |
| DeBourke, Sheana | Merrimack, NH sheanaalanna@hotmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 7:38 AM |
| Wester, Jessica | Loudon, NH wester.j@protonmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 7:42 AM |
| Turcotte, Robert | Strafford, NH rdturcotte@hotmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 7:42 AM |
| Kidney, Tammy | Campton, NH tamnjeff520@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 7:43 AM |
| Lloyd, Gisela | East Kingston, NH haus@onepinewoods.us | A Member of the Public | Myself | Support | No | No | 1/31/2022 7:43 AM |
| Wheeler, Wayne | Concord, NH wwheelernh@outlook.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 7:47 AM |
| McLean, Scott | Derry, NH conan1169@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 7:54 AM |
| Johnson, Debra | Grantham, NH debjohnsondjj@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 8:06 AM |

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|---------------------|---------------------------------------------------|------------------------|--------|---------|----|----|-------------------|
| Pouliot, Cheryl | West Lebanon, NH pouliotcheryl@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 8:06 AM |
| ANGELIS, CHERYL | SALEM, NH cangelis_alt@yahoo.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 8:07 AM |
| DeCaprio, Trish | Kensington, NH trishsoineann@comcast.net | A Member of the Public | Myself | Support | No | No | 1/31/2022 8:08 AM |
| Rollins., Ericka | Greenland, NH erickarollins76@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 8:16 AM |
| Chase, Howard | Epsom, NH howpatchase@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 8:16 AM |
| McClennen, Sarah P | North Woodstock, NH sarah@feelpeaceful.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 8:17 AM |
| Holmes, Robert | Chichester, NH rlkcholmes@TDS.et | A Member of the Public | Myself | Support | No | No | 1/31/2022 8:17 AM |
| Medeiros, Jesse | Plainfield, NH bgtrck458@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 8:19 AM |
| Wilson, Mary | Mont Vernon, NH ml_wilson@yahoo.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 8:25 AM |
| Seaman, Jessicah | Derry, NH ajseaman@myfairpoint.net | A Member of the Public | Myself | Support | No | No | 1/31/2022 8:29 AM |
| Delano, Janie | hudson, NH tadandpole4@yahoo.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 8:31 AM |
| Sommese, Cheryl | Londonderry, NH dsommese@aol.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 8:36 AM |
| Anderson, Mary | Plaistow, NH elfskid@yahoo.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 8:40 AM |
| Carraher, Melanie | Boscawen, NH MLCarraher@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 8:41 AM |
| Smith, Jennifer | East Kingston, NH jennifer.m.smith22@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 8:45 AM |
| Fournier, James | Fitzwilliam, NH Brendan1@myfairpoint.net | A Member of the Public | Myself | Support | No | No | 1/31/2022 8:51 AM |
| Hamel, Bonnie | Milan, NH bonnie1397@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 8:54 AM |
| Ford Burley, Nicole | Lebanon, NH nicole.ford.burley@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 8:55 AM |

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|------------------------------|-------------------------------------------------------|------------------------|--------------------------|---------|----|----|-------------------|
| Potucek, Representative John | Rockingham 6 - Derry, NH potucek1@comcast.net | An Elected Official | Myself & My Constituents | Support | No | No | 1/31/2022 8:57 AM |
| frechette, jeffrey | waterville valley, NH frechettejeffrey@hotmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 8:58 AM |
| Goncalo, Penelope | Londonderry, NH 5servinghim@comcast.net | A Member of the Public | Myself | Support | No | No | 1/31/2022 9:01 AM |
| Cohen, Bruuce | Nashua, NH bruce.cohen@leg.state.nh.us | An Elected Official | Hillsborough 28 | Oppose | No | No | 1/31/2022 9:02 AM |
| Roberts, Bryan | Greenland, NH zeekroberts3@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 9:04 AM |
| Roberts, Katherine | Greenland, NH mychuckbrown@hotmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 9:06 AM |
| Cauley, Elizabeth | Milford, NH b.cauley@comcast.net | A Member of the Public | Myself | Support | No | No | 1/31/2022 9:08 AM |
| Nesbitt, Josh | Rumney, NH gaius619@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 9:10 AM |
| Willerer, MIchael | Newmarket, NH thewillerers@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 9:10 AM |
| Stevens, Deb | Nashua, NH debstevens4ward7@gmail.com | An Elected Official | My 10K constituents | Oppose | No | No | 1/31/2022 9:10 AM |
| Owens, Brady | Nashua, NH brady.owens@pm.me | A Member of the Public | Myself | Support | No | No | 1/31/2022 9:11 AM |
| Ford Burley, Richard | Lebanon, NH richardfordburley@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 9:13 AM |
| Valliere, Eileen | Hampstead, NH eileen@tbisoftware.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 9:16 AM |
| Jakubowski, Dennis | Loudon, NH Dendeb146@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 9:20 AM |
| LaClair, Donna | Loudon, NH alleycat9801@comcast.net | A Member of the Public | Myself | Support | No | No | 1/31/2022 9:20 AM |
| Templeton, Christine | Goffstown, NH templetonfamilyorganics@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 9:21 AM |
| Jakubowski, Deborah | Loudon, NH Dendeb146@gmail.com | A Member of the Public | My self | Oppose | No | No | 1/31/2022 9:22 AM |
| Owens, Kimberly | Nashua, NH tiptoeskst@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 9:22 AM |

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|---------------------|-------------------------------------------------|------------------------|--------|---------|----|----|--------------------|
| Morris, Steven | Newport, NH swmorris22@hotmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 9:24 AM |
| Spalinger, Daniel | Windham, NH spalind@yahoo.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 9:28 AM |
| WOOD, JASON | HAMPSTEAD, NH 19washpond@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 9:38 AM |
| DePuy, Charles | Lebanon, NH c.depuy@yahoo.com | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 9:38 AM |
| Brown, Kathleen | Acworth, NH brown57kat@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 9:39 AM |
| Safford, Lori | Pelham, NH lorisafford@comcast.net | A Member of the Public | Myself | Support | No | No | 1/31/2022 9:40 AM |
| Killmeyer, Kathleen | Chesterfield, NH killmeyer@myfairpoint.net | A Member of the Public | Myself | Support | No | No | 1/31/2022 9:40 AM |
| Young, Tim | Pembroke, NH tim.young11@outlook.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 9:44 AM |
| El-Azem, Laura | Londonderry, NH laura@elazem.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 9:48 AM |
| Valcancick, Amy | Newmarket, NH av2112@comcast.net | A Member of the Public | Myself | Support | No | No | 1/31/2022 9:48 AM |
| McGuinness, Martha | Bedford, NH mmcguinness45@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 9:50 AM |
| Romano, Leane | Litchfield, NH Leaneari@hotmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 9:52 AM |
| Schaefer, Debbi | Exter, NH debbischaefer@hotmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 9:54 AM |
| Romano, Stephen | Litchfield, NH Allpro@allpromoversnh.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 9:54 AM |
| st-yves, claudia | waterville valley, NH st_yvesclo@hotmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 9:54 AM |
| Tyszka, Matthew | Newport, NH mattcol@aol.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 9:55 AM |
| Martin, Jeanne | Merrimack, NH jeanne-martin@hotmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 10:00 AM |
| Kimball, Doug | Hopkinton, NH Roadrock1@aol.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 10:03 AM |

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|-----------------------|---------------------------------------------|------------------------|--------|---------|----|----|--------------------|
| Anan, Jimmy | Littleton, NH jimmyanan1@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 10:04 AM |
| Cullison, Gary | Lempster, NH gdubcullison@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 10:08 AM |
| Seppala, Kathleen | Rindge, NH katsep25@protonmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 10:13 AM |
| Wieselquist, Jennifer | Newmarket, NH jenn.wieselquist@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 10:19 AM |
| Kimball, Karen | Hopkinton, NH Kare115@aol.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 10:21 AM |
| Erlebacher, Frances | Rye, NH creatives@aol.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 10:25 AM |
| Heath, Mary | Manchester, NH m.heath@comcast.net | An Elected Official | Myself | Oppose | No | No | 1/31/2022 10:26 AM |
| Rardin, David | Thornton, NH david@rardin.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 10:33 AM |
| laplante, louise | MILTON, NH louiselaplante04@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 10:34 AM |
| Child, Kim | Nashua, NH kchild1@hotmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 10:34 AM |
| Brown, Jason | Milford, NH jason.r.brown14@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 10:37 AM |
| Brown, Danielle | Milford, MA daniellebjorkman@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 10:37 AM |
| Ladd, Karen | Hopkinton, NH karen.e.ladd@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 10:46 AM |
| Colquhoun, Laura | Nashua, NH lauracolquhoun2@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 10:49 AM |
| DeWitt, Sarah | Exeter, NH brillopad9@hotmail.com | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 10:51 AM |
| Worrall, James | Winchester, NH jmworrall1953@yahoo.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 10:57 AM |
| Kenney, Robert | Temple, NH rsrkenney@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 10:57 AM |
| Gragg, Debbie | Manchester, NH debgragg63@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 10:58 AM |

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|----------------------|----------------------------------------------------|------------------------|--------------------------------------|---------|----|----|--------------------|
| Hoffman, Christy | Somersworth, NH Christyjhoffman@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 11:03 AM |
| Kenyon, Jeannine | Newmarket, NH quahogjk@icloud.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 11:05 AM |
| Conley, Gina | Auburn, NH ginacosta08@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 11:06 AM |
| Fouch, Joanna | Loudon, NH jfouch51@yahoo.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 11:11 AM |
| leclerc, david | NASHUA, NH 03062, NH drdavidleclerc@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 11:12 AM |
| Jordan, Paula | Canterbury, NH Pjordan457@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 11:13 AM |
| Medeiros, Kate | Plainfield, NH kdwmedeiros@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 11:15 AM |
| Hamilton, Jacqueline | Center Barnstead,, NH jaqlnh@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 11:18 AM |
| aylesworth, annie | new boston, NH aaylesworth@comcast.net | A Member of the Public | Myself | Support | No | No | 1/31/2022 11:18 AM |
| Whitney, Mary | Center Barnstead, NH mwhitney371@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 11:18 AM |
| Bryan, Anne | Hebron, NH anneb@worldpath.net | A Member of the Public | Myself | Support | No | No | 1/31/2022 11:19 AM |
| Belanger, Paula | Salisbury, NH pbtoxicfree@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 11:22 AM |
| Belanger, Shane | Salisbury, NH belangerbuilt@gmail.com | A Member of the Public | Belanger Construction & Design, Inc. | Support | No | No | 1/31/2022 11:22 AM |
| Pimentel, Rod | Henniker, NH Rod.pimentel@leg.state.nh.us | An Elected Official | Myself | Oppose | No | No | 1/31/2022 11:28 AM |
| Vilela, Simon | Moultonborough, NH simonnhjack@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 11:34 AM |
| Schmitt, Megan | Concord, NH 88mmas368@protonmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 11:36 AM |
| Howland, Curtis | Manchester, NH howland@priss.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 11:39 AM |
| Noyes, Chris | Bethlehem, NH Chris@crosstowncourierservice.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 11:51 AM |

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|----------------------|---------------------------------------------|------------------------|--------|---------|----|----|--------------------|
| Wallace, Andrew | Richmond, NH andywallace25@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 11:51 AM |
| Boyer, Judith | Chesterfield, NH jboyer4@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 11:52 AM |
| Faria, Jason | Exeter, NH medfica@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 11:59 AM |
| Sylvain, Barbara | TILTON, NH brbsalem@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 12:01 PM |
| Oxenham, Lee | Plainfield, NH leeoxenham@comcast.net | An Elected Official | Myself | Oppose | No | No | 1/31/2022 12:01 PM |
| Mooney, John | Northfield, NH shmushkapop@aol.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 12:03 PM |
| Lozito, Viola Marie | Claremont, NH vmarielozito@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 12:06 PM |
| Lozito, Patrick | Claremont, NH patlozito@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 12:07 PM |
| Penta, Susan | Hampstead, NH spenta328@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 12:11 PM |
| Gifford, George | Goffstown, NH butchgifford123@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 12:17 PM |
| Braden, Julie | Brentwood, NH Julesflyer75@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 12:22 PM |
| DeRosa, Robin | Campton, NH orbitractor@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 12:25 PM |
| DeMark, Richard | Meredith, NH demarknh114@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 12:27 PM |
| DeMark, Harriet | Meredith, NH demarknh114@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 12:27 PM |
| Bock, Debra | Hudson, NH the2box@msn.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 12:32 PM |
| Bouchard, Donald | MANCHESTER, NH donaldjbouchard@gmail.com | An Elected Official | Myself | Oppose | No | No | 1/31/2022 12:40 PM |
| Goss-Vozella, Robert | Salem, NH Bobbygoss30@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 12:50 PM |
| Fletcher, Theresa | Swanzey, NH Fourfletcherz@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 12:57 PM |

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|--------------------|---------------------------------------------|------------------------|--------|---------|----|----|--------------------|
| Willett, Kathleen | Swanzy, NH kwillettinnh@yahoo.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 12:58 PM |
| Willett, Michael | Swanzy, NH mapleknollfarmnh@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 1:00 PM |
| Willett, Elizabeth | Swanzy, NH Lizarelli22@yahoo.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 1:01 PM |
| Taku, Fumio | Hudson, NH fumio.taku@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 1:04 PM |
| Higgins, Patricia | HANOVER, NH phiggins47@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 1:04 PM |
| Timmins, Courtney | Belmont, NH cst610@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 1:24 PM |
| Timmins, Jeremiah | Belmont, NH kaiheitai@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 1:24 PM |
| Robbins, Ashley | Milton, NH ashleylincoln@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 1:26 PM |
| Le Doux, Julie | Hollis, NH jbizzbuzz@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 1:30 PM |
| Terrio, Mary | Hollis, NH may_terrio@yahoo.com | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 1:32 PM |
| Johnson, Vivian | HOLLIS, NH vmj33@outlook.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 1:36 PM |
| Hutchison, Heidi | Dover, NH Heidishutchison@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 1:38 PM |
| Collyer, Anne | Newton, NH annicollyer34@gmail.com | An Elected Official | Myself | Support | No | No | 1/31/2022 1:41 PM |
| Donaldson, Marcia | Hollis, NH wsource2239@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 1:43 PM |
| Dyer, Allison | Nashua, NH allie_scott@comcast.net | A Member of the Public | Myself | Support | No | No | 1/31/2022 1:47 PM |
| Chapin, Charles | Alexandria, NH charles.chapin3@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 1:51 PM |
| Downs, Nathan | Dover, NH nathan.a.downs@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 2:09 PM |
| Belanger, Maria | Keene, NH olgapereira9@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 2:10 PM |

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|--------------------|-----------------------------------------------|------------------------|-------------------|---------|----|----|-------------------|
| Langellotti, Jodi | Dover, NH startsfromwithin@gmail.com | A Member of the Public | OCD New Hampshire | Oppose | No | No | 1/31/2022 2:10 PM |
| Belanger, Norbert | Keene, NH Nebelanger@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 2:10 PM |
| Pappas, Laurie | Contoocook, NH laurihere44@yahoo.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 2:12 PM |
| Hamer, Heidi | Manchester, NH heidi.hamer@leg.state.nh.us | An Elected Official | Myself | Oppose | No | No | 1/31/2022 2:15 PM |
| Ferrari, Angela | Mont Vernon, NH angelaferri84@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 2:18 PM |
| Koen, Andrew | Windham, NH andrew.r.koen@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 2:22 PM |
| Meyer, Joanne | Rye, NH jomeyer777@aol.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 2:26 PM |
| Noonan, Colleen | Dover, NH cmnoon52@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 2:28 PM |
| Coutu, Michael | Rye, NH mikecoutu@comcast.net | A Member of the Public | Myself | Support | No | No | 1/31/2022 2:31 PM |
| Schuman, Diana | Dover, NH deesch@comcast.net | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 2:45 PM |
| Goss, Harlyene | Wakefield, NH hg@harlyenegoss.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 3:18 PM |
| Chamberlin, Lisa | Windham, NH dawnchamber@hotmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 3:23 PM |
| Zaenglein, Barbara | AMHERST, NH bzaenglein@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 3:26 PM |
| LYMAN, RUSSELL | WEBSTER, NH moparuss@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 3:30 PM |
| Zaenglein, Eric | Amherst, NH henley11@comcast.net | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 3:32 PM |
| kirsch, walter | warner, NH kirschwalterf@yahoo.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 3:33 PM |
| O'Neill, Sandra | Madbury, NH sandy_oneill@comcast.net | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 3:44 PM |
| Howard, Heath | Strafford, NH heathjosephhoward@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 3:46 PM |

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|--------------------|----------------------------------------------|------------------------|--------|---------|----|----|-------------------|
| Perra, Jason | Durham, NH jasonperra@icloud.com | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 3:46 PM |
| Williams, Cindy | Mont Vernon, NH honeypothounds@aol.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 3:49 PM |
| Garnett, Marikaye | Hudson, NH Marikaye777@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 3:52 PM |
| Eaton, Alexis | Durham, NH ameaton481@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 3:52 PM |
| Wallace, Adrian | Manchester, NH adrian_w@ctemplar.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 4:01 PM |
| Petrusewicz, Carol | Rochester, NH clmcc2befree@yahoo.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 4:02 PM |
| Whitcomb, Jennifer | Durham, NH jwhitcomb295@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 4:07 PM |
| Grady, Virginia | Hollis, NH ginnygrady13@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 4:08 PM |
| Sturgeon, Paige | Moultonborough, NH redhillphoto@yahoo.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 4:09 PM |
| Hackmann, Kent | Andover, NH hackmann@uidaho.edu | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 4:09 PM |
| Ploszaj, Rep. Tom | Center Harbor, NH tom@tomploszaj.com | An Elected Official | Myself | Support | No | No | 1/31/2022 4:10 PM |
| Schofield, Kim | Epping, NH ksdm@comcast.net | A Member of the Public | Myself | Support | No | No | 1/31/2022 4:22 PM |
| Cope, David | Hancock, NH davidcope2000@hotmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 4:23 PM |
| Murphy, Kevin | Hampstead, NH kfmurphy76@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 4:24 PM |
| Doherty, Angela | Weare, NH Angeladoherty93@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 4:32 PM |
| Lewis, Elizabeth | Nashua, NH ecop.lewis@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 4:32 PM |
| Sorber, Anne | Exeter, NH anne@sorber.us | A Member of the Public | Myself | Support | No | No | 1/31/2022 4:40 PM |
| Sorber, Kevin | Exeter, NH kevin@sorber.us | A Member of the Public | Myself | Support | No | No | 1/31/2022 4:40 PM |

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|---------------------|----------------------------------------------|------------------------|--------|---------|----|----|-------------------|
| Mahony, Liam | Durham, NH ljm1077@wildcats.unh.edu | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 4:44 PM |
| Kenyon, David | Newmarket, NH quahogdk@icloud.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 4:46 PM |
| Dolpies, Michael | Northfield, NH mdolpies@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 4:46 PM |
| Corell, Elizabeth | Concord, NH Elizabeth.j.corell@gmail.com | A Member of the Public | None | Oppose | No | No | 1/31/2022 4:58 PM |
| Peterson, Susan | Newton, NH susanrp@aol.com | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 5:02 PM |
| Marshall, Stephanie | Exeter, NH stephmarshall@myfairpoint.net | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 5:10 PM |
| ROY, MARY | GOFFSTOWN, NH Royz7777us@yahoo.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 5:14 PM |
| Parrish, Laura | Hollis, NH lparrish28@yahoo.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 5:23 PM |
| Duncan, Stan | Newton, NH standuncan@post.harvard.edu | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 5:36 PM |
| Froumy, Heather | Exeter, NH hastingsfroumy@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 5:37 PM |
| Almy, Susan | Lebanon, NH Susan.almy@comcast.net | An Elected Official | Myself | Oppose | No | No | 1/31/2022 6:07 PM |
| Anastasia, Patricia | Londonderry, NH patti.anastasia@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 6:38 PM |
| Scott, Donald | Nashua, NH dfscott123@comcast.net | A Member of the Public | Myself | Support | No | No | 1/31/2022 6:47 PM |
| Pauer, Diane | Brookline, NH diane.pauer@leg.state.nh.us | An Elected Official | Myself | Support | No | No | 1/31/2022 7:01 PM |
| goodwin, shawn | Manchester, NH sgoody2221@aol.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 7:02 PM |
| Valcancick, Joseph | Newmarket, NH jvalcancick@pm.me | A Member of the Public | Myself | Support | No | No | 1/31/2022 7:06 PM |
| Campion, Polly | Etna, NH pollykcampion@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 7:09 PM |
| Brown, Joanna | Manchester, NH jberardi2@hotmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 7:17 PM |

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|----------------------------|--------------------------------------------------|------------------------|--------|---------|----|----|-------------------|
| Deleault, Olivia | Manchester, NH livdeleault07@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 7:26 PM |
| Clark, Jeremy | Ashland, NH nhhouse@franklinwebpublishing.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 7:26 PM |
| Lindberg, Ian | Hampstead, NH yankeepetrolhead@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 7:26 PM |
| Bahmueller, Gretchen | Durham, NH glb1018@wildcats.unh.edu | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 7:26 PM |
| Smith, Olivia | Durham, NH omsmith161@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 7:27 PM |
| Mower, Elizabeth | Goffstown, NH emmow@comcast.net | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 7:27 PM |
| Norris, Sydney | Durham, NH sydney.norris@unh.edu | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 7:27 PM |
| Broderick, Megan | Durham, NH megan.broderick@unh.edu | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 7:27 PM |
| Beame, Julia | Hancock, NH juliabeame@hotmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 7:28 PM |
| Cave, Carly | Durham, NH carlyjcave@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 7:29 PM |
| Mattlage, Linda | Concord, NH L.mattlage@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 7:34 PM |
| Carpenter, Penny | Raymond, NH pcarp2627@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 7:44 PM |
| Early, Robert | Amherst, NH b_early@myfairpoint.net | A Member of the Public | Myself | Support | No | No | 1/31/2022 7:47 PM |
| Odom, Judy | Bow, NH judyodom@comcast.net | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 7:51 PM |
| Clark, Denise | Milford, NH denise.m.clark03055@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 7:56 PM |
| Andrews, David | Chichester, NH davidandrewsnh@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 8:07 PM |
| Fenner-Lukaitis, Elizabeth | Warner, NH glukaitis@mcttelecom.com | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 8:09 PM |
| Axelman, Elliot | Hooksett, NH alu.axelman@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 8:10 PM |

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|----------------------|---------------------------------------------|------------------------|----------------------------|---------|----|----|--------------------|
| Kras, Danielle | Fremont, NH waldenranger2005@yahoo.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 8:23 PM |
| Dixon, Peter | Bedford, NH Dixonpe@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 8:24 PM |
| A Gieschen Jr, John | Chesterfield, NH jgieschen@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 8:26 PM |
| Hatcher, Phil | Dover, NH phil.hatcher@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 8:29 PM |
| D'Amico, Matthew | Dover, NH mdamico1998@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 8:37 PM |
| Saba, Robin | CANDIA, NH rbrooks230@hotmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 8:43 PM |
| Watkins, Valerie | Kensington, NH Valerilyn@yahoo.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 8:45 PM |
| Genus, Francis | Franklin, NH frankrgenus@yahoo.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 9:02 PM |
| Kudlik, Cindy | Grafton, NH CindyKudlik@protonmail.com | An Elected Official | Myself | Support | No | No | 1/31/2022 9:28 PM |
| Sanborn, Laurie | Orange, NH lcsanborn@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 9:33 PM |
| Hagenow, Janice | Warner, NH lovestodance40@yahoo.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 9:36 PM |
| Alexander, Deborah | Canaan, NH debalexander.nh@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 9:43 PM |
| Bowles, Margaret | Lyme, NH mcb2885@gmail.com | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 9:44 PM |
| wazir, Safiya | Concord, NH Swazir@leg.state.nh.us | An Elected Official | Myself and my Constituents | Oppose | No | No | 1/31/2022 9:49 PM |
| de Bruyn Kops, Peter | Amherst, NH dbk@acugen.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 9:54 PM |
| Wieck, Katherine | Canterbury, NH katherine.wieck@unh.edu | A Member of the Public | Myself | Oppose | No | No | 1/31/2022 10:00 PM |
| Sullivan, Alexandra | Merrimack, NH alexmarysullivan@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 10:00 PM |
| Rossall, Julie | Keene, NH deut10_12@hotmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 10:23 PM |

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|------------------------|------------------------------------------------|------------------------|--------------|---------|----|----|--------------------|
| Rossall, Dave | Keene, NH deut10_12@hotmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 10:29 PM |
| Grassie, Chuck | Rochester, NH chuck.grassie@leg.state.nh.us | An Elected Official | Strafford 11 | Oppose | No | No | 1/31/2022 10:37 PM |
| Sullivan, Mary | Nashua, NH m.f.sullivan@comcast.net | A Member of the Public | Myself | Support | No | No | 1/31/2022 10:38 PM |
| Noel, Kenneth | Manchester, NH knoel104@gmail.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 10:59 PM |
| Cormier, Jennifer | Dunbarton, NH nhgencourt@jcsmotif.com | A Member of the Public | Myself | Support | No | No | 1/31/2022 11:22 PM |
| Quinn, Meghan | ENFIELD, NH mquinn099@yahoo.com | A Member of the Public | Myself | Oppose | No | No | 2/1/2022 5:08 AM |
| Dupuis, Keren | Gilford, NH Kd_nh17@yahoo.com | A Member of the Public | Myself | Support | No | No | 2/1/2022 5:52 AM |
| Howell, Steven | Woodstock, NH boat30.nh@gmail.com | A Member of the Public | Myself | Support | No | No | 2/1/2022 6:25 AM |
| Pelella, Natalie | Grafton, NH mattalie1@aol.com | A Member of the Public | Myself | Oppose | No | No | 2/1/2022 6:46 AM |
| Merlone, Lynn | Rindge, NH prulone@gmail.com | A Member of the Public | Myself | Oppose | No | No | 2/1/2022 6:48 AM |
| Theriault, Mary | Brookline, NH theriault.mary@yahoo.com | A Member of the Public | Myself | Support | No | No | 2/1/2022 7:08 AM |
| Cook, Barbara | Canterbury, NH Bdc7@aol.com | A Member of the Public | Myself | Oppose | No | No | 2/1/2022 7:13 AM |
| Collins, Kelly | Hancock, NH kellyanncollins@live.com | A Member of the Public | Myself | Support | No | No | 2/1/2022 7:19 AM |
| Cloutier, Suzanne | Hampton, NH shcloutier@comcast.net | A Member of the Public | Myself | Support | No | No | 2/1/2022 7:32 AM |
| Boyer, Alan | Chesterfield, NH teleskicaster@gmail.com | A Member of the Public | Myself | Oppose | No | No | 2/1/2022 7:54 AM |
| RodriguezBrick, Carmen | Nashua, NH brickta@comcast.net | A Member of the Public | Myself | Support | No | No | 2/1/2022 8:16 AM |
| Wells, Ken | Andover, NH kenwells3@gmail.com | A Member of the Public | Myself | Oppose | No | No | 2/1/2022 8:27 AM |
| Berling, Mark | Auburn, NH MB58197@protonmail.com | A Member of the Public | Myself | Support | No | No | 2/1/2022 8:32 AM |

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|-------------------|--------------------------------------------------|------------------------|--------|---------|----|----|------------------|
| Clement, Michelle | Salem, NH mkmilone@gmail.com | A Member of the Public | Myself | Support | No | No | 2/1/2022 8:48 AM |
| Tuttle, Annette | Concord, NH annettetuttle2222@gmail.com | A Member of the Public | Myself | Support | No | No | 2/1/2022 8:56 AM |
| Smith, Nancy | Enfield, NH nancysmith8@me.com | A Member of the Public | Myself | Oppose | No | No | 2/1/2022 9:08 AM |
| Dolkart, Kenneth | Grantham, NH kenneth.dolkart@gmail.com | A Member of the Public | Myself | Oppose | No | No | 2/1/2022 9:12 AM |
| Gass, Kimberly | Portsmouth, NH kimberlygass@gmail.com | A Member of the Public | Myself | Support | No | No | 2/1/2022 9:13 AM |
| Veltri, Anthony | Holderness, NH anthony.j.veltri@gmail.com | A Member of the Public | Myself | Support | No | No | 2/1/2022 9:18 AM |
| Dagata, Amber | Stratham, NH amberdagata@msn.com | A Member of the Public | Myself | Support | No | No | 2/1/2022 9:19 AM |
| Doherty, David | Pembroke, NH ddoherty0845@gmail.com | A Member of the Public | Myself | Oppose | No | No | 2/1/2022 9:20 AM |
| Hodsdon, Alan | CANTERBURY, NH alan.hodsdon@gmail.com | A Member of the Public | Myself | Oppose | No | No | 2/1/2022 9:24 AM |
| Roy, Lucy | North Hampton, NH Bikeerz@comcast.net | A Member of the Public | Myself | Support | No | No | 2/1/2022 9:25 AM |
| Rousseau, Michael | North Hampton, NH Mike@mrhomeimprovements.com | A Member of the Public | Myself | Support | No | No | 2/1/2022 9:28 AM |
| Emerson, Anne | Canterbury, NH ademerson4180@gmail.com | A Member of the Public | Myself | Oppose | No | No | 2/1/2022 9:37 AM |
| Buck, Barbara | Bradford, NH bcbuck108@gmail.com | A Member of the Public | Myself | Oppose | No | No | 2/1/2022 9:40 AM |
| Little, Lucas | Loudon, NH superbrothersister12299@gmail.com | A Member of the Public | Myself | Support | No | No | 2/1/2022 9:46 AM |
| M, T | Berlin, NH Tmounce57@gmail.com | A Member of the Public | Myself | Support | No | No | 2/1/2022 9:48 AM |
| Hampton, Doris | Canterbury, NH dandmhamp38@mail.com | A Member of the Public | Myself | Oppose | No | No | 2/1/2022 9:48 AM |
| seeger, jessica | Hancock, NH jessicaseeger@gmail.com | A Member of the Public | Myself | Support | No | No | 2/1/2022 9:56 AM |
| stokes, matthew | Hancock, NH jessicaseeger@gmail.com | A Member of the Public | Myself | Support | No | No | 2/1/2022 9:56 AM |

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|---------------------|--------------------------------------------|------------------------|--------|---------|----|----|-------------------|
| Howes, Linda | Springfield, NH 4lindahowes@gmail.com | A Member of the Public | Myself | Support | No | No | 2/1/2022 9:59 AM |
| Kelley, True | Warner, NH true@mcttelecom.com | A Member of the Public | Myself | Oppose | No | No | 2/1/2022 9:59 AM |
| Pellettieri, Judith | Warner, NH judithpellettieri@gmail.com | A Member of the Public | Myself | Oppose | No | No | 2/1/2022 10:00 AM |
| Phillips, Emily | Freemont, NH Theemilyphillips@gmail.com | A Member of the Public | Myself | Support | No | No | 2/1/2022 10:04 AM |
| Young, Susan | Alton Bay, NH snewco@hotmail.com | A Member of the Public | Myself | Support | No | No | 2/1/2022 10:12 AM |
| Richardson, Bryan | Alexandria, NH marks-dad@ipatriots.us | A Member of the Public | Myself | Support | No | No | 2/1/2022 10:15 AM |
| Cole-Henry, Ashley | Enfield, NH acolehenry16@gmail.com | A Member of the Public | Myself | Oppose | No | No | 2/1/2022 10:25 AM |
| Dunham, Bonnie | Merrimack, NH Bsdunham12@gmail.com | A Member of the Public | Myself | Oppose | No | No | 2/1/2022 11:14 AM |
| Cates, Tammy | Nashua, NH tjcates@eagleswind.com | A Member of the Public | Myself | Support | No | No | 2/1/2022 11:24 AM |
| Cates, William | Nashua, NH wcatesjr@eagleswind.com | A Member of the Public | Myself | Support | No | No | 2/1/2022 11:24 AM |
| Cates, Bethany | Nashua, NH brcates99@gmail.com | A Member of the Public | Myself | Support | No | No | 2/1/2022 11:24 AM |
| Cates, Tyler | Nashua, NH xtylercatesx@gmail.com | A Member of the Public | Myself | Support | No | No | 2/1/2022 11:24 AM |
| Cates, Sahriah | Nashua, NH sahriah@sahriah.com | A Member of the Public | Myself | Support | No | No | 2/1/2022 11:24 AM |
| Stearn, Charity | Nashua, NH superauntie@eagleswind.com | A Member of the Public | Myself | Support | No | No | 2/1/2022 11:25 AM |
| Stearn, Sylvia | Nashua, NH supermimi@eagleswind.com | A Member of the Public | Myself | Support | No | No | 2/1/2022 11:25 AM |
| Cooros, James | Manchester, NH ignomic@gmail.com | A Member of the Public | Myself | Support | No | No | 2/1/2022 11:34 AM |
| bory, lee | nashua, NH leebory@juno.com | A Member of the Public | Myself | Oppose | No | No | 2/1/2022 11:35 AM |
| Tuttle, Jennifer | Farmington, NH Mom4ever81@gmail.com | A Member of the Public | Myself | Support | No | No | 2/1/2022 11:36 AM |

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|---------------------|-----------------------------------------------|------------------------|--------|---------|----|----|-------------------|
| Howard, Daniel | Strafford, NH danhoward100@gmail.com | A Member of the Public | Myself | Oppose | No | No | 2/1/2022 11:59 AM |
| Kondratenok, Anna | Hollis, NH Anna.kondra@gmail.com | A Member of the Public | Myself | Support | No | No | 2/1/2022 12:07 PM |
| Hunnewell, Richard | Holderness, NH hunnewell.richard@gmail.com | A Member of the Public | Myself | Oppose | No | No | 2/1/2022 12:20 PM |
| Hunnewell, Anne | Holderness, NH ahunne@roadrunner.com | A Member of the Public | Myself | Oppose | No | No | 2/1/2022 12:20 PM |
| Lawrence, Johanna | Rye, NH johannalawrence@verizon.net | A Member of the Public | Myself | Support | No | No | 2/1/2022 12:24 PM |
| Grover, Gizelle | Rindge, NH gizelle_grover@yahoo.com | A Member of the Public | Myself | Support | No | No | 2/1/2022 12:39 PM |
| Crockett, Robert | Hanover, NH rocroc@gmail.com | A Member of the Public | Myself | Oppose | No | No | 2/1/2022 12:41 PM |
| Aylesworth, John | New Boston, NH johnaylesworth@comcast.net | A Member of the Public | Myself | Support | No | No | 2/1/2022 1:16 PM |
| Istel, Claudia | Acworth, NH cistel79@gmail.com | A Member of the Public | Myself | Oppose | No | No | 2/1/2022 1:16 PM |
| Marcinuk, Joseph | Durham, NH Joe.Marcinuk@unh.edu | A Member of the Public | Myself | Oppose | No | No | 2/1/2022 1:59 PM |
| CLARK, SUSAN | TILTON, NH sukieclark@hotmail.com | A Member of the Public | Myself | Oppose | No | No | 2/1/2022 2:01 PM |
| Plunkett, Erin-Dail | Hampstead, NH erindailplunkett@yahoo.com | A Member of the Public | Myself | Support | No | No | 2/1/2022 2:15 PM |
| Cantwell, Kara | NASHUA, NH kara.cantwell8@gmail.com | A Member of the Public | Myself | Support | No | No | 2/1/2022 2:22 PM |
| Lepesqueur, Paul | CANTERBURY, NH karumi.karumi@gmail.com | A Member of the Public | Myself | Oppose | No | No | 2/1/2022 2:28 PM |
| Kerwin, Mary | Canterbury, NH forthemary@gmail.com | A Member of the Public | Myself | Oppose | No | No | 2/1/2022 2:29 PM |
| Campbell, Karolyn | Epsom, NH kkcampbell43@yahoo.com | A Member of the Public | Myself | Oppose | No | No | 2/1/2022 2:34 PM |
| Mercer, Jennifer | Loudon, NH cjmercerc@myfairpoint.net | A Member of the Public | Myself | Support | No | No | 2/1/2022 3:08 PM |
| Gordon, KB | Sunapee, NH andkatnh@gmail.com | A Member of the Public | Myself | Oppose | No | No | 2/1/2022 4:13 PM |

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|----------------------|---------------------------------------------|------------------------|--------|---------|----|----|------------------|
| Hubert, Fred | Hollis, NH fhubert67@yahoo.com | A Member of the Public | Myself | Support | No | No | 2/1/2022 4:22 PM |
| Petruzzello, Michael | Wolfeboro, NH mpetruzzello91@gmail.com | A Member of the Public | Myself | Support | No | No | 2/1/2022 4:27 PM |
| Petruzzello, Rhonda | Wolfeboro, NH rpetruzzello91@gmail.com | A Member of the Public | Myself | Support | No | No | 2/1/2022 4:29 PM |
| Gutterman, Gail | Sunapee, NH gutsea@yahoo.com | A Member of the Public | Myself | Oppose | No | No | 2/1/2022 4:32 PM |
| Enos, Manuel | Nottingham, NH mericenos@gmail.com | A Member of the Public | Myself | Support | No | No | 2/1/2022 4:48 PM |
| thompson, julia | durham, NH maple371@gmail.com | A Member of the Public | Myself | Oppose | No | No | 2/1/2022 4:50 PM |
| Frost, Dawn | Canaan, NH lytlefrost@gmail.com | A Member of the Public | Myself | Oppose | No | No | 2/1/2022 4:53 PM |
| Lemoy, Claude | Canaan, NH claude.lemoy@gmail.com | A Member of the Public | Myself | Oppose | No | No | 2/1/2022 5:15 PM |
| Cross, John | Brookline, NH jc938272@gmail.com | A Member of the Public | Myself | Oppose | No | No | 2/1/2022 5:21 PM |
| Smith, Suzanne | Hebron, NH zanne719@gmail.com | An Elected Official | Myself | Oppose | No | No | 2/1/2022 5:31 PM |
| Ward-Scott, Colleen | Nashua, NH Colleenws@comcast.net | A Member of the Public | Myself | Support | No | No | 2/1/2022 5:51 PM |
| Davis, Erin | Barrington, NH EMSmith07@gmail.com | A Member of the Public | Myself | Oppose | No | No | 2/1/2022 6:12 PM |
| Robinson, Steven | Northwood, NH Nikkiandme@yahoo.com | A Member of the Public | Myself | Support | No | No | 2/1/2022 6:22 PM |
| Robinson, Karen | Northwood, NH Bdabng12@yahoo.com | A Member of the Public | Myself | Support | No | No | 2/1/2022 6:26 PM |
| cahill, Kathy | Concord, NH kathyhigginscahill@gmail.com | A Member of the Public | Myself | Oppose | No | No | 2/1/2022 6:48 PM |
| Marchuk, Mercy | Dover, NH Mercymarchuk@gmail.com | A Member of the Public | Myself | Oppose | No | No | 2/1/2022 6:51 PM |
| Cecchetti, Rick | Strafford, NH rcecc@aol.com | A Member of the Public | Myself | Oppose | No | No | 2/1/2022 7:09 PM |
| Perry, Carol | Strafford, NH cperrynh1@gmail.com | A Member of the Public | Myself | Oppose | No | No | 2/1/2022 7:19 PM |

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|---------------------|---------------------------------------------|------------------------|----------------|---------|----|----|-------------------|
| Dutzy, Sherry | Nashua, NH sherry.dutzy@leg.state.nh.us | An Elected Official | Myself | Oppose | No | No | 2/1/2022 7:37 PM |
| Kuemmerle, Nancy | Enfield, NH nkuemmerle@une.edu | A Member of the Public | Myself | Oppose | No | No | 2/1/2022 7:41 PM |
| York, Barbara | Sunapee, NH spiders1120@gmail.com | A Member of the Public | Myself | Oppose | No | No | 2/1/2022 7:46 PM |
| BLAKE, DEBRA | Hooksett, NH debrablakesales@comcast.net | A Member of the Public | Myself | Support | No | No | 2/1/2022 8:14 PM |
| Brooks, Jill | Dover, NH Jillannbrooks@hotmail.com | A Member of the Public | Myself | Oppose | No | No | 2/1/2022 8:17 PM |
| Callahan, Elizabeth | STRAFFORD, NH ecwho50@gmail.com | A Member of the Public | Myself | Oppose | No | No | 2/1/2022 8:30 PM |
| Ward, Mary | Hollis, NH marylouward@charter.net | A Member of the Public | Myself | Support | No | No | 2/1/2022 8:59 PM |
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| Sylvia, Elizabeth | Nashua, NH elizabethlidman@hotmail.com | A Member of the Public | Myself | Support | No | No | 2/1/2022 9:52 PM |
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| Hayes, Randy | Canterbury, NH rcompostr@gmail.com | A Member of the Public | Myself | Oppose | No | No | 2/2/2022 8:07 AM |

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|-------------------|----------------------------------------------|------------------------|--------|---------|----|----|-------------------|
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| DiMasi, Alisha | Lyndeborough, NH alisha.dimasi@gmail.com | A Member of the Public | Myself | Support | No | No | 2/2/2022 2:53 PM |
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Dear Members of the House Education Committee,

HB1233 is a dangerous bill that would greatly affect students like myself. Universities have already been hot spots for the spread of COVID-19, and banning the requirement of masks and vaccinations will only increase this. There are students who already don't follow the mask mandate as it currently stands, and this bill would only encourage their willful disregard for the health and safety of their fellow students, faculty, and staff. UNH has been able to maintain low case levels due to their rigorous testing schedule and requirement of masks, and we should not throw our progress away. I urge that you all vote in opposition to this bill, as it should be the university making decisions about student, faculty, and staff safety, not the state house.

Thank you,

UNH Student



Review

Nanofiber-Based Face Masks and Respirators as COVID-19 Protection: A Review

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Abstract: Wearing face masks, use of respirators, social distancing, and practicing personal hygiene are all measures to prevent the spread of the coronavirus disease (COVID-19). This pandemic has revealed the deficiency of face masks and respirators across the world. Therefore, significant efforts are needed to develop air filtration and purification technologies, as well as innovative, alternative antibacterial and antiviral treatment methods. It has become urgent—in order for humankind to have a sustainable future—to provide a feasible solution to air pollution, particularly to capture fine inhalable particulate matter in the air. In this review, we present, concisely, the air pollutants and adverse health effects correlated with long- and short-term exposure to humans; we provide information about certified face masks and respirators, their compositions, filtration mechanisms, and the variations between surgical masks and N95 respirators, in order to alleviate confusion and misinformation. Then, we summarize the electrospun nanofiber-based filters and their unique properties to improve the filtration efficiency of face masks and respirators.



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Keywords: air pollutants; COVID-19; face masks; respirators; nanofibers filter media

1. Introduction

World population growth, industrialization, and urbanization have initiated the production of enormous quantities of contaminants being emitted into the air, with no notion of how they could affect human health. Recently, air contaminant concentrations have risen above Air Quality Guidelines (AQG) issued by the World Health Organization (WHO) in many developed countries, leading to environmental protection policies for all individuals across the world. Air pollution severely destroys life quality and poses an immediate danger to public health [1]. Symptoms, such as weeping, coughing, angina, and difficulty breathing, are related to air pollution immediately after exposure, and may also cause more subtle, long-term harm to human health. People are typically ignorant about the impacts of long-term exposure to their health (as well as the fact that long-term exposure may worsen their medical conditions). Air pollution accesses the human body via the respiratory tract, and it also has systemic influences that can harm several organs [2,3].

In metropolises, because of these severe environmental problems, people wear masks or respirators for filtering polluted outdoor air, and air filtration equipment is becoming more common indoors as well. Indeed, using reception-based solutions via improving masks and respirators as effective means to capture hazardous particulates [4]. Air filtration is a promising, efficient, and practical technique used against air pollutants. Even now, extensive efforts are employed to enhance highly efficient air filter media, with a focus on improving filter efficiency [5–8]. Although conventional air filtration media, such as high-efficiency particulate air (HEPA) filters, have a high efficiency of filtration (of approximately 99.97%) for airborne particles (0.1–0.5 µm), their performance is still low for particulate matter (PM) in the sub-micrometer. Another drawback of using thicker filtering media is the high-pressure drop or energy costs to offset the resulting flow resistance. Such

disadvantages of traditional high-performance filters can be mitigated using an electrospinning technique to prepare nanofiber-based filters. Carbon-based air filters are designed to trap air pollutants and fabricated as protective masks. Because of their high surface area, abundance, stable chemical structure, low resistance, and high functionalization ability with other materials, carbon materials are promising candidates for air purification. Particularly, since the diameter of carbon nanofibers is comparable to the free path of the air molecules (66 nm under normal conditions), they overcome the inherent problem between filtration efficiency and pressure drop [9,10]. They can be used to remove volatile organic compounds, nanoparticles, and bacterial contaminants in the air [10].

Electrospinning permits fiber production, with nanoscale diameters varying between 40 and 2000 nanometers as excellent candidates for biomedical applications [11,12]. In addition, electrospun nanofiber filters possess a high ratio of surface area/volume that significantly increases the possibility of pollutant deposition on the surface of the fiber, and consequently develops the performance of the filter with a relatively low-pressure drop [13]. This review is intended to condense previous research into a concise, easy-to-read document, focusing on the efficacy of face masks and respirators containing nanomaterials in their structures.

2. Air Pollutants and Adverse Health Effects

Air pollution is one of the most earnest threats to the environment, and it also has an adverse impact on human health. The World Health Organization (WHO) announced that diseases resulting from household air pollution (indoor) cause the death of approximately 4 million people each year; moreover, 7.6% of all deaths were caused by ambient air pollution (outdoor) universally in 2016 [14]. Household (indoor) air pollutants, such as environmental tobacco smoke (ETS), along with what is generated by the combustion of biomass fuel (dung, wood, etc.), are also disturbing in various regions [15]. Air pollutants of ambient (outdoor) areas are a combination of thousands of components. From a health viewpoint, PM and pollutants such as ozone (O₃), volatile organic compounds (VOCs), nitrogen dioxide (NO₂), carbon monoxide (CO), sulfadiazine, and sulfur dioxide (SO₂) are the most important among them [16–18].

Primary pollutants are released immediately into the air by fossil fuel combustion (similar to nitrogen and sulfur oxides, and soot particles). Industrial sources, motorized road traffic, residential heating, and power generation are the primary PM sources. Once primary pollutants interact in the atmosphere, secondary pollutants are produced, including O₃, PM, and aerosol [19]. PM is the sum of particles suspended in the air, such as liquid droplets and solid particles. PM is classified according to the particle size as large (PM₁₀), fine (PM_{2.5}), and ultrafine (PM_{0.1}), where the subscript represents the upper limit of particulate diameter in micrometers (Figure 1). Ultra-fine particles are invisible in contrast to particles being large, visible as haze, or dust with sufficient lighting.

Upper airways and mucous membranes might be affected by large PM₁₀ particles, resulting in coughing and tears. PM_{2.5} and PM_{0.1} cause the worst health influences because they can get to the pulmonary alveoli and pass into the circulatory system, causing severe health problems and increase morbidity and mortality in long-term exposure [20]. Several reports have correlated ultrafine particle exposures to various symptoms, particularly respiratory and cardiovascular diseases [21–24]. Additionally, some natural pollutants, including bacteria, pollen, and certain microorganisms and aerosols carrying viruses, cause respiratory infectious diseases, for instance, chronic obstructive pulmonary disease (COPD), cancer of the lung, or asthma [25].

The world is currently—during the ongoing pandemic of coronavirus disease—facing dangerous viral aerosols, brought about by severe acute respiratory syndrome coronavirus 2 (SARS-Co-2) [27,28]. The microsize aerosols (0.25–1.0 μm in diameter) that carry the virus are released into the air once the infected person sneezes, coughs, and breaths [29,30]. The released droplets significantly vary in number and size; during a sneeze, up to 40,000 droplets are released at a speed of 100 m/s [31], and approximately 3000 droplet

nuclei are generated during a cough [32]. The size of the COVID-19 virus (Figure 2) is about 80–150 nm; the small size of SARS-CoV-2 led to concern because it could allow the virus to pass through respirator filters tested for larger particles of 0.3 μm [33]. Because this virus has a long incubation period (3–20 days), and there are asymptomatic carriers, wearing a face mask or respirator, social distancing, and paying attention to personal hygiene are encouraged to prevent spreading the virus [34].

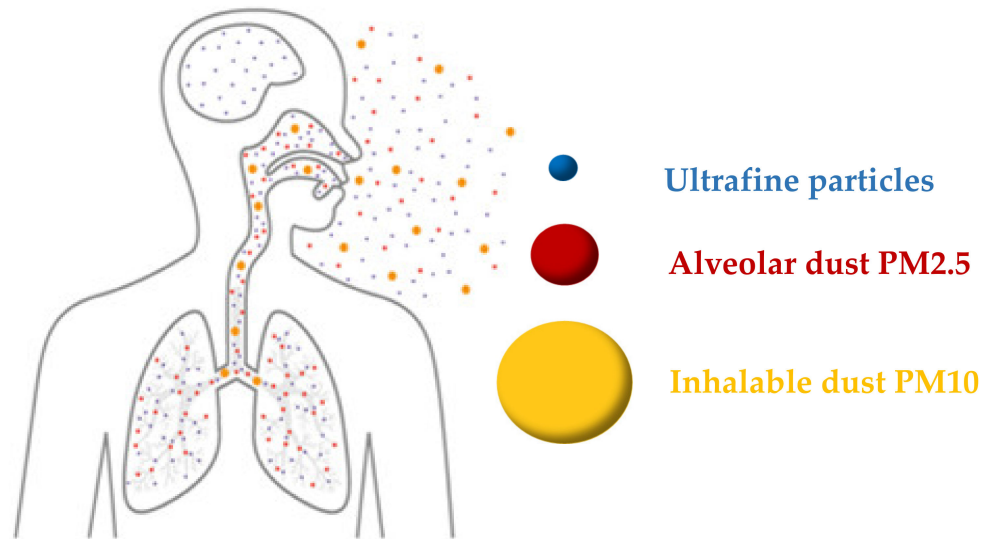


Figure 1. Different sizes of particulate matter (adapted with permission from Reference [26]).

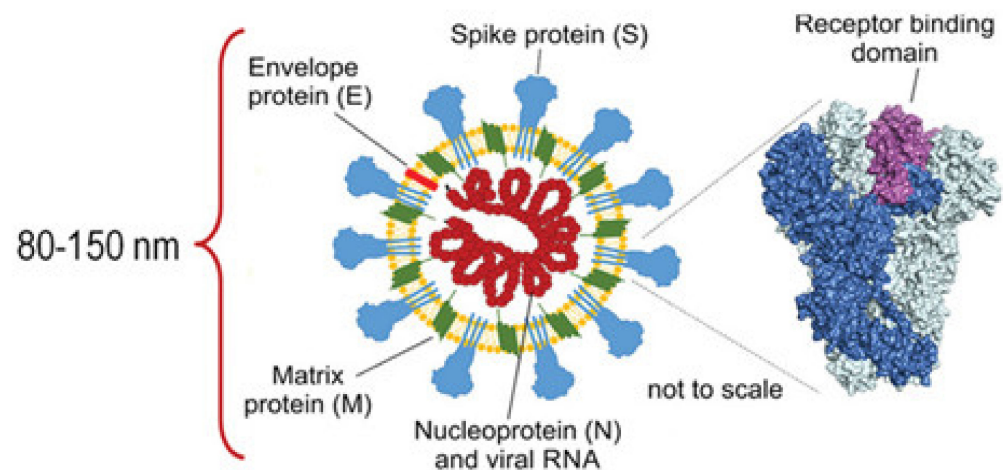


Figure 2. Coronavirus disease (COVID-19) (adapted with permission from Reference [35]).

3. Face Masks and Respirators

Filtering facepieces (FFP), face masks, and respirators are cost-effective, beneficial, and practical due to their good performance at reducing exposure to airborne particulate matter [34]. Face masks are disposable, loose-fitting devices that provide physical barriers to separate the wearer's mouth and nose from potential pollutants in the surrounding environment. A regular face mask comprises one or two layers of plastered or flat fabric, typically made of paper or cotton. It is typically only efficient in catching large particles of pollutants and is not used for preventing infectious diseases.

The most commonly used surgical mask comprises of polypropylene (PP) of 3-ply layers (at least), with different thicknesses and capabilities for protecting the wearer from infectious particles. It should have 80% bacteria filtration efficiency, at minimum; however, we should note that it does not provide reliable protection against small airborne particles

and viruses [36,37]. Surgical masks should not be shared with others and are labeled as masks for surgery, dental, isolation, or medical procedures. They can come with or without a face shield. If worn correctly, surgical masks are designed for protection against air pollution in a sterilized field, or in a working environment—for protection against large particles, such as spit and mucous generated from the wearer. Another usage is to minimize the risk of splashed or sprayed body fluids, blood, and secretions from reaching the wearer’s nose and mouth [38]. **Since face masks do not have sufficient filtering to protect the wearer from respiratory droplets and do not prevent leakage around the mouth after inhalation due to loose-fitting, they are used for one time only [39].**

On the other hand, respirators are particular types of personal protective equipment (PPE) designed to protect the wearer from inhaling harmful airborne particles (including infectious agents, such as coronavirus, SARS, H1N1, etc.), gases, or vapors [40,41]. They are usually pre-molded, fit tightly, adhere with an elastic band to the head, and utilize filters to reduce inhaled harmful air contaminants. Respirators are categorized into air-purifying and supplied respirators with filtering devices and breathing apparatuses, respectively. In particular, respirators help reduce the wearer’s airway exposure to inhalable pollutants with a size of fewer than 100 µm. A valved respirator enables it to exhale air easier, is more convenient for wearing, and contains less moisture build-up within the respirator. The problem of ventilators with valves is that they filter the air in (inhale) but not the air out (exhale). Regarding COVID-19, the one-way protection of valved respirators places individuals around the wearer at risk; for such a reason, hospitals do not use respirators with valves [42].

4. Standards for Face Masks and Respirators

Face masks and respirators are subject to specific standards and regulations, based on the nation or geographical region (Table 1). The Food and Drug Administration (FDA) cleared the surgical masks in the United States, and they should be complying with the standards of the American Society for Testing and Materials (ASTM). The ASTM F2100-11 standards are certified with five performance metrics for materials used to make medical face masks: resistance to fluid, breathability, bacterial filtration efficiency (BFE), particulate filtration efficiency (PFE), and flammability. Depending on their test marks, ASTM attributes the substance’s barrier efficiency to a numerical rating: level 1 barrier—fluid exposure at low risk; level 2 barrier—fluid exposure at moderate risk; level 3 barrier—fluid exposure at high risk. Surgical masks in Europe should be standard by European Norm (EN). According to the EN 14683 standard for surgical masks, the three types of surgical mask effectiveness are: type I or BFE1—more than 95% bacterial filtration efficiency, type II or BFE2—more than 98% bacterial filtration efficiency, type IIR—bacteria filtering effectiveness of more than 98% and splash-resistant. The European standard added a resistance test for types IR and IIR; IIR has the most resistance.

Table 1. American Society for Testing and Materials and European Norm standards for face masks and respirators.

| FFP Type | Standards | Filtration Efficiencies | | |
|---------------|-----------------------------|-------------------------|--------------------|--------------------------|
| Surgical Mask | USA: ASTM F2100-11 standard | Level 1 95% | Level 2 98% | Level 3 98% |
| | EN: EN 14683 standard | Type I 95% | Type II 98% | Type IIR 98% |
| Respirator | USA: NIOSH 42 CFR Part 84 | N95/R95/P95 95% | N99/R99/P99 99% | N100/R100/P100 99.97% |
| | EN: EN 149:2001 | FFP1 80% | FFP2 94% | FFP3 99% |

ASTM = American Society for Testing Materials. FFP = Filtering Facepieces. NIOSH = Respirators are tested and cleared via the National Institute for Occupational Safety and Health. CFR = Code of Federal Regulations.

Respirators are tested and cleared via the National Institute for Occupational Safety and Health (NIOSH) in the U.S., which belongs to the Centers for Disease Control and Prevention (CDC). The respirator series, air-purifying types, N (not oil resistant), R (resistant to oil), and P (oil proof) are approved by NIOSH under 42 Code of Federal Regulations (CFR) Part 84, each at 95, 99, and 99.97% filtration efficiency levels, as shown in (Table 1) [43]. Among them, the N95 respirator is the most extensively used [44]. By EN 149:2001, the Legislation of European Standards for respirators is covered. There are three types of disposable respirators according to that standard: 80% as low efficiency, or FFP1; 94% as medium efficiency, or FFP2; and 99% as high efficiency, or FFP3, as shown in Table 1 [45]. The higher the FFP number, the more protection the respirator can offer if adequately used. EN 149:2001 includes breathing resistance, filter penetration, flammability, extended exposure (loading), dolomite dust clogging (optional), and total inward leakage (TIL). Since the standard N95 and FFP3 or FFP2 respirators are approximately equivalent, they are recommended to be used for prevention of airborne infectious diseases [46].

5. The Variations between a Surgical Mask and N95 Respirator

With the rapid emergence of infectious diseases, such as COVID-19, there has been significant interest in using surgical masks and N95 respirators as part of infection prevention procedures. The surgical masks consist of very fine middle layers with extra fine glass fibers, which are covered on both sides by acrylic bonded parallel-laid or wet-laid nonwoven material (Figure 3). N95 respirators are engineered for specific functions—different from surgical masks (even though they often appear to be identical) (Figure 4) [47]. The N95 consists of an outer layer constructed of hydrophobic nonwoven PP (to prevent moisture), a filter layer of melt-blown nonwoven PP (to capture oil and non-oil-based particles), a support layer, and an inner layer, as shown in Figure 4.

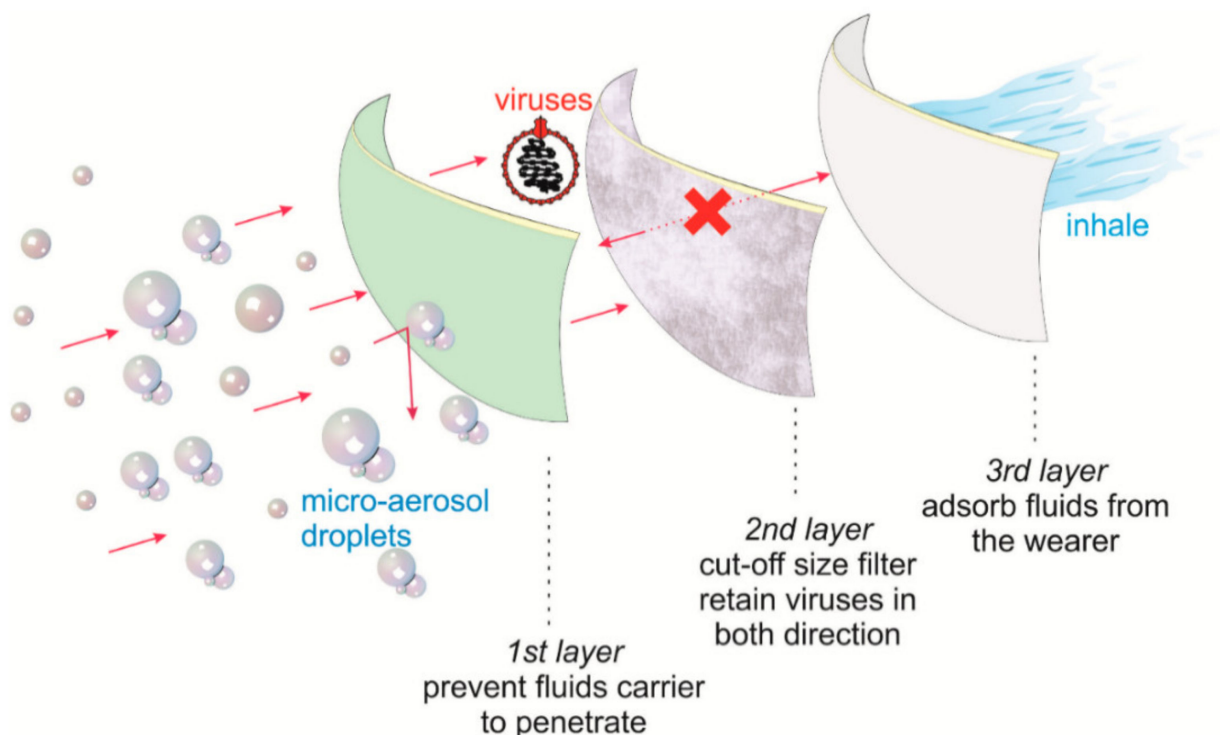


Figure 3. Structure of the surgical face mask (adapted with permission from Reference [48]).

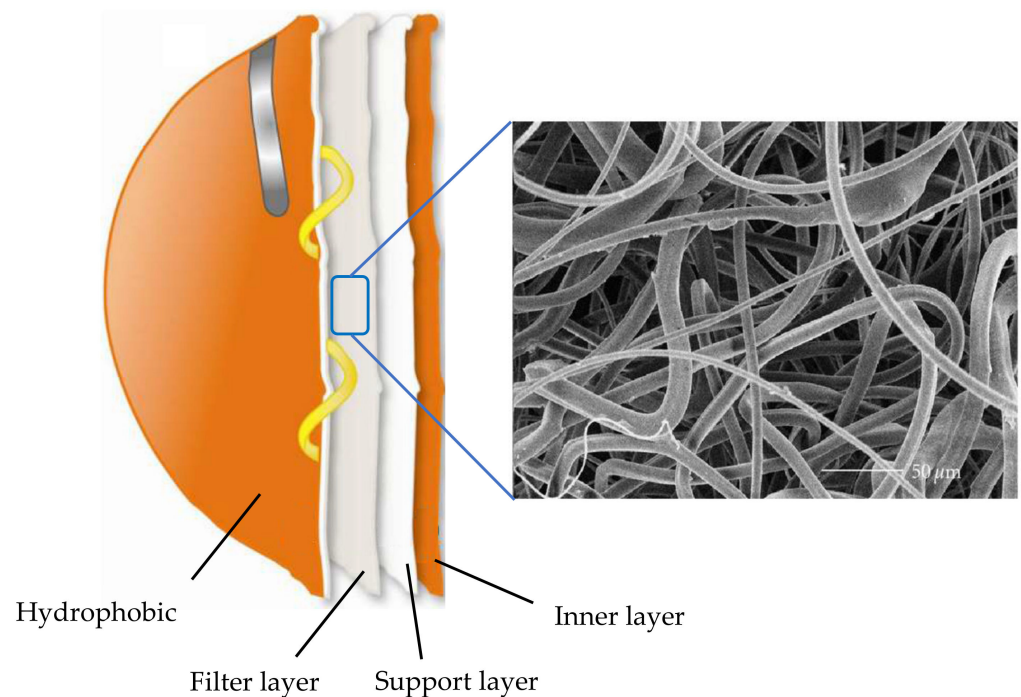


Figure 4. Structure of N95 respirator (adapted with permission from Reference [49]).

6. Filtration Mechanisms of Particles

Face masks and respirators have commonly been used as protective devices for filtering airborne contaminants. Fibrous filters are used in current surgical masks and respirators, made from several flat, fine, fiber layers (μm in diameter) of nonwoven mats, capable of capturing PM particles through physical adhesion barriers. Various parameters regulate filtration effectiveness, such as fiber diameter, porosity, and filter thickness. The filtration mechanism is a significant aspect in terms of the accuracy and efficiency of the filter media. Filtering of particles is essentially performed through five collections of mechanisms: (1) interception, (2) inertial impaction, (3) diffusion, (4) gravitational settling, and (5) electrostatic attraction (Figure 5a). On the other hand, deep filtration with low efficiency and a longer life occurs when microfiber is used, while the nanofibers lead to high efficiency, a shorter life, and a surface filtration process. To perform deep, high efficiency and a shorter time filtration process, the beaded nanofiber is recommended to be used (Figure 5b).

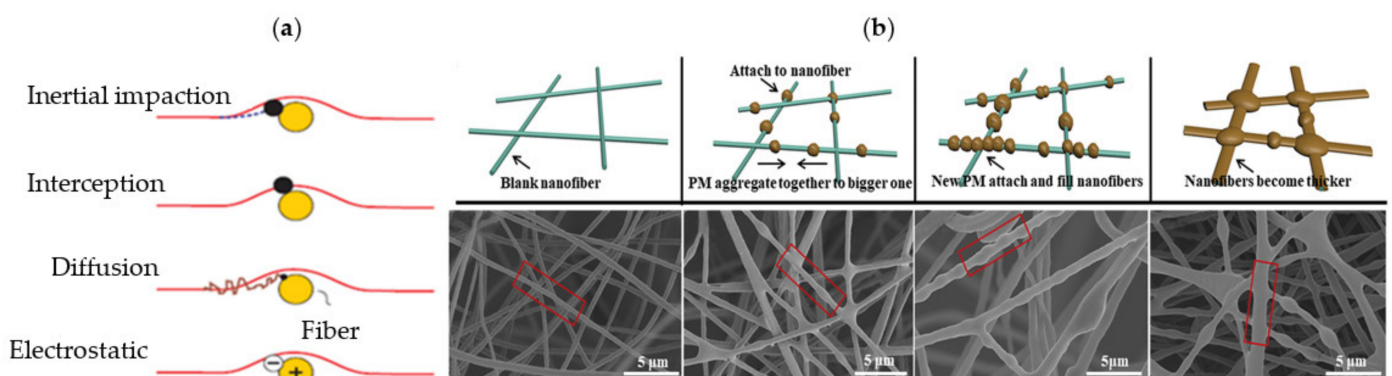


Figure 5. Mechanisms of particle filtration: (a) five collections of mechanism, and (b) interaction of PM with nanofibers (adapted with permission from Reference [50]).

Generally, all collection mechanisms, except the electrostatic attraction, refer to mechanical filters and are affected by particle size and velocity. Interception and inertial impaction are commonly known to be predominant combination mechanisms for macro and microparticles ($>0.3 \mu\text{m}$), while diffusion is predominant for nanoparticles ($<0.3 \mu\text{m}$). An interception occurs when the particles follow streamline round the fiber and come into contact with the fiber's surface, and deposit on it because of van der Waals forces. Inertial impaction occurs when the particle changes its streamline direction near a filter fiber and impacts the fiber due to inertia. This mechanism is more efficient for capturing large particles and increases at higher particle velocity. On the contrary, particles under $0.3 \mu\text{m}$ are mainly affected by diffusion. These very tiny particles move across streamlines (Brownian motion) until they contact the fiber, because of air molecules' random movements. In gravitational settling, and due to gravity, large particles may settle in slow movement airstreams. The electrostatic attraction may be significant, but hard to measure because it needs to know the fiber charges and particles. Through the Columbia attraction, particles that are charged are attracted to the fibers oppositely charged [50,51]. When the filter fibers are in the nanoscale, the filtration conditions can change. Airflow aerodynamic behavior around the periphery of nanostructured fibers will significantly change. In addition, the strong forces of van der Waals that are capable of adsorbing submicron-sized particles will be produced. Due to the pores' good interconnectivity, the diffusion, inertial effect, and interception will also be enhanced [52].

7. The Composition of Surgical Masks and N95 Respirators

The filtering materials of face masks and respirators are made of nonwoven fabric, considered disposal after use because their reuse significantly degrades their filtering performance. The salient benefit of nonwoven technology concerns the potential to manufacture fabrics and structures that cost much lower than other fabric technology, such as woven and knitted. Most surgical mask industries use spunbond melt-blown spunbond (SMS) technology for producing surgical masks. The suitable polymer materials for surgical mask manufacturing are PP, polyethylene terephthalate (PET), polystyrene, polycarbonate, polyethylene (PE), polyester, etc. [53–56]. PP is usually used to produce surgical masks by fabricating spunbond nonwoven layers (20 g/m^2) and melt-blown nonwoven sheets (25 g/m^2) [57]. It is relatively cheap and has low melt viscosity for easy processing. In addition, these polymers are transparent, lightweight, and provide high-optical clarity; thus, they could be three-dimensionally (3D) printed as face masks for COVID-19 protection [58].

A standard surgical mask is usually comprised of three layers: a soft nonwoven absorbent (layer being inner), a melt-blown (the layer at middle), and a nonwoven hydrophobic (layer being outer). Each layer has a specific function: the inner layer is purposed to absorb moisture, sweat, and the spit of the wearer; the middle layer of the surgical mask is designed as an electret filter to prevent germs from coming in or exiting from the mask; and the outer layer is purposed to repulse water, bodily fluids, and blood. Masks are manufactured by machines where the layers are ultrasonically welded together, and the masks are labeled with ear strings and nose strips. Masks are first sterilized before being exported.

The N95 respirator is comprised of many layers of PP nonwoven fabric. The two external protective layers are produced using a spunbond to cover both the inner and outer of the N95 respirator. There is a layer of pre-filtration between these spunbond layers, which may be as thick as 250 g/m^2 , making it stiffer and thicker, so it can be flexible enough to form the required shape. The last layer is a nonwoven melt-blown electret material of high-quality that controls filtration competence. The full respirators are manufactured by converted equipment, welding the layers by ultrasonic and adding belts and strips of metal to regulate the mask over the user's face. Finally, respirators are sanitized before shipment.

8. Electrospun Nanofibers and Their Applications in Face Masks and Respirators

Electrospinning is a novel technique to manufacture nanofibers, as it provides a quick procedure, low expense, and precise control of the nanofiber compositions and geometric

features. In electrospinning, high voltages apply to melts or polymer solution droplets to eliminate the tension of liquid surface and ultrafine fibers with diameters between 40 and 2000 nm to be created (Figure 6) [59]. Selecting a suitable solution concentration, appropriate voltage, and the space between the supporting collector and the syringe tip is of considerable importance for synthesizing uniform nanofibers. As an essential part of this technology, nanofiber-based filter media are the main components for enhancing filtration performance [60–64].

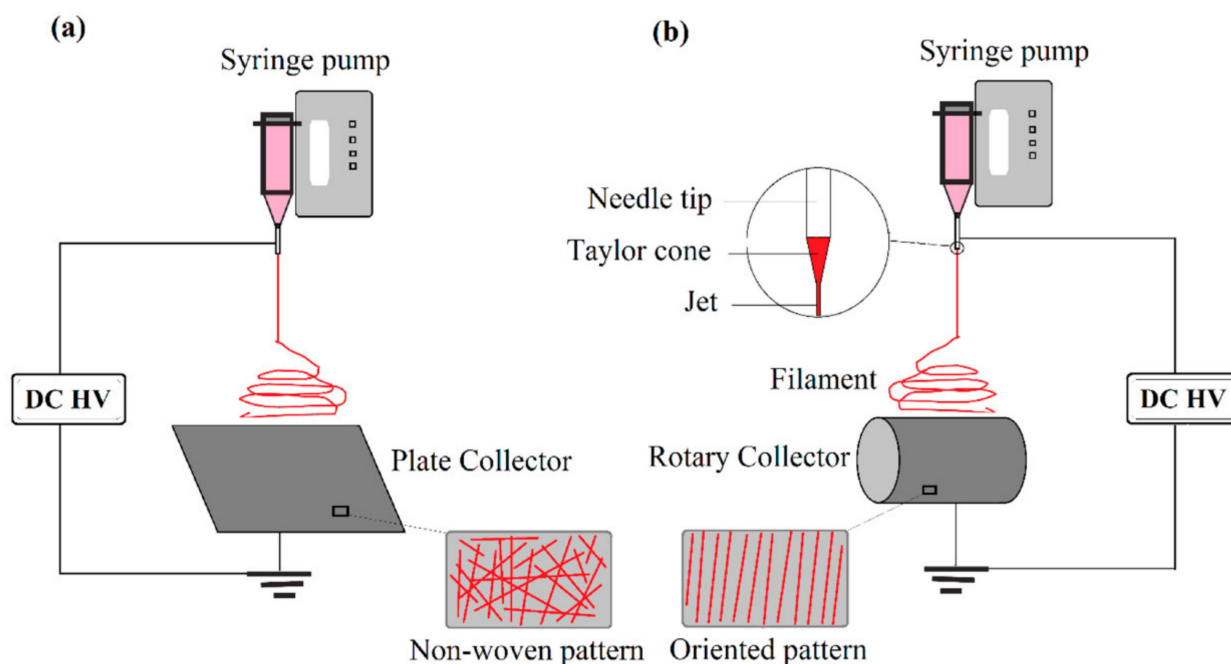


Figure 6. Electrospinning process (adapted with permission from Reference [65]).

Electrospun nanofiber-based filter media possess a high ratio of surface/volume, low-pressure drop, good interconnectivity of voids, and controllable connectivity and morphology, rendering them desirable to achieve excellent filtering. Because of its fragility, electrospun nanofibers do not can not be used individually at filter media, it should be deposited onto a substrate, usually fabric as nonwoven. Glass, polyester, nylon, and cellulose are the common substances used to support the electrospun nanofibers. The substrate should have excellent mechanical properties to enable pleating, fabrication of filter, and toughness in usage [66]. For the filtration propose, substrates are selected for pleating, filter fabrication, durability in use, and filter cleaning.

Currently, most researchers who are interested in the air filter industry are searching for technology based on nanofibers to enhance dust interception capability and filtration quality. There are already several applications of commercialized filters, as well as those in progress. Using nanofibers in face masks and respirators is better than the available commercialized. The active filters used in commercial face masks and respirators right now employ small diameter PP fibers in the range of 500–1000 nm; these filters achieve filtration with the help of static electricity. The pore size decreases as the fiber diameter decreases, and the distribution of fibers per unit area becomes denser. The electrostatic assisted melt-blown improves filtration quality by creating a small charge in the fabric, which increases the fabric's adsorption capability.

However, such filters can lose their static electricity after wearing for an extended period and when exposed to water, thereby reducing their filtration efficiency, so this type of filter is designed to be disposable. This is not the case for nanofibers that do not depend on static electricity to filter contaminants; they use smaller pores and reasonable distribution of pores to physically filter aerosols that contain harmful dust or viruses [67].

Several studies and patents on nanofibers have been identified in different face masks and respirator applications [68–70]. Munzarová (2013) developed barrier fabrics based on nanofibers via electrospinning to be laminated onto face masks. This barrier protects from the permeation of microorganisms, dust particles, and allergens [71]. Skaria and Smaldone (2014) produced a prototype nanofiber-based filter media fitted face mask compared to the N95 respirator. They found that the prototype significantly reduced airflow resistance, resulting in greater face mask compliance and increased filtration efficiency, similar to that obtained when using an N95 respirator [72].

With a slightly different perspective, Li and Gong (2015) informed of the development of nanofiber-based on polysulfone for mask filtration, utilizing electrospinning to be coated onto nonwoven PP, aiming to avoid the inhalation of harmful pollutants in contaminated haze air. The nanofiber mat thickness was modified at different collective preparation periods (15 min < 30 min < 60 min), and these three nanofiber masks were compared with nonwoven disposable face masks, nonwoven operative room masks, N95 and R95 respirators, and Ito PM_{2.5}. It was observed that electrospun nanofiber masks might be efficient at filtering out PM_{2.5} particles and, at the same time, maintain good breathability [73]. Similarly, Akduman (2019) prepared a nanofiber layer of cellulose acetate (CA) and polyvinylidene fluoride (PVDF) with 100% mechanical filtration for face masks and respirators capable of meeting the specifications of N95 respirators. The effect of nanofiber mat thickness, nanofiber diameters, and pore size on filtration efficiency was compared [38,74]. The mean diameter of PVDF nanofibers (236.50 nm) was smaller than the diameter CA (319.02 nm) nanofibers. Therefore, CA nanofibers showed better filtration efficiency [74].

The use of solution blow spinning (SBS) nanofibers is a significant step in developing a composite mask [75,76]. Noel et al. (2019) used the SBS nanofibers method in composite multilayered filter masks; they prepared three different nanofiber fabrics types, cellulose diacetate (CDA), polyacrylonitrile (PAN), and PVDF. They demonstrated that the presence of functionalities of different molecules in the electrospun nanofibers had a significant effect on the efficiency of filtration, i.e., PAN nanofiber had the best filtration efficiency (0.05 Pa⁻¹) of the quality factor and good air permeability, whereas, among all the nanofibers studied, PVDF air filter quality was the lowest, with (0.02 Pa⁻¹) of the quality factor [77].

Moreover, titanium dioxide (TiO₂), carbon nanotubes (CNTs), and silver (Ag) have been easily used as additional materials for coating onto electrospun nanofibers. Nanostructured TiO₂ was of considerable interest to different coating materials because of its remarkable catalysis of UV rays and shielding properties [78,79]. Ruan et al. (2020) fabricated and developed the polyacrylonitrile-co-polyacrylate (PAN-co-PMA):TiO₂ membrane of the electrospun nanofiber [80]. The electrospun nanofiber membrane features, such as permeability of air, PM trapping, and aerosol inspection, were evaluated methodically. For two types of nanofiber membranes, the microfiber nonwoven, the nanofiber membrane, and the nonwoven fabric bracket were built-up into a multi-layer structure electrostatic force. The PAN-co-PMA:TiO₂ nanofiber membrane bonding system demonstrated effective PM_{2.5} removal and superior air permeability (284–339 mm/s) [80]. Several studies have manifested the use of activated carbon, and carbon nanofiber (AC/CNF) composite was found to be a suitable alternative for the respirator cartridge due to being lightweight and its appropriate absorption ability [81]. In the study by Jahangiri et al. (2013), the granulated (AC/CNF) was utilized to absorb and remove VOCs from breathing air in the respiratory mask cartridges. The findings demonstrated that the breakthrough period was longer for this cartridge than for other types [82].

It is known that incorporating antimicrobial agents, such as silver, with nanofibers, exhibits antimicrobial properties in the filters [83]. They were mainly distributed on the nanofiber surface. Microorganisms can be killed when they contact silver nanoparticles during filtration [84], for example, nanosilver-embedded polyacrylonitrile nanofibers [85]. Yang et al. (2017) demonstrated the thermal management effect in the nano-fiber-based face mask with a nylon 6/nano PE model system that manifests high efficacy for PM_{2.5} capturing (99.6%) with lower pressure drop [62]. Moreover, they modified the nano PE

substrate with silver. The fiber/Ag/nano PE mask filter reveals a value of (87.0%) as IR reflectance is high and might be utilized in winter or summer to protect the wearer from contaminated air and render the face warm or cool/comfortable [62].

Additionally, for protection against bacteria and viruses, nanofibers comprising superabsorbent polymers (SAPs) have been produced in order to provide greater convenience, adding additional functions, as well as medical care. To this end, many researchers have fabricated electrospun superabsorbent nanofibers to increase material absorption ability, to be utilized as personal hygiene products, microbe bio-filters, and disposable face masks [86,87]. Sivri (2018) used nanofibers electrospun of (PVA/SAP) aqueous polymer solutions to be coated onto face masks for developing virus barrier functions and liquid absorption functions. It was found that all face masks were successfully coated with nanofiber, according to Fourier transform infrared spectroscopy (FTIR) investigations and scanning electron microscopy (SEM). Air permeability and capacity to absorb liquids showed that the coating with nanofiber improved the face mask's hydrophilicity while permeability of air decreased reversely [88].

The coronavirus pandemic outbreak has prompted a lack of face masks and respirators in the world. Therefore, there is an immediate need for a secure disinfection method, and reuse them, with minimum loss of efficiency and integrity [89–92]. Lee et al. (2019) developed high-performance membrane filters of polybenzimidazole (PBI) nanofiber that can be utilized for dustproof masks or other air filters. They indicated that the PBI nanofiber filter membrane achieved high filtration efficiency (~98.5%) at a significantly lower pressure drop (130 Pa), in contrast to the commercial face mask. They also demonstrated the PBI filter reusability membrane, due to its thermal, mechanical, and chemical stability, after the proposed cleaning process [93]. An injection molded autoclavable, scalable, conformable (iMASC) system was designed and produced by James et al. (2020) for aerosol-based protection N95 content filters that can be installed and replaced as desired. To understand the masking potential with various face forms and sizes, the finite element (FE) analysis tested the deformability of the iMASC system. The iMASC system has been shown to match several various face shapes and sizes with success, utilizing a test method confirmed by Occupational Safety and Health Administration (OSHA). These data support more qualification tests required for use in the healthcare sector [94].

Nazek et al. (2020) have improved a nanoporous flexible Si-based template on a silicon-on-insulator (SOI) wafer utilizing potassium hydroxides (KOH) etching, utilizing the template as a hard mask through a reactive ion etching process for transferring patterns onto a lightweight (<0.12 g) and flexible polymeric membrane. The flexible membrane might be utilized on the N95 mask as reusable to boost its filtration efficiency against particles sub-300 nm, including COVID-19. Furthermore, N95 mask reusability contributes toward eliminating the challenges surrounding single-use face mask shortages [95].

9. Conclusions

The COVID-19 outbreak has become a serious problem in modern human history. Wearing protective face masks, preserving personal hygiene, and social distancing should be followed to help prevent the spread of COVID-19. This disease has led to a worldwide increase in the usage of billions of face masks and respirators every day, resulting in a high demand for goods that produce them. In general, most commercial filtering facepieces use electrostatic filter media that can degrade over time (due to many different variables). Nanotechnologies play a crucial role in this issue by fabricating nanomaterials with special characteristics for air filtration. A nanofiber-based mask would not lose its efficiency in time or due to many different factors (because of its mechanical filtration efficiency protection, from the mask layers). In this regard, we summarize the filters based on electrospun nanofibers and their unique characteristics to increase filtration performance of face masks and respirators.

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Short Biography of Author

Dr. Gomaa A. M. Ali is an Assistant Professor at the Chemistry Department, Faculty of Science, Al-Azhar University, Egypt. He has 13 years of experience working in the research area of Materials Science, Nanocomposites, Humidity Sensing, Graphene, Supercapacitors, Water Treatment, and Drug Delivery. He was awarded his Ph.D. in Advanced Nanomaterials for Energy Storage from UMP, Malaysia. He is the recipient of some national and international prizes and awards, such as TWAS-AREP (2018), Gold Medals (Archimedes, Russia, 2014), Green Technology Award (CITREX, Malaysia, 2015), Gold Medals (British Invention Show, UK, 2015). He has published over 94 journal articles and six book chapters on a broad range of cross-disciplinary research fields. He has served as both a Senior Editor and board member of many international journals and a reviewer for more than 50 WoS journals. Dr. Gomaa is a co-Editor of the handbook “Waste recycling technologies for nanomaterials manufacturing” Springer, 2021.

Archived: Thursday, February 3, 2022 10:59:31 AM
From: [Anthony Amato](#)
Sent: Tuesday, February 1, 2022 11:49:37 AM
To: [~House Education Committee](#)
Subject: HB 1233
Importance: Normal

I WANT HB 1233 PASSED!

A. Frank Amato
Hooksett

Archived: Thursday, February 3, 2022 10:59:35 AM

From: [Russell Payne](#)

Sent: Monday, January 31, 2022 11:45:11 AM

To: [~House Education Committee](#)

Subject: HB1233

Importance: Normal

Dear Members of House Committee on Education:

The power to force vaccination or masks on our youth should not belong to HHS or with any other illegal federal government agency such Department of Education. Higher education or healthcare Any reason should be trumped by personal inherent rights. This is not Americanism, it's "totalitarianism." Vote OTP on HB 1233.

Sincerely & Respectfully

Russ Payne

Archived: Thursday, February 3, 2022 10:59:37 AM
From: [Jesse Medeiros](#)
Sent: Monday, January 31, 2022 8:29:28 AM
To: [~House Education Committee](#)
Subject: HB1233
Importance: Normal

Hello Committee members,

Please Support B1233. Medical freedom is an essential human right. No one should be required to undergo a permanent medical procedure, or cover their face indefinitely, to access society at large, especially any space receiving public funds. Similarly you should oppose HB1332 as it grants authority to institutions which should remain with the individual. Best, Jesse.

Jesse Medeiros

bgtrck458@gmail.com

603-969-6302

Call, Text, or Email, Thanks!

Archived: Thursday, February 3, 2022 10:59:41 AM
From: [Brett Tourigny](#)
Sent: Sunday, January 30, 2022 8:13:56 PM
To: [~House Education Committee](#)
Subject: HB1233
Importance: Normal

My name is Brett Tourigny, resident of Moultonborough NH. I support this bill.

Archived: Thursday, February 3, 2022 10:59:33 AM
From: Donna Marie
Sent: Monday, January 31, 2022 6:15:09 PM
To: ~House Education Committee
Subject: HB1233
Importance: Normal

Dear Esteemed Members,

Please support HB1233. I was a victim of a university's zeal to push an experimental vaccine.

Thank you!
Donna Beatrice
Nashua

Here are the latest adverse reactions as per the CDC website:



Archived: Thursday, February 3, 2022 10:59:32 AM
From: [Catharine S. Newick](#)
Sent: Tuesday, February 1, 2022 8:44:52 AM
To: [~House Education Committee](#)
Subject: HB1233-OPPOSE
Importance: Normal

Greetings

I wish to request this committee to oppose HB1233. This committee is not an expert on how to run an institution of higher education. Nor are you responsible for the health of those who attend or work there. Any decision regarding face masks and vaccines should be made at the institution.-not the state.

Archived: Thursday, February 3, 2022 10:59:31 AM

From: [Johanna Lawrence](#)

Sent: Tuesday, February 1, 2022 12:29:40 PM

To: [~House Education Committee](#)

Subject: In strong support of HB 1233

Importance: Normal

Please SUPPORT this important bill! – [HB 1233](#), prohibiting higher education institutions receiving state funds from requiring face masks and COVID-19 vaccinations for attendance. This bill would prohibit colleges, universities and the like from requiring the COVID jab or face masks to attend classes.

Thank you,
Johanna Lawrence
Rye, Nh

Archived: Thursday, February 3, 2022 10:59:31 AM

From: [Dave Cory](#)

Sent: Tuesday, February 1, 2022 1:56:43 PM

To: [~House Education Committee](#)

Subject: Re: In strong support of HB 1233

Importance: Normal

Please SUPPORT this important bill! – [HB 1233](#), prohibiting higher education institutions receiving state funds from requiring face masks and COVID-19 vaccinations for attendance. This bill would prohibit colleges, universities and the like from requiring the COVID jab or face masks to attend classes.

Thank you,
Dave Cory
Rye, Nh

Archived: Thursday, February 3, 2022 10:59:29 AM

From: [Joe Torelli](#)

Sent: Wednesday, February 2, 2022 9:23:24 AM

To: ~[House Education Committee](#)

Subject: Opinion on HB1233

Importance: Normal

Committee members:

I strongly urge each of you to support HB1233.

As we learn more and more about the efficacy of masks (none) and the Pfizer chief revealing two weeks ago that the Covid "vaccine" they have been injected into our populace is the original technology from spring 2020, which was limited to Sars-Cov2, the formula, he admitted, has NOT BEEN changed nearly two years later.

The Covid "vaccine" being used today is little to no effect with even the Delta variant of last summer/autumn, and certainly not Omicron. They (big-Pharma) are exhausting their inventory to maximize their bottom line, not help the people.

Literally... the only "immunity" the Covid "vaccines" have is to benefit the pharma companies... ONLY THE PHARMA COMPANIES ARE IMMUNE... immune from liability.

We are so past even considering a vaccine requirement for our schools and higher ed, especially since that group is rarely if ever affected except in cases of multiple comorbidities.

Please support and vote for this bill.

Joe Torelli
(917)209-6074
Hampton

Archived: Thursday, February 3, 2022 10:59:37 AM

From: [Edwin Meszynski](#)

Sent: Monday, January 31, 2022 8:07:33 AM

To: [~House Education Committee](#)

Subject: Please support HB 1233

Importance: Normal

Representatives,
please support HB 1233.
Thank you,
Ed Meszynski

Sent from my iPhone

Archived: Thursday, February 3, 2022 10:59:38 AM
From: [Michelle Slack](#)
Sent: Sunday, January 30, 2022 10:30:07 PM
To: [~House Education Committee](#)
Subject: Please Support HB 1233
Importance: Normal

Dear Committee members please Support HB 1233.

Archived: Thursday, February 3, 2022 10:59:29 AM

From: [Becky](#)

Sent: Wednesday, February 2, 2022 6:58:21 AM

To: [~House Education Committee](#)

Subject: Please support HB 1233

Importance: Normal

Dear Committee Members,

Please support HB 1233, prohibiting higher education institutions receiving state funds from requiring face masks and COVID-19 vaccinations for attendance. Aside from the fact that such a requirement would violate our rights to informed consent and medical privacy, it has been shown time and again that masks are virtually useless against the spread of this virus and that the COVID-19 vaccination provides a (brief) benefit only to the recipient. We must end medical coercion in all forms. Institutions receiving state funds are paid for by all taxpayers in this state, and as such, we must all have access to them, regardless of our private medical choices.

Respectfully,
Rebecca Schwab
Penacook, NH

Sent with [ProtonMail](#) Secure Email.

Archived: Thursday, February 3, 2022 10:59:37 AM

From: [Kendra Goodwin](#)

Sent: Monday, January 31, 2022 6:54:11 AM

To: [~House Education Committee](#)

Subject: Please support HB1233

Importance: Normal

These institutions (especially those receiving federal dollars) have zero business telling their students what to inject into their bodies!! It's not like putting a mask on it is irreversible!!! It is disgusting what is happening in this country and I will not support any politician that supports a medical apartheid!

Kendra

Archived: Thursday, February 3, 2022 10:59:26 AM
From: [Amanda Mastroianni](#)
Sent: Wednesday, February 2, 2022 9:05:57 PM
To: ~[House Education Committee](#)
Subject: Please support HB1233
Importance: Normal

Dear Members of the Committee on Education,

My name is Amanda Mastroianni and I live in Merrimack, NH.

Universities should be able to recommend masks and vaccines, however it should never be required. The one-size-fits-all approach to health is onerous.

Please support HB 1233

Thank you!!!

Archived: Thursday, February 3, 2022 10:59:30 AM
From: [Linda Howes](#)
Sent: Tuesday, February 1, 2022 6:09:28 PM
To: [~House Education Committee](#)
Subject: Support HB 1233
Importance: Normal

Honorable Committee Members ~

Please support HB 1233 prohibiting higher education institutions from requiring COVID 19 vaccinations or face mask requirements for enrollment and attendance.

It's become obvious that these vaccines are not preventing infection or transmission as hospitals, health care facilities, colleges, schools, businesses, cruise ships and more continue to report skyrocketing outbreaks amongst fully vaccinated people. Vaccine mandates have become obsolete.

We now have many preventive and treatment protocols that effectively address COVID 19.

Thank you for your consideration, Linda

Archived: Thursday, February 3, 2022 10:59:32 AM
From: altieripiv@gmail.com
Sent: Monday, January 31, 2022 11:33:11 PM
To: ~House Education Committee
Subject: Support HB 1233
Importance: Normal

Stop colleges and universities receiving state funds from requiring face masks and Covid-19 shots!

SUPPORT HB 1233

Jenny Altieri
Rockingham County

Archived: Thursday, February 3, 2022 10:59:36 AM

From: [Keith Milone](#)

Sent: Monday, January 31, 2022 10:23:35 AM

To: [~House Education Committee](#)

Subject: Support HB 1233

Importance: Normal

Honorable Committee Members,

Please **Support HB 1233** as all individuals have a sovereign right to choose all of these medical matters without limiting their ability to attend any educational institution.

Thank you,
Keith
Lyme, NH 03768

Archived: Thursday, February 3, 2022 10:59:38 AM
From: [Diane Neuland](#)
Sent: Monday, January 31, 2022 4:17:43 AM
To: [~House Education Committee](#)
Subject: Support HB 1233
Importance: Normal

Dear Committee Members,

Please support HB 1233.

Thank you,

Diane Wilson
Hollis, NH

Sent from [Mail](#) for Windows

Archived: Thursday, February 3, 2022 10:59:28 AM
From: Allison
Sent: Wednesday, February 2, 2022 9:59:39 AM
To: ~House Education Committee
Subject: SUPPORT HB 1233
Importance: Normal

Hello House Education Committee,

Until I logged in to oppose HB 1332, I had no idea there was also a bill to PROTECT our NH public college students from vaccine mandates. You have hopefully read my previous testimony email about why I would support this bill.

My daughters are both at UNH on full scholarships and we have great concerns about jumping into this vaccine so early in the game. My one daughter just this week already was forced out of the nursing program because of her vaccine status. To now hear that she could be forced to be vaccinated just to *attend* UNH is so very alarming!

Please support this bill to protect our students' bodily autonomy. There is NO benefit to the public health for forcing these students to be vaccinated as the vaccine is PROVEN not to prevent transmission or infection.

Sincerely,
Allison O'Neil
Hampton, NH

Archived: Thursday, February 3, 2022 10:59:34 AM
From: [Carol McQuilken](#)
Sent: Monday, January 31, 2022 2:10:40 PM
To: [~House Education Committee](#)
Subject: Support HB1233
Importance: Normal

I am emailing to ask that you support HB1233.

Thank you,
Carol McQuilken

Sent from my iPhone

Archived: Thursday, February 3, 2022 10:59:38 AM

From: Cheryl Dean

Sent: Sunday, January 30, 2022 10:29:33 PM

To: ~House Education Committee

Subject: Support HB1233

Importance: Normal

I am writing you to support HB1233 . I do not want any of my tax money to go towards any higher education institution that infringes on the rights of Americans by requiring covid shots or masking. Humans have the God given right to make their own health decisions. We must protect these rights. PERIOD.

Please support HB1233 , freedom and liberty. Make our forefathers proud!

Thank you

Cheryl Dean

Archived: Thursday, February 3, 2022 10:59:29 AM
From: [Anthony Ferrantello](#)
Sent: Wednesday, February 2, 2022 8:13:51 AM
To: [~House Education Committee](#)
Subject: Support HB1233
Importance: Normal

Students should not be forced to wear masks nor get vaccinated. This bill prohibits higher education institutions receiving state funds from requiring face masks and COVID-19 vaccinations for attendance. This bill would prohibit colleges, universities and the like from requiring the COVID jab or face masks to attend classes. Please support this bill.

Thank you,
Anthony Ferrantello
Keene, NH

Archived: Thursday, February 3, 2022 10:59:35 AM
From: mountainfrog@aol.com
Sent: Monday, January 31, 2022 1:09:40 PM
To: ~House Education Committee
Subject: SUPPORT NH HB 1233
Importance: Normal

Dear New Hampshire House Education Committee,

Please support New Hampshire House Bill 1233.

Education is important. Do not allow higher education institutions to dictate and segregate students with unconstitutional mandates, barring them from what needs to be equal opportunity for ALL.

Medical freedom for ALL is JUSTICE for ALL.

Please let your God given conscience be your guide.

Sincerely,

New Hampshire Citizen

Archived: Friday, January 28, 2022 9:23:09 AM
From: [Ashley](#)
Sent: Sunday, January 23, 2022 5:37:59 PM
To: [~House Education Committee](#)
Subject: Support
Importance: Normal

Good afternoon,

My name is Ashley. I am a resident of Rollinsford, NH and a mother of 3 children. I am reaching out to you to ask that you support HB 1233.

Sent from [Mail](#) for Windows



House Education Committee

February 2, 2022

HB 1233, prohibiting higher education institutions receiving state funds from requiring face masks and COVID-19 vaccinations for attendance.

Testimony of Tom Cronin, Director of Government Relations, UNH/USNH

For nearly two years, students, faculty, and staff throughout the University System of New Hampshire have come together to produce a nation leading collegiate response to COVID-19. Early in the pandemic we developed an aggressive testing program that has helped us to monitor the prevalence and interrupt the spread of the virus on campus. Over the last year, voluntarily, our residential campuses reached incredibly high vaccination levels among students and employees. Throughout the pandemic we have adjusted campus guidance around masking, gatherings and distancing based on public health guidance, community transmission rates, and the unique characteristics of busy residential colleges and universities.

The utilization of these and other public health strategies, and the flexibility to adapt based on conditions in the region and on campus, have helped to keep case counts well below state and regional averages and have allowed our campuses to largely avoid significant interruptions to the in-person collegiate experience. We oppose HB 1233 because it would unnecessarily restrict access to a simple, evidenced-based tool for slowing the spread of the virus.

At present, given incredibly high levels of COVID-19 transmission, we do require students, employees, and visitors to wear face coverings in classrooms and most communal spaces on our campuses. As noted previously, this requirement has shifted based on the level of community transmission. We believe it is important to retain this flexibility to adjust our requirements based on local conditions.

We urge the legislature to reject any measures that would limit the tools available to the state's public colleges and universities to keep our students, employees, and host communities healthy and our campuses open.

Contact: Tom Cronin, Director of Government Relations
thomas.cronin@unh.edu | 603-264-5659

Archived: Thursday, February 3, 2022 10:59:34 AM
From: leeoxenham@comcast.net
Sent: Monday, January 31, 2022 1:19:30 PM
To: ~House Education Committee
Subject: Error on sign-up
Importance: Normal

Dear Education Committee members.

I inadvertently signed up in support of HB 1233 – but I actually OPPOSE it.

We need to take common sense measures to protect our students while they are in our schools.

Thank you for your efforts!

Rep. Lee Oxenham
STE

Representative Lee Oxenham

*New Hampshire House of Representatives
Science Technology and Energy Committee*

Representing Cornish, Grantham, Plainfield and Springfield

leeoxenham@comcast.net

Archived: Thursday, February 3, 2022 10:59:30 AM
From: [wm Langellotti](#)
Sent: Tuesday, February 1, 2022 8:08:07 PM
To: [~House Education Committee](#)
Subject: FEB 2 House Bills
Importance: Normal

NH House Education Committee Members,

Thank you.

We Oppose:

HB 1233, prohibiting higher education institutions receiving state funds from requiring face masks and COVID-19 vaccinations for attendance.

and **we oppose**

HB 1332, excepting public universities and colleges from requirements under medical freedom in immunizations.(No requirements for vaccines)

We support

HB 1670-L, relative to funds of the education freedom account program after termination of a student's participation and responsibilities of the scholarship organization (terminates EFA funds if student returns to district school and requires an audit of any misuse of funds)

We SUPPORT

HB 1669-FN, requiring the department of education to administer the education freedom account program.(brings the freedom accounts under state supervision)

William Langellotti

Catherine Langellotti

31 Alexandra Lane
Rochester, NH 03867

Archived: Thursday, February 3, 2022 10:59:30 AM

From: [Kay Yeagley](#)

Sent: Tuesday, February 1, 2022 9:02:16 PM

To: [~House Education Committee](#)

Subject: Feb 2, 2022 remote testimony

Importance: Normal

My name is Kay Yeagley and I have been a Georges Mills, NH resident since 1973.

I would like to comment on today's bills that are before your committee. But before I give my input I would ask that as you take testimony and later vote on these bills that you ask yourself these four questions before deciding about each bill and that you have a reasonable answer for each.

If I vote for this bill what are the negatives?

If I vote for this bill what are the positives?

If I vote against this bill what are the negatives?

If I vote against this bill what are the positives?

My input for today's bills before your committee:

HB 1233 - I oppose this bill because I believe this is truly a minority opinion. It also appears, to me, as if this bill has been prepared by those who choose to place the burden of reducing infectious diseases on the general public rather than themselves.

HB1332 - I oppose this bill because I believe every person has a responsibility to the well being of the general population. When looking at the CDC National Center for Health Statistics 2019 Data Finder the vaccination rates for diseases we no longer worry about have an average rate above 80%. We are not an "every man for themselves" kind of state - are we?

HB 1670 - L I am in support of this bill because that student and their family need to be accountable to me and my tax dollar.

HB 1669 - FN - I am in support of this bill because local control is a very important part of this state's monetary philosophy. (You can't change boats in mid-stream without a great chance of falling in.)

HB 1669 - FN I am in support of this bill because I expect every single cent of my tax dollar to be properly administered and supervised.

Archived: Thursday, February 3, 2022 10:59:33 AM
From: Jennifer
Sent: Monday, January 31, 2022 9:06:56 PM
To: ~House Education Committee
Subject: February 2, Bills HB 1233 SUPPORT
Importance: Normal

Dear Rick, Glenn, Ralph, Alicia, Michael, Deborah, Oliver, Julius, Bill, Melissa, Mel, David, Patricia, Linda, Arthur, Sue, Stephen, Muriel, Marjorie,

Please SUPPORT HB 1233 - I am watching the parties closely, as an independent, I am watching closer than ever. The tide has turned on this subject - the vax/mask trial is over in many states and other countries. Let's not be the last to hold onto this failing situation.

Thank you,
Jenn Dafeldecker and family
Swanzey

Dear Representatives of the Education Committee:

I am a university level student in New Hampshire that has been overly burdened by the mask and testing requirement instituted by my university. When I have to constantly wear a mask, I experience constant headaches, have noticed an increase in acne and irritation on my face, have been robbed of my sense of individuality and customization when it comes to my appearance and best of all, masks do nothing to stop the spread of the virus.

According to the Centre for Evidence-Based Medicine at Oxford University summarized six international studies which "showed that masks alone have no significant effect in interrupting the spread of ILI or influenza in the general population, nor in healthcare workers." (https://www.legis.nd.gov/assembly/67-2021/testimony/HPOLSUB-1323-20210204-5275-F-SEELY_BRADLEY.pdf)

The aforementioned link also has charts of various countries that show where mask mandates were instituted and demonstrates that mandates have little effect on infection rates. In fact, given the data from the charts, it's almost easier to argue that mask mandates demonstrate a negative effect when it comes to an increase in COVID cases.

Regardless, even if masks were protective, it is up to the discretion and individual choice of every citizen to choose their level of risk when operating in society. Every day people choose to engage in risky behavior whether they consciously recognize it or not. Driving, eating junk food, and excessively drinking are all risky behaviors, but society firmly and correctly recognizes that putting onerous restrictions on this activity would be a gross violation of liberty and individual choice.

This principle holds true with all personal medical decisions but particularly with masks and vaccines. One of the key things that individualizes us is our abilities to see and express ourselves with our facial expressions. Students in the University of New Hampshire are robbed that basic ability to express themselves and have instead have been forced to wear uncomfortable and unhealthy clothes that do little to stop a virus that is not dangerous to their age group.

Additionally, it should go without saying that mandating that someone engage in a medical procedure without their consent is absolutely unacceptable and should not even be on the table for discussion.

This is not to say that I believe that those that choose to wear masks or get vaccines should be discouraged or even banned from doing so. Far from it. I believe that everyone should be granted the basic choice of what to do with their lives in terms of risk assessment and tax money should not be allocated to institutions that violate that principle.

I strongly urge you to consider supporting HB1233 to support students, medical freedom, consent, and freedom. Thank you.

Kindly put this testimony to be on the docket during the hearing on 2/2/2022.

Very Truly Yours,

Zephan N. Wood- Student, citizen, and taxpayer of New Hampshire.

368 Young Road
Barrington, NH 03825
603-781-5117
BCormier58@msn.com

January 27, 2022

Representative Rick Ladd
Chair, House Education Committee
New Hampshire State Legislature
107 North Main Street
Concord, NH 03301

Dear Representative Rick Ladd :

My name is Barbara Cormier. I have been a nurse for over 40 years. I am a member of the New Hampshire Nurses Association. I currently teach nursing at Manchester Community College. I am writing in vehement opposition to HB 1233.

Historically, employers and educational institutions have had the right to establish requirements for their employees and/or students to protect the health and safety of those same individuals and all who utilize their services. HB1233 would strip these institutions of this capacity.

With the pandemic still being very active this bill proposes the removal of the evidence-based practices that have been shown to slow the spread, and would put students, faculty, and staff at a higher risk. As an educator I have seen firsthand the negative impact of the pandemic on the learning environment. The proposed prohibitions and threats to funding of our college system would only add to that negative impact. Many of the agencies we utilize for clinical placement require vaccination. Would this bill also prohibit us from enforcing our clinical agency requirements? If we fail to comply with the agency requirements, we risk losing our clinical placement sites. This further severely impacts the learning of our nursing students as simulation can never fully replace the value of hands-on learning in the clinical setting.

I see nothing but negative outcomes for the educational environment should HB1233 pass and respectfully request that it not be endorsed by the committee.

Sincerely,

Barbara Cormier MSN-Ed., RN, CNE

Barbara Cormier MSN-Ed., RN, CNE

Dear Members of the House Education Committee,

HB1233 is a dangerous bill that would greatly affect students like myself. Universities have already been hot spots for the spread of COVID-19, and banning the requirement of masks and vaccinations will only increase this. There are students who already don't follow the mask mandate as it currently stands, and this bill would only encourage their willful disregard for the health and safety of their fellow students, faculty, and staff. UNH has been able to maintain low case levels due to their rigorous testing schedule and requirement of masks, and we should not throw our progress away. I urge that you all vote in opposition to this bill, as it should be the university making decisions about student, faculty, and staff safety, not the state house.

Thank you,

UNH Student

Please support HB 1233

I respectfully ask you to support HB 1233.

There are so many challenges and stress associated with going to college or university.

Many NH families are having to add now the worry of the vaccine mandates.

I have a senior in high school now and she is choosing not to be vaccinated by the Covid-19 at this time.

She is having to choose her higher education on academics as well as if they require her to get vaccinated in order to attend.

She is choosing only to apply to colleges and universities that do not discriminate against those who choose not to be vaccinated. Covid-19 vaccines and masks should be optional, but never mandatory for in person learning.

Please support HB 1233.

Thank you, Paige Sturgeon

To the Members of the House Education Committee,

I am testifying today in strong opposition of HB1233. The University System of New Hampshire has demonstrated tremendous success in keeping COVID-19 case numbers low, which is the result of the mask mandates, testing operations, and vaccine programs that schools have enacted. Nearly two years into this pandemic, the state's public universities remain committed to these standards despite the financial difficulties and political pressures that they bring. From this, it is clear to me that these difficult decisions are made out of commitments to the public health and education of the students, faculty, and staff they serve. I am saddened that some of our elected officials do not agree.

The science has become increasingly clear: masks are most effective in preventing the transmission of COVID-19 when everyone in a group is wearing one. It is tempting to reject mask mandates in the name of bodily autonomy – “my body, my choice” as some people mockingly protest – but your ability to transmit a severe, contagious disease is far outside the realm of bodily autonomy. Given this, mask mandates cannot reasonably be considered an infringement on our rights. Driving under the influence of alcohol is illegal because it threatens the lives of those around you. Deciding to drink is a risk we are allowed to take because, to most extents, it only affects ourselves. *That* is bodily autonomy. The moment we get behind the wheel, however, we have discarded autonomy entirely. Mask-wearing is no different. Your mask protects those around you whether they are wearing one or not, just like deciding not to drink and drive protects other drivers whether they are drunk or not.

I urge the committee to vote in opposition of this bill. The health and safety of our students, faculty, and staff is the responsibility of the University System and its public health teams. The progress we have made in this pandemic is a success that belongs only to these officials and the students, faculty, and staff who have worked so hard to commit to these programs and procedures. The state house has not earned a place in this matter.

Thank you,

Matthew D'Amico
UNH Student and Dover Resident

Dear Members of the House Education Committee,

HB1233 is a dangerous bill that would greatly affect students like myself. Universities have already been hot spots for the spread of COVID-19, and banning the requirement of masks and vaccinations will only increase this. There are students who already don't follow the mask mandate as it currently stands, and this bill would only encourage their willful disregard for the health and safety of their fellow students, faculty, and staff. UNH has been able to maintain low case levels due to their rigorous testing schedule and requirement of masks, and we should not throw our progress away. I urge that you all vote in opposition to this bill, as it should be the university making decisions about student, faculty, and staff safety, not the state house.

Thank you,

UNH Student

Dear Members of the House Education Committee,

HB1233 is a dangerous bill that would greatly affect students like myself. Universities have already been hot spots for the spread of COVID-19, and banning the requirement of masks and vaccinations will only increase this. There are students who already don't follow the mask mandate as it currently stands, and this bill would only encourage their willful disregard for the health and safety of their fellow students, faculty, and staff. UNH has been able to maintain low case levels due to their rigorous testing schedule and requirement of masks, and we should not throw our progress away. I urge that you all vote in opposition to this bill, as it should be the university making decisions about student, faculty, and staff safety, not the state house.

Thank you,

Daisy Young



February 2, 2022

Representative Rick Ladd, Chairman
House Education Committee
Legislative Office Building, Room 207
33 N. State Street
Concord, NH 03301
Email: HouseEducationCommittee@leg.state.nh.us

RE: HB 1233 prohibiting higher education institutions receiving state funds from requiring face masks and COVID-19 vaccinations for attendance

Dear Chairman Ladd and the members of the Education Committee:

Bi-State Primary Care Association and our members respectfully request HB 1233, prohibiting higher education institutions receiving state funds from requiring face masks and COVID-19 vaccinations for attendance, be recommended inexpedient to legislate. Bi-State staff and our members will not attend legislative hearings due to the risk of COVID-19, and we thank you for the opportunity to submit written testimony to your committee electronically. Bi-State and our members write to you in strong opposition of HB 1233 because it will result in limiting educational institutions' ability to mitigate the spread of deadly disease and will result in an increase in COVID-19 cases.

Bi-State Primary Care Association (Bi-State) is a 501(c)(3) nonprofit organization, formed by two health and social service leaders in 1986 to advance access to comprehensive primary care and preventive services for all, with special emphasis on those most in need in New Hampshire and Vermont. Today, Bi-State represents 28 member organizations across both states that provide comprehensive primary care services to over 300,000 patients at 146 locations. Our members include community health centers (CHCs), federally qualified health centers (FQHCs), rural health clinics (RHCs), area health education center programs, and Planned Parenthood of Northern New England. New Hampshire's 13 health centers serve approximately 112,000 patients at locations across the state, including in those districts represented by the members of this esteemed committee.

Bi-State and our members oppose HB 1233 because it will prohibit New Hampshire's universities and colleges from enacting public health measures designed to minimize the spread of infectious diseases.

New Hampshire, like all states, requires childhood vaccinations to attend school.¹ The Centers for Disease Control and Prevention also recommend vaccinations for adults of all ages, including Tdap, Td, HPV, influenza, and shingles. These vaccinations help prevent the spread of germs in classrooms and communal living spaces such as dorms and multi-bedroom apartments. If HB 1233 as introduced were to become law, our colleges and universities will be prohibited from requiring students be vaccinated against deadly diseases to attend school. HB 1233 also prohibits colleges and universities from adopting mask or facial covering requirements to minimize the spread of COVID-19 or any other infectious disease. Public health measures, such as mask and vaccination requirements, are designed to protect all community members, including those who cannot wear masks or be vaccinated. It is completely irresponsible to prohibit mitigation measures that will prevent the spread of deadly diseases.

Unlike K-12 schools, New Hampshire's colleges and universities have instituted mask and vaccination requirements and have much different and better outcomes than our K-12 schools. Why would we want to prohibit colleges and universities from taking steps to prevent disease when college students are also in close quarters with fellow classmates and teachers? On January 19th, the New Hampshire Department of Health and Human Services reported there were 117 active COVID-19 clusters in the K-12 schools, with an average of 12.8 cases per cluster.² The Department also reported 40 active childcare clusters. Masks are the only thing keeping children who are not old enough to be vaccinated safe. There are likely several factors that caused the drastic rise in pediatric cases, and the rise in school and childcare clusters, including the lack of mask mandates. We know that employing mitigation measures such as masks in schools prevents the spread of disease. Eliminating the ability of the State and local authorities to require masks to prevent disease spread will undoubtedly increase the number of COVID-19 cases and burden our health care system even more than it is today. On January 3rd, one health center reported it received over 600 calls from parents and caregivers calling for COVID-19 tests for children. COVID-19 will continue to overwhelm our health care system if we do not slow the spread of disease.

It is also important to remember college and university students are not isolated from members of their communities: Students go to grocery stores, restaurants, parks, health care facilities, and more. Additionally, New Hampshire colleges and universities offer health profession certificates and degrees. The health care organizations that those students will receive clinical training at will likely require vaccinations due to the Centers for Medicare and Medicaid vaccination requirements.

New Hampshire is suffering from not only some of our highest numbers of COVID-19 infections, hospitalizations, and deaths since the beginning of the pandemic, but also extraordinary staffing shortages that are impacting all residents and their ability to access primary and emergency care. Staffing shortages at CHCs are *not* due to vaccine requirements; ~5% of their workforce is currently out sick due solely to illness from COVID-19. This does not include their health care staff who are unable to go to work because they are at home caring for a

¹ See Chapter He-P 300 Diseases last accessed on Jan. 31, 2022.

² NH DHHS COVID-19 Education and Childcare Partner Call (January 19, 2022)

<https://www.covid19.nh.gov/sites/g/files/ehbemt481/files/inline-documents/sonh/hcp-call-presentation-011922.pdf>



sick child, nor does it illustrate the incredible strain that working at reduced workforce capacity puts on the rest of their staff.

The lack of immunizations, masks in schools, and other mitigation measures in our communities is eroding our health care system's ability to respond to urgent primary care needs: Primary care providers across the state cannot prioritize their regular patient visits because their staff are responding to COVID-19. Utilizing a package of mitigation strategies is economically prudent, will reduce the number of health care workers taking care of a sick child, and will, most importantly, save lives. College campuses are small communities and are large employers in New Hampshire. We cannot eliminate their ability to mitigate the spread of disease.

For these reasons and more, Bi-State Primary Care Association and our members respectfully request the Committee recommend HB 1233 be inexpedient to legislate.

Sincerely,

Kristine E. Stoddard, Esq.
Senior Director of NH Public Policy
kstoddard@bistatepca.org
(603) 228-2830 ext. 113

Archived: Monday, February 7, 2022 9:08:19 AM
From: Sally
Sent: Sunday, February 6, 2022 1:46:08 PM
To: ~House Education Committee; Mary Beth Walz; Sally Staude
Cc: banfieldannmarie@gmail.com; Kathleen Cintavey
Subject: HB1233 Hearing comments-references for ineffective masks
Importance: Normal
Attachments:
[mask ineffectiveness 022222.docx](#)  [membranes-11-00250-v2.pdf](#) 

Dear State Reps,

I spoke in favor of HB1233 Last Wednesday, Feb 3, and shared my medical research history (42 yrs in R&D) on this topic. Rep. Walz asked for the references to support the comments I made, and I apologize that it has taken several days to locate the full committee email address to share them!

First, from the journal Membranes, a publication which illustrates the size of Covid virus particles (viruses are the smallest infecting organisms, as they lack their own reproduction 'machinery'- they use our cells for that purpose) vs the size of openings in masks, including surgical and cloth masks. You can see from the authors' comments (highlighted), the limitations of the currently used masks; those involving nanotechnology are not those we currently have for use.

The second attachment is a list of published studies/ analyses of data (with blue links) which have evaluated use of masks during the Covid pandemic and also influenza use. The most relevant ones from this long list of 97 publications:

#5, 7, 20, 24, 27, 28, 29*, 30, 32, 33, 36, 37, 44(safety), 48, 49, 50, 52, 53, 54, 56, 57, 59, 60, 61, 62. 65, 70, 72, 75, 82, 86, 97.

The evidence at this point shows there is no consistent evidence that masks are effective against transmission of Covid (or influenza, another very small virus), and that mandatory mask use has been shown to cause many adverse effects (increased infection, low O2 levels and elevated Co2 in blood), vision issues, severe acne, anxiety, learning disabilities (ref #63).

I hope this committee will vote to eliminate mandatory masking, not only in higher education, but in our public schools in New Hampshire!!!

Sincerely,
Sally H Staude
Dover, NH 03820
603-490-6971

Sent from [Mail](#) for Windows

MASK-INEFFECTIVENESS

1) [Effectiveness of Adding a Mask Recommendation to Other Public Health Measures to Prevent SARS-CoV-2 Infection in Danish Mask Wearers, Bundgaard, 2021](#) “Infection with SARS-CoV-2 occurred in 42 participants recommended masks (1.8%) and 53 control participants (2.1%). The between-group difference was -0.3 percentage point (95% CI, -1.2 to 0.4 percentage point; $P = 0.38$) (odds ratio, 0.82 [CI, 0.54 to 1.23]; $P = 0.33$). Multiple imputation accounting for loss to follow-up yielded similar results...the recommendation to wear surgical masks to supplement other public health measures did not reduce the SARS-CoV-2 infection rate among wearers by more than 50% in a community with modest infection rates, some degree of social distancing, and uncommon general mask use.”

2) [SARS-CoV-2 Transmission among Marine Recruits during Quarantine, Letizia, 2020](#) “Our study showed that in a group of predominantly young male military recruits, approximately 2% became positive for SARS-CoV-2, as determined by qPCR assay, during a 2-week, strictly enforced quarantine. Multiple, independent virus strain transmission clusters were identified...all recruits wore double-layered cloth masks at all times indoors and outdoors.”

3) [Physical interventions to interrupt or reduce the spread of respiratory viruses, Jefferson, 2020](#) “There is low certainty evidence from nine trials (3507 participants) that wearing a mask may make little or no difference to the outcome of influenza-like illness (ILI) compared to not wearing a mask (risk ratio (RR) 0.99 , 95% confidence interval (CI) 0.82 to 1.18). There is moderate certainty evidence that wearing a mask probably makes little or no difference to the outcome of laboratory-confirmed influenza compared to not wearing a mask (RR 0.91 , 95% CI 0.66 to 1.26 ; 6 trials; 3005 participants)...the pooled results of randomised trials did not show a clear reduction in respiratory viral infection with the use of medical/surgical masks during seasonal influenza.”

4) [The Impact of Community Masking on COVID-19: A Cluster-Randomized Trial in Bangladesh, Abaluck, 2021](#)
[Heneghan et al.](#) A cluster-randomized trial of community-level mask promotion in rural Bangladesh from November 2020 to April 2021 (N=600 villages, N=342,126 adults. Heneghan writes: “In a [Bangladesh study](#), surgical masks reduced symptomatic COVID infections by between 0 and 22 percent, while the efficacy of cloth masks led to somewhere between an 11 percent increase to a 21 percent decrease. Hence, based on these randomized studies, adult masks appear to have either no or limited efficacy.”

5) [Evidence for Community Cloth Face Masking to Limit the Spread of SARS-CoV-2: A Critical Review, Liu/CATO, 2021](#) “The available clinical evidence of facemask efficacy is of low quality and the best available clinical evidence has mostly failed to show efficacy, with fourteen of sixteen identified randomized controlled trials comparing face masks to no mask controls failing to find statistically significant benefit in the intent-to-treat populations. Of sixteen quantitative meta-analyses, eight were equivocal or critical as to whether evidence supports a public recommendation of masks, and the remaining eight supported a public mask intervention on limited evidence primarily on the basis of the precautionary principle.”

6) [Nonpharmaceutical Measures for Pandemic Influenza in Nonhealthcare Settings—Personal Protective and Environmental Measures](#), CDC/Xiao, 2020“Evidence from 14 randomized controlled trials of these measures did not support a substantial effect on transmission of laboratory-confirmed influenza...none of the household studies reported a significant reduction in secondary laboratory-confirmed influenza virus infections in the face mask group...the overall reduction in ILI or laboratory-confirmed influenza cases in the face mask group was not significant in either studies.”

7) [CIDRAP: Masks-for-all for COVID-19 not based on sound data](#), Brosseau, 2020“We agree that the data supporting the effectiveness of a cloth mask or face covering are very limited. We do, however, have data from laboratory studies that indicate cloth masks or face coverings offer very low filter collection efficiency for the smaller inhalable particles we believe are largely responsible for transmission, particularly from pre- or asymptomatic individuals who are not coughing or sneezing...though we support mask wearing by the general public, we continue to conclude that cloth masks and face coverings are likely to have limited impact on lowering COVID-19 transmission, because they have minimal ability to prevent the emission of small particles, offer limited personal protection with respect to small particle inhalation, and should not be recommended as a replacement for physical distancing or reducing time in enclosed spaces with many potentially infectious people.”

8) [Universal Masking in Hospitals in the Covid-19 Era](#), Klompas/NEJM, 2020“We know that wearing a mask outside health care facilities offers little, if any, protection from infection. Public health authorities define a significant exposure to Covid-19 as face-to-face contact within 6 feet with a patient with symptomatic Covid-19 that is sustained for at least a few minutes (and some say more than 10 minutes or even 30 minutes). The chance of catching Covid-19 from a passing interaction in a public space is therefore minimal. In many cases, the desire for widespread masking is a reflexive reaction to anxiety over the pandemic...The calculus may be different, however, in health care settings. First and foremost, a mask is a core component of the personal protective equipment (PPE) clinicians need when caring for symptomatic patients with respiratory viral infections, in conjunction with gown, gloves, and eye protection...universal masking alone is not a panacea. A mask will not protect providers caring for a patient with active Covid-19 if it's not accompanied by meticulous hand hygiene, eye protection, gloves, and a gown. A mask alone will not prevent health care workers with early Covid-19 from contaminating their hands and spreading the virus to patients and colleagues. Focusing on universal masking alone may, paradoxically, lead to more transmission of Covid-19 if it diverts attention from implementing more fundamental infection-control measures.”

9) [Masks for prevention of viral respiratory infections among health care workers and the public: PEER umbrella systematic review](#), Dugré, 2020“[This systematic review found limited evidence that the use of masks might reduce the risk of viral respiratory infections. In the community setting, a possible reduced risk of influenza-like illness was found among mask users. In health care workers, the results show no difference between N95 masks and surgical masks on the risk of confirmed influenza or other confirmed viral respiratory infections, although possible benefits from N95 masks were found for preventing influenza-like illness or other clinical respiratory infections. Surgical masks might be superior to cloth masks but data are limited to 1 trial.](#)”

- 10) [Effectiveness of personal protective measures in reducing pandemic influenza transmission: A systematic review and meta-analysis](#), Saunders-Hastings, 2017“Facemask use provided a non-significant protective effect (OR = 0.53; 95% CI 0.16–1.71; I² = 48%) against 2009 pandemic influenza infection.”
- 11) [Experimental investigation of indoor aerosol dispersion and accumulation in the context of COVID-19: Effects of masks and ventilation](#), Shah, 2021“Nevertheless, high-efficiency masks, such as the KN95, still offer substantially higher apparent filtration efficiencies (60% and 46% for R95 and KN95 masks, respectively) than the more commonly used cloth (10%) and surgical masks (12%), and therefore are still the recommended choice in mitigating airborne disease transmission indoors.”
- 12) [Exercise with facemask; Are we handling a devil's sword?- A physiological hypothesis](#), Chandrasekaran, 2020“Exercising with facemasks may reduce available Oxygen and increase air trapping preventing substantial carbon dioxide exchange. The hypercapnic hypoxia may potentially increase acidic environment, cardiac overload, anaerobic metabolism and renal overload, which may substantially aggravate the underlying pathology of established chronic diseases. Further contrary to the earlier thought, no evidence exists to claim the facemasks during exercise offer additional protection from the droplet transfer of the virus.”
- 13) [Surgical face masks in modern operating rooms—a costly and unnecessary ritual?](#), Mitchell, 1991“Following the commissioning of a new suite of operating rooms air movement studies showed a flow of air away from the operating table towards the periphery of the room. Oral microbial flora dispersed by unmasked male and female volunteers standing one metre from the table failed to contaminate exposed settle plates placed on the table. The wearing of face masks by non-scrubbed staff working in an operating room with forced ventilation seems to be unnecessary.”
- 14) [Facemask against viral respiratory infections among Hajj pilgrims: A challenging cluster-randomized trial](#), Alfelali, 2020“By intention-to-treat analysis, facemask use did not seem to be effective against laboratory-confirmed viral respiratory infections (odds ratio [OR], 1.4; 95% confidence interval [CI], 0.9 to 2.1, p = 0.18) nor against clinical respiratory infection (OR, 1.1; 95% CI, 0.9 to 1.4, p = 0.40).”
- 15) [Simple respiratory protection—evaluation of the filtration performance of cloth masks and common fabric materials against 20-1000 nm size particles](#), Rengasamy, 2010“Results obtained in the study show that common fabric materials may provide marginal protection against nanoparticles including those in the size ranges of virus-containing particles in exhaled breath.”
- 16) [Respiratory performance offered by N95 respirators and surgical masks: human subject evaluation with NaCl aerosol representing bacterial and viral particle size range](#), Lee, 2008“The study indicates that N95 filtering facepiece respirators may not achieve the expected protection level against bacteria and viruses. An exhalation valve on the N95 respirator does not affect the respiratory protection; it appears to be an appropriate alternative to reduce the breathing resistance.”
- 17) [Aerosol penetration and leakage characteristics of masks used in the health care industry](#), Weber, 1993“We conclude that the protection provided by surgical masks may

be insufficient in environments containing potentially hazardous sub-micrometer-sized aerosols.”

18) [Disposable surgical face masks for preventing surgical wound infection in clean surgery](#), Vincent, 2016 “We included three trials, involving a total of 2106 participants. There was no statistically significant difference in infection rates between the masked and unmasked group in any of the trials...from the limited results it is unclear whether the wearing of surgical face masks by members of the surgical team has any impact on surgical wound infection rates for patients undergoing clean surgery.”

19) [Disposable surgical face masks: a systematic review](#), Lipp, 2005 “From the limited results it is unclear whether wearing surgical face masks results in any harm or benefit to the patient undergoing clean surgery.”

20) [Comparison of the Filter Efficiency of Medical Nonwoven Fabrics against Three Different Microbe Aerosols](#), Shimasaki, 2018 “We conclude that the filter efficiency test using the phi-X174 phage aerosol may overestimate the protective performance of nonwoven fabrics with filter structure compared to that against real pathogens such as the influenza virus.”

21) [The use of masks and respirators to prevent transmission of influenza: a systematic review of the scientific evidence](#), Bin-Reza, 2012 “The use of masks and respirators to prevent transmission of influenza: a systematic review of the scientific evidence” “None of the studies established a conclusive relationship between mask/respirator use and protection against influenza infection. Some evidence suggests that mask use is best undertaken as part of a package of personal protection especially hand hygiene.”

22) [Facial protection for healthcare workers during pandemics: a scoping review](#), Godoy, 2020 “Compared with surgical masks, N95 respirators perform better in laboratory testing, may provide superior protection in inpatient settings and perform equivalently in outpatient settings. Surgical mask and N95 respirator conservation strategies include extended use, reuse or decontamination, but these strategies may result in inferior protection. Limited evidence suggests that reused and improvised masks should be used when medical-grade protection is unavailable.”

23) [Assessment of Proficiency of N95 Mask Donning Among the General Public in Singapore](#), Yeung, 2020 “These findings support ongoing recommendations against the use of N95 masks by the general public during the COVID-19 pandemic. N95 mask use by the general public may not translate into effective protection but instead provide false reassurance. Beyond N95 masks, proficiency among the general public in donning surgical masks needs to be assessed.”

24) [Evaluating the efficacy of cloth facemasks in reducing particulate matter exposure](#), Shakya, 2017 “Standard N95 mask performance was used as a control to compare the results with cloth masks, and our results suggest that cloth masks are only marginally beneficial in protecting individuals from particles <math><2.5 \mu\text{m}</math>.”

25) [Use of surgical face masks to reduce the incidence of the common cold among health care workers in Japan: a randomized controlled trial](#), Jacobs, 2009“Face mask use in health care workers has not been demonstrated to provide benefit in terms of cold symptoms or getting colds.”

26) [N95 Respirators vs Medical Masks for Preventing Influenza Among Health Care Personnel](#), Radonovich, 2019 “Among outpatient health care personnel, N95 respirators vs medical masks as worn by participants in this trial resulted in no significant difference in the incidence of laboratory-confirmed influenza.”

27) [Does Universal Mask Wearing Decrease or Increase the Spread of COVID-19?](#), Watts up with that? 2020“A survey of peer-reviewed studies shows that universal mask wearing (as opposed to wearing masks in specific settings) does not decrease the transmission of respiratory viruses from people wearing masks to people who are not wearing masks.”

28) [Masking: A Careful Review of the Evidence](#), Alexander, 2021“In fact, it is not unreasonable at this time to conclude that surgical and cloth masks, used as they currently are, have absolutely no impact on controlling the transmission of Covid-19 virus, and current evidence implies that face masks can be actually harmful.”

29) [Community and Close Contact Exposures Associated with COVID-19 Among Symptomatic Adults ≥18 Years in 11 Outpatient Health Care Facilities — United States, July 2020](#), Fisher, 2020Reported characteristics of symptomatic adults ≥18 years who were outpatients in 11 US academic health care facilities and who received positive and negative SARS-CoV-2 test results (N = 314)* — United States, July 1–29, 2020, revealed that 80% of infected persons wore face masks almost all or [most of the time](#).

30) [Impact of non-pharmaceutical interventions against COVID-19 in Europe: a quasi-experimental study](#), Hunter, 2020Face masks in public was not associated with reduced incidence.

31) [Masking lack of evidence with politics](#), CEBM, Heneghan, 2020“[It would appear that despite two decades of pandemic preparedness, there is considerable uncertainty as to the value of wearing masks. For instance, high rates of infection with cloth masks could be due to harms caused by cloth masks, or benefits of medical masks. The numerous systematic reviews that have been recently published all include the same evidence base so unsurprisingly broadly reach the same conclusions.](#)”

32) [Transmission of COVID-19 in 282 clusters in Catalonia, Spain: a cohort study](#), Marks, 2021“[We observed no association of risk of transmission with reported mask usage by contacts, with the age or sex of the index case, or with the presence of respiratory symptoms in the index case at the initial study visit.](#)”

33) [Non-pharmaceutical public health measures for mitigating the risk and impact of epidemic and pandemic influenza](#), WHO, 2020“[Ten RCTs were included in the meta-analysis, and there was no evidence that face masks are effective in reducing transmission of laboratory-confirmed influenza.](#)”

34) [The Strangely Unscientific Masking of America](#), Younes, 2020“[One report reached its conclusion based on observations of a “dummy head attached to a breathing](#)

simulator.” Another analyzed use of surgical masks on people experiencing at least two symptoms of acute respiratory illness. Incidentally, [not one of these studies](#) involved cloth masks or accounted for real-world mask usage (or misuse) among lay people, and none established efficacy of widespread mask-wearing by people not exhibiting symptoms. There was simply no evidence whatsoever that healthy people ought to wear masks when going about their lives, especially outdoors.”

35) [Facemasks and similar barriers to prevent respiratory illness such as COVID-19: A rapid systematic review](#), Brainard, 2020“31 eligible studies (including 12 RCTs). Narrative synthesis and random-effects meta-analysis of attack rates for primary and secondary prevention in 28 studies were performed. Based on the RCTs we would conclude that wearing facemasks can be very slightly protective against primary infection from casual community contact, and modestly protective against household infections when both infected and uninfected members wear facemasks. However, the RCTs often suffered from poor compliance and controls using facemasks.”

36) [The Year of Disguises](#), Koops, 2020“The healthy people in our society should not be punished for being healthy, which is exactly what lockdowns, distancing, mask mandates, etc. do...Children should not be wearing face coverings. We all need constant interaction with our environments and that is especially true for children. This is how their immune system develops. They are the lowest of the low-risk groups. Let them be kids and let them develop their immune systems... The “Mask Mandate” idea is a truly ridiculous, knee-jerk reaction and needs to be withdrawn and thrown in the waste bin of disastrous policy, along with lockdowns and school closures. You can vote for a person without blindly supporting all of their proposals!”

37) [Open Schools, Covid-19, and Child and Teacher Morbidity in Sweden](#), Ludvigsson, 2020“1,951,905 children in Sweden (as of December 31, 2019) who were 1 to 16 years of age, were examined...social distancing was encouraged in Sweden, but wearing face masks was not...No child with Covid-19 died.”

38) [Double-Masking Benefits Are Limited, Japan Supercomputer Finds](#), Reidy, 2021“Wearing two masks offers limited benefits in preventing the spread of droplets that could carry the coronavirus compared to one well-fitted disposable mask, according to a Japanese study that modeled the dispersal of droplets on a supercomputer.”

39) [Physical interventions to interrupt or reduce the spread of respiratory viruses. Part 1 – Face masks, eye protection and person distancing: systematic review and meta-analysis](#), Jefferson, 2020“There was insufficient evidence to provide a recommendation on the use of facial barriers without other measures. We found insufficient evidence for a difference between surgical masks and N95 respirators and limited evidence to support effectiveness of quarantine.”

40) [Should individuals in the community without respiratory symptoms wear facemasks to reduce the spread of COVID-19?](#), NIPH, 2020“Non-medical facemasks include a variety of products. There is no reliable evidence of the effectiveness of non-medical facemasks in community settings. There is likely to be substantial variation in effectiveness between products. However, there is only limited evidence from laboratory

studies of potential differences in effectiveness when different products are used in the community.”

41) [Is a mask necessary in the operating theatre?](#), Orr, 1981 “It would appear that minimum contamination can best be achieved by not wearing a mask at all but operating in silence. Whatever its relation to contamination, bacterial counts, or the dissemination of squames, there is no direct evidence that the wearing of masks reduces wound infection.”

42) [The surgical mask is a bad fit for risk reduction](#), Neilson, 2016 “As recently as 2010, the US National Academy of Sciences declared that, in the community setting, “face masks are not designed or certified to protect the wearer from exposure to respiratory hazards.” A number of studies have shown the inefficacy of the surgical mask in household settings to prevent transmission of the influenza virus.”

43) [Facemask versus No Facemask in Preventing Viral Respiratory Infections During Hajj: A Cluster Randomised Open Label Trial](#), Alfelali, 2019 “Facemask use does not prevent clinical or laboratory-confirmed viral respiratory infections among Hajj pilgrims.”

44) [Facemasks in the COVID-19 era: A health hypothesis](#), Vainshelboim, 2021 “The existing scientific evidences challenge the safety and efficacy of wearing facemask as preventive intervention for COVID-19. The data suggest that both medical and non-medical facemasks are ineffective to block human-to-human transmission of viral and infectious disease such SARS-CoV-2 and COVID-19, supporting against the usage of facemasks. Wearing facemasks has been demonstrated to have substantial adverse physiological and psychological effects. These include hypoxia, hypercapnia, shortness of breath, increased acidity and toxicity, activation of fear and stress response, rise in stress hormones, immunosuppression, fatigue, headaches, decline in cognitive performance, predisposition for viral and infectious illnesses, chronic stress, anxiety and depression.”

45) [The use of masks and respirators to prevent transmission of influenza: a systematic review of the scientific evidence](#), Bin-Reza, 2011 “None of the studies established a conclusive relationship between mask/respirator use and protection against influenza infection. Some evidence suggests that mask use is best undertaken as part of a package of personal protection especially hand hygiene.”

46) [Are Face Masks Effective? The Evidence.](#), Swiss Policy Research, 2021 “Most studies found little to no evidence for the effectiveness of face masks in the general population, neither as personal protective equipment nor as a source control.”

47) [Postoperative wound infections and surgical face masks: A controlled study](#), Tunevall, 1991 “These results indicate that the use of face masks might be reconsidered. Masks may be used to protect the operating team from drops of infected blood and from airborne infections, but have not been proven to protect the patient operated by a healthy operating team.”

48) [Mask mandate and use efficacy in state-level COVID-19 containment](#), Guerra, 2021 “Mask mandates and use are not associated with slower state-level COVID-19 spread during COVID-19 growth surges.”

49) [Twenty Reasons Mandatory Face Masks are Unsafe, Ineffective and Immoral](#), Manley, 2021 “A [CDC-funded review](#) on masking in May 2020 came to the conclusion: “Although mechanistic studies support the potential effect of hand hygiene or face masks, evidence from 14 randomized controlled trials of these measures did not support a substantial effect on transmission of laboratory-confirmed influenza... None of the household studies reported a significant reduction in secondary laboratory-confirmed influenza virus infections in the face mask group.” If masks can’t stop the regular flu, how can they stop SAR-CoV-2?”

50) [A cluster randomised trial of cloth masks compared with medical masks in healthcare workers](#), MacIntyre, 2015 “First RCT of cloth masks, and the results caution against the use of cloth masks. This is an important finding to inform occupational health and safety. Moisture retention, reuse of cloth masks and poor filtration may result in increased risk of infection...the rates of all infection outcomes were highest in the cloth mask arm, with the rate of ILI statistically significantly higher in the cloth mask arm (relative risk (RR)=13.00, 95% CI 1.69 to 100.07) compared with the medical mask arm. Cloth masks also had significantly higher rates of ILI compared with the control arm. An analysis by mask use showed ILI (RR=6.64, 95% CI 1.45 to 28.65) and laboratory-confirmed virus (RR=1.72, 95% CI 1.01 to 2.94) were significantly higher in the cloth masks group compared with the medical masks group. Penetration of cloth masks by particles was almost 97% and medical masks 44%.”

51) [Horowitz: Data from India continues to blow up the ‘Delta’ fear narrative](#), Blazemedia, 2021 “Rather than proving the need to sow more panic, fear, and control over people, the story from India — the source of the “Delta” variant — continues to refute every current premise of COVID fascism...Masks failed to stop the spread there.”

52) [An outbreak caused by the SARS-CoV-2 Delta variant \(B.1.617.2\) in a secondary care hospital in Finland, May 2021](#), Hetemäki, 2021 Reporting on a [nosocomial hospital outbreak](#) in Finland, Hetemäki et al. observed that “both symptomatic and asymptomatic infections were found among vaccinated health care workers, and secondary transmission occurred from those with symptomatic infections despite use of personal protective equipment.”

53) [Nosocomial outbreak caused by the SARS-CoV-2 Delta variant in a highly vaccinated population, Israel, July 2021](#), Shitrit, 2021 In a [hospital outbreak](#) investigation in Israel, Shitrit et al. observed “high transmissibility of the SARS-CoV-2 Delta variant among twice vaccinated and masked individuals.” They added that “this suggests some waning of immunity, albeit still providing protection for individuals without comorbidities.” Again, despite use of personal protective equipment.

54) [47 studies confirm ineffectiveness of masks for COVID and 32 more confirm their negative health effects](#), Lifesite news staff, 2021 “No studies were needed to justify this practice since most understood viruses were far too small to be stopped by the wearing of most masks, other than sophisticated ones designed for that task and which were too costly and complicated for the general public to properly wear and keep changing or cleaning. It was also understood that long mask wearing was unhealthy for wearers for common sense and basic science reasons.”

55) [Are EUA Face Masks Effective in Slowing the Spread of a Viral Infection?](#), Dopp, 2021
The vast evidence shows that masks are ineffective.

56) [CDC Study finds overwhelming majority of people getting coronavirus wore masks](#), Boyd/Federalist, 2021
“A Centers for Disease Control [report](#) released in September shows that masks and face coverings are not effective in preventing the spread of COVID-19, even for those people who consistently wear them.”

57) [Most Mask Studies Are Garbage](#), Eugyppius, 2021
“The other kind of study, the proper kind, would be a randomised controlled trial. You compare the rates of infection in a masked cohort against rates of infection in an unmasked cohort. Here things have gone much, much worse for mask brigade. They spent months trying to prevent the publication of [the Danish randomised controlled trial](#), which found that masks do zero. When that paper finally squeaked into print, they spent more months trying desperately to poke holes in it. You could feel their boundless relief when [the Bangladesh study](#) finally appeared to save them in early September. Every last Twitter blue-check could now proclaim that Science Shows Masks Work. Such was their hunger for any scrap of evidence to prop up their prior convictions, that none of them noticed the sad nature of the Science in question. The study found a mere 10% reduction in seroprevalence among the masked cohort, an effect so small that it fell within the confidence interval. Even the study authors couldn't exclude the possibility that masks in fact do zero.”

58) [Using face masks in the community: first update](#), ECDC, 2021
“No high-quality evidence in favor of face masks and recommended their use only based on the ‘precautionary principle.’”

59) [Do physical measures such as hand-washing or wearing masks stop or slow down the spread of respiratory viruses?](#), Cochrane, 2020
“Seven studies took place in the community, and two studies in healthcare workers. Compared with wearing no mask, wearing a mask may make little to no difference in how many people caught a flu-like illness (9 studies; 3507 people); and probably makes no difference in how many people have flu confirmed by a laboratory test (6 studies; 3005 people). Unwanted effects were rarely reported, but included discomfort.”

60) [Mouth-nose protection in public: No evidence of effectiveness](#), Thieme/ Kappstein, 2020
“The use of masks in public spaces is questionable simply because of the lack of scientific data. If one also considers the necessary precautions, masks must even be considered a risk of infection in public spaces according to the rules known from hospitals... If masks are worn by the population, the risk of infection is potentially increased, regardless of whether they are medical masks or whether they are so-called community masks designed in any way. If one considers the precautionary measures that the RKI as well as the international health authorities have pronounced, all authorities would even have to inform the population that masks should not be worn in public spaces at all. Because no matter whether it is a duty for all citizens or voluntarily borne by the citizens who want it for whatever reason, it remains a fact that masks can do more harm than good in public.”

61) [US mask guidance for kids is the strictest across the world](#), Skelding, 2021 “Kids need to see faces,” Jay Bhattacharya, a professor of medicine at Stanford University, told The Post. Youngsters watch people’s mouths to learn to speak, read and understand emotions, he said. “We have this idea that this disease is so bad that we must adopt any means necessary to stop it from spreading,” he said. “It’s not that masks in schools have no costs. They actually do have substantial costs.”

62) [Masking young children in school harms language acquisition](#), Walsh, 2021 “This is important because children and/or students do not have the speech or language ability that adults have — they are not equally able and the ability to see the face and especially the mouth is critical to language acquisition which children and/or students are engaged in at all times. Furthermore, the ability to see the mouth is not only essential to communication but also essential to brain development.”

63) [The Case Against Masks for Children](#), Makary, 2021 “It’s abusive to force kids who struggle with them to sacrifice for the sake of unvaccinated adults... Do masks reduce Covid transmission in children? Believe it or not, we could find only a single retrospective study on the question, and its results were inconclusive. Yet two weeks ago the Centers for Disease Control and Prevention sternly decreed that 56 million U.S. children and adolescents, vaccinated or not, should cover their faces regardless of the prevalence of infection in their community. Authorities in many places took the cue to impose mandates in schools and elsewhere, on the theory that masks can’t do any harm. That isn’t true. Some children are fine wearing a mask, but others struggle. Those who have myopia can have difficulty seeing because the mask fogs their glasses. (This has long been a problem for medical students in the operating room.) Masks can cause severe acne and other skin problems. The discomfort of a mask distracts some children from learning. By increasing airway resistance during exhalation, masks can lead to increased levels of carbon dioxide in the blood. And masks can be [vectors for pathogens](#) if they become moist or are used for too long.”

64) [Face Covering Mandates](#), Peavey, 2021 “Face Covering Mandates And Why They AREN’T Effective.”

65) [Do masks work? A Review of the evidence](#), Anderson, 2021 “In truth, the CDC’s, U.K.’s, and WHO’s earlier guidance was much more consistent with the best medical research on masks’ effectiveness in preventing the spread of viruses. That research suggests that Americans’ many months of mask-wearing has likely provided little to no health benefit and might even have been counterproductive in preventing the spread of the novel coronavirus.”

66) [Most face masks won’t stop COVID-19 indoors, study warns](#), Anderer, 2021 “New research reveals that cloth masks filter just 10% of exhaled aerosols, with many people not wearing coverings that fit their face properly.”

67) [How face masks and lockdowns failed](#)/the face mask folly in retrospect, Swiss Policy Research, 2021 “Mask mandates and lockdowns have had no discernible impact.”

68) [CDC Releases School COVID Transmission Study But Buries One of the Most Damning Parts](#), Davis, 2021 “The 21% lower incidence in schools that required mask use among students was not statistically significant compared with schools where mask

use was optional... With tens of millions of American kids headed back to school in the fall, their parents and political leaders owe it to them to have a clear-sighted, scientifically rigorous discussion about which anti-COVID measures actually work and which might put an extra burden on vulnerable young people without meaningfully or demonstrably slowing the spread of the virus...that a masking requirement of students failed to show independent benefit is a finding of consequence and great interest.”

69) [World Health Organization internal meeting, COVID-19 – virtual press conference – 30 March 2020](#), 2020“This is a question on Austria. The Austrian Government has a desire to make everyone wear a mask who’s going into the shops. I understood from our previous briefings with you that the general public should not wear masks because they are in short supply. What do you say about the new Austrian measures?... I’m not specifically aware of that measure in Austria. I would assume that it’s aimed at people who potentially have the disease not passing it to others. In general WHO recommends that the wearing of a mask by a member of the public is to prevent that individual giving the disease to somebody else. We don’t generally recommend the wearing to masks in public by otherwise well individuals because it has not been up to now associated with any particular benefit.”

70) [Face masks to prevent transmission of influenza virus: a systematic review](#), Cowling, 2010“Review highlights the limited evidence base supporting the efficacy or effectiveness of face masks to reduce influenza virus transmission.”“None of the studies reviewed showed a benefit from wearing a mask, in either HCW or community members in [households](#) (H).”

71) [Effectiveness of N95 respirators versus surgical masks in protecting health care workers from acute respiratory infection: a systematic review and meta-analysis](#), Smith, 2016“Although N95 respirators appeared to have a protective advantage over surgical masks in laboratory settings, our meta-analysis showed that there were insufficient data to determine definitively whether N95 respirators are superior to surgical masks in protecting health care workers against transmissible acute respiratory infections in clinical settings.”

72) [Effectiveness of Masks and Respirators Against Respiratory Infections in Healthcare Workers: A Systematic Review and Meta-Analysis](#), Offeddu, 2017“We found evidence to support universal medical mask use in hospital settings as part of infection control measures to reduce the risk of CRI and ILI among HCWs. Overall, N95 respirators may convey greater protection, but universal use throughout a work shift is likely to be less acceptable due to greater discomfort...Our analysis confirms the effectiveness of medical masks and respirators against SARS. Disposable, cotton, or paper masks are not recommended. The confirmed effectiveness of medical masks is crucially important for lower-resource and emergency settings lacking access to N95 respirators. In such cases, single-use medical masks are preferable to cloth masks, for which there is no evidence of protection and which might facilitate transmission of pathogens when used repeatedly without adequate sterilization...We found no clear benefit of either medical masks or N95 respirators against pH1N1...Overall, the evidence to inform policies on mask use in HCWs is poor, with a small number of studies that is prone to reporting biases and lack of statistical power.”

73) [N95 Respirators vs Medical Masks for Preventing Influenza Among Health Care Personnel](#), Radonovich, 2019“Use of N95 respirators, compared with medical masks, in the outpatient setting resulted in no significant difference in the rates of laboratory-confirmed influenza.”

Effectiveness of N95 respirators versus surgical masks against influenza: A systematic review and meta-analysis74) [Masks Don't Work: A Review of Science Relevant to COVID-19 Social Policy](#), Rancourt, 2020The use of N95 respirators compared with surgical masks is not associated with a lower risk of laboratory-confirmed influenza. It suggests that N95 respirators should not be recommended for general public and nonhigh-risk medical staff those are not in close contact with influenza patients or suspected patients. “No RCT study with verified outcome shows a benefit for HCW or community members in households to wearing a mask or respirator. There is no such study. There are no exceptions. Likewise, no study exists that shows a benefit from a broad policy to wear masks in public (more on this below). Furthermore, if there were any benefit to wearing a mask, because of the blocking power against droplets and aerosol particles, then there should be more benefit from wearing a respirator (N95) compared to a surgical mask, yet several large meta-analyses, and all the RCT, prove that there is no such relative benefit.”

75) [More Than a Dozen Credible Medical Studies Prove Face Masks Do Not Work Even In Hospitals!](#), Firstenberg, 2020“Mandating masks has not kept death rates down anywhere. The 20 U.S. states that have never ordered people to wear face masks indoors and out have dramatically lower COVID-19 death rates than the 30 states that have mandated masks. Most of the no-mask states have COVID-19 death rates below 20 per 100,000 population, and none have a death rate higher than 55. All 13 states that have death rates higher 55 are states that have required the wearing of masks in all public places. It has not protected them.”

76) [Does evidence based medicine support the effectiveness of surgical facemasks in preventing postoperative wound infections in elective surgery?](#), Bahli, 2009“From the limited randomized trials it is still not clear that whether wearing surgical face masks harms or benefit the patients undergoing elective surgery.”

77) [Peritonitis prevention in CAPD: to mask or not?](#), Figueiredo, 2000“The current study suggests that routine use of face masks during CAPD bag exchanges may be unnecessary and could be discontinued.”

78) [The operating room environment as affected by people and the surgical face mask](#), Ritter, 1975“*The wearing of a surgical face mask had no effect upon the overall operating room environmental contamination and probably work only to redirect the projectile effect of talking and breathing. People are the major source of environmental contamination in the operating room.*”

79) [The efficacy of standard surgical face masks: an investigation using “tracer particles](#), Ha'eri, 1980“Particle contamination of the wound was demonstrated in all experiments. Since the microspheres were not identified on the exterior of these face masks, they must have escaped around the mask edges and found their way into the wound.”

80) [Wearing of caps and masks not necessary during cardiac catheterization](#), Laslett, 1989“Prospectively evaluated the experience of 504 patients undergoing percutaneous left heart catheterization, seeking evidence of a relationship between whether caps and/or masks were worn by the operators and the incidence of infection. No infections were found in any patient, regardless of whether a cap or mask was used. Thus, we found no evidence that caps or masks need to be worn during percutaneous cardiac catheterization.”

81) [Do anaesthetists need to wear surgical masks in the operating theatre? A literature review with evidence-based recommendations](#), Skinner, 2001“A questionnaire-based survey, undertaken by Leyland’ in 1993 to assess attitudes to the use of masks, showed that 20% of surgeons discarded surgical masks for endoscopic work. Less than 50% did not wear the mask as recommended by the Medical Research Council. Equal numbers of surgeons wore the mask in the belief they were protecting themselves and the patient, with 20% of these admitting that tradition was the only reason for wearing them.”

82) [Mask mandates for children are not backed by data](#), Faria, 2021“Even if you want to use the 2018-19 flu season to avoid overlap with the start of the COVID-19 pandemic, the CDC paints a similar picture: It [estimated](#) 480 flu deaths among children during that period, with 46,000 hospitalizations. COVID-19, mercifully, is simply not as deadly for children. According to the American Academy of Pediatrics, preliminary data from 45 states [show](#) that between 0.00%-0.03% of child COVID-19 cases resulted in death. When you combine these numbers with the CDC [study](#) that found mask mandates for students — along with hybrid models, social distancing, and classroom barriers — did not have a statistically significant benefit in preventing the spread of COVID-19 in schools, the insistence that we force students to jump through these hoops for their own protection makes no sense.”

83) [The Downsides of Masking Young Students Are Real](#), Prasad, 2021“The benefits of mask requirements in schools might seem self-evident—they have to help contain the coronavirus, right?—but that may not be so. In Spain, masks are used in kids ages 6 and older. The authors of one study there examined the risk of viral spread at all ages. If masks provided a large benefit, then the transmission rate among 5-year-olds would be far higher than the rate among 6-year-olds. The [results don’t show that](#). Instead, they show that transmission rates, which were low among the youngest kids, steadily increased with age—rather than dropping sharply for older children subject to the face-covering requirement. This suggests that masking kids in school does not provide a major benefit and might provide none at all. And yet many officials prefer to double down on masking mandates, as if the fundamental policy were sound and only the people have failed.”

84) [Masks In Schools: Scientific American Fumbles Report On Childhood COVID Transmission](#), English/ACSH, 2021“Masking is a low-risk, inexpensive intervention. If we want to recommend it as a precautionary measure, especially in situations where vaccination isn’t an option, great. But that’s not what the public has been told. “Florida governor Ron DeSantis and politicians in Texas say research does not support mask mandates,” SciAm’s sub-headline bellowed. “Many studies show they are wrong.”If

that's the case, demonstrate that the intervention works before you mandate its use in schools. If you can't, acknowledged what UC San Francisco hematologist-oncologist and Associate Professor of Epidemiology Vinay Prasad wrote over [at the Atlantic](#): "No scientific consensus exists about the wisdom of mandatory-masking rules for schoolchildren ... In mid-March 2020, few could argue against erring on the side of caution. But nearly 18 months later, we owe it to children and their parents to answer the question properly: Do the benefits of masking kids in school outweigh the downsides? The honest answer in 2021 remains that we don't know for sure."

85) [Masks 'don't work,' are damaging health and are being used to control population: Doctors panel](#), Haynes, 2021 "The only randomized control studies that have ever been done on masks show that they don't work," began Dr. Nepute. He referred to Dr. Anthony Fauci's "noble lie," in which Fauci "changed his tune," from his March 2020 [comments](#), where he downplayed the need and efficacy of mask wearing, before urging Americans to use masks later in the year. "Well, he lied to us. So if he lied about that, what else has he lied to you about?" questioned Nepute. Masks have become commonplace in almost every setting, whether indoors or outdoors, but Dr. Popper mentioned how there have been "no studies" which actually examine the "effect of wearing a mask during all your waking hours." "There's no science to back any of this and particularly no science to back the fact that wearing a mask twenty four-seven or every waking minute, is health promoting," added Popper."

86) [Aerosol penetration through surgical masks](#), Chen, 1992 "The mask that has the highest collection efficiency is not necessarily the best mask from the perspective of the filter-quality factor, which considers not only the capture efficiency but also the air resistance. Although surgical mask media may be adequate to remove bacteria exhaled or expelled by health care workers, they may not be sufficient to remove the sub-micrometer-sized aerosols containing pathogens to which these health care workers are potentially exposed."

87) [CDC: Schools With Mask Mandates Didn't See Statistically Significant Different Rates of COVID Transmission From Schools With Optional Policies](#), Miltimore, 2021 "The CDC did not include its finding that "required mask use among students was not statistically significant compared with schools where mask use was optional" in the summary of its report."

88) [Horowitz: Data from India continues to blow up the 'Delta' fear narrative](#), Howorwitz, 2021 "Rather than proving the need to sow more panic, fear, and control over people, the story from India — the source of the "Delta" variant — continues to refute every current premise of COVID fascism... Unless we do that, we must return to the very effective lockdowns and masks. In reality, India's experience proves the opposite true; namely: 1) Delta is largely an attenuated version, with a much lower fatality rate, that for most people is akin to a cold. 2) Masks failed to stop the spread there. 3) The country has come close to the herd immunity threshold with just 3% vaccinated.

89) [Transmission of SARS-CoV-2 Delta Variant Among Vaccinated Healthcare Workers, Vietnam](#), Chau, 2021 While not definitive in the LANCET publication, it can be inferred that the nurses were all masked up and had PPE etc. as was the case in

Finland and Israel nosocomial outbreaks, indicating the failure of PPE and masks to constrain Delta spread.

90) [Aerosol penetration through surgical masks](#), Willeke, 1992 “The mask that has the highest collection efficiency is not necessarily the best mask from the perspective of the filter-quality factor, which considers not only the capture efficiency but also the air resistance. Although surgical mask media may be adequate to remove bacteria exhaled or expelled by health care workers, they may not be sufficient to remove the submicrometer-size aerosols containing pathogens to which these health care workers are potentially exposed.”

91) [The efficacy of standard surgical face masks: an investigation using “tracer particles”](#), Wiley, 1980 “Particle contamination of the wound was demonstrated in all experiments. Since the microspheres were not identified on the exterior of these face masks, they must have escaped around the mask edges and found their way into the wound. The wearing of the mask beneath the headgear curtails this route of contamination.”

92) [An Evidence Based Scientific Analysis of Why Masks are Ineffective, Unnecessary, and Harmful](#), Meehan, 2020 “Decades of the highest-level scientific evidence (meta-analyses of multiple randomized controlled trials) overwhelmingly conclude that medical masks are ineffective at preventing the transmission of respiratory viruses, including SAR-CoV-2...those arguing for masks are relying on low-level evidence (observational retrospective trials and mechanistic theories), none of which are powered to counter the evidence, arguments, and risks of mask mandates.”

93) [Open Letter from Medical Doctors and Health Professionals to All Belgian Authorities and All Belgian Media](#), AIER, 2020 “Oral masks in healthy individuals are ineffective against the spread of viral infections.”

94) [Effectiveness of N95 respirators versus surgical masks against influenza: A systematic review and meta-analysis](#), Long, 2020 “The use of N95 respirators compared with surgical masks is not associated with a lower risk of laboratory-confirmed influenza. It suggests that N95 respirators should not be recommended for general public and nonhigh-risk medical staff those are not in close contact with influenza patients or suspected patients.”

95) [Advice on the use of masks in the context of COVID-19](#), WHO, 2020 “However, the use of a mask alone is insufficient to provide an adequate level of protection or source control, and other personal and community level measures should also be adopted to suppress transmission of respiratory viruses.”

96) [Face mask: it's safe for only 20 minutes](#), The Sydney Morning Herald, 2003 “Health authorities have warned that surgical masks may not be an effective protection against the virus.” “Those masks are only effective so long as they are dry,” said Professor Yvonne Cossart of the Department of Infectious Diseases at the University of Sydney. “As soon as they become saturated with the moisture in your breath they stop doing their job and pass on the droplets.” Professor Cossart said that could take as little as 15 or 20 minutes, after which the mask would need to be changed. But those

warnings haven't stopped people snapping up the masks, with retailers reporting they are having trouble keeping up with demand."

97) [Study: Wearing A Used Mask Is Potentially Riskier Than No Mask At All](#), Boyd, 2020

[Effects of mask-wearing on the inhalability and deposition of airborne SARS-CoV-2 aerosols in human upper airway](#)"According to researchers from the University of Massachusetts Lowell and California Baptist University, a three-layer surgical mask is 65 percent efficient in filtering particles in the air. That effectiveness, however, falls to 25 percent once it is used."It is natural to think that wearing a mask, no matter new or old, should always be better than nothing," said author Jinxiang Xi."Our results show that this belief is only true for particles larger than 5 micrometers, but not for fine particles smaller than 2.5 micrometers," he continued."

MASK MANDATES

1) [Mask mandate and use efficacy for COVID-19 containment in US States](#), Guerra, 2021"Calculated total COVID-19 case growth and mask use for the continental United States with data from the Centers for Disease Control and Prevention and Institute for Health Metrics and Evaluation. We estimated post-mask mandate case growth in non-mandate states using median issuance dates of neighboring states with mandates...did not observe association between mask mandates or use and reduced COVID-19 spread in US states."

2) [These 12 Graphs Show Mask Mandates Do Nothing To Stop COVID](#), Weiss, 2020"Masks can work well when they're fully sealed, properly fitted, changed often, and have a filter designed for virus-sized particles. This represents none of the common masks available on the consumer market, making universal masking much more of a confidence trick than a medical solution...Our universal use of unscientific face coverings is therefore closer to medieval superstition than it is to science, but many powerful institutions have too much political capital invested in the mask narrative at this point, so the dogma is perpetuated. The narrative says that if cases go down it's because masks succeeded. It says that if cases go up it's because masks succeeded in preventing more cases. The narrative simply assumes rather than proves that masks work, despite overwhelming scientific evidence to the contrary."

3) [Mask Mandates Seem to Make CCP Virus Infection Rates Climb, Study Says](#), Vadum, 2020"Protective-mask mandates aimed at combating the spread of the [CCP virus](#) that causes the disease [COVID-19](#) appear to promote its spread, according to a report from RationalGround.com, a clearinghouse of COVID-19 data trends that's run by a grassroots group of data analysts, computer scientists, and actuaries."

4) [Horowitz: Comprehensive analysis of 50 states shows greater spread with mask mandates](#), Howorwitz, 2020

[Justin Hart](#)"How long do our politicians get to ignore the results?... The results: When comparing states with mandates vs. those without, or periods of times within a state with a mandate vs. without, there is absolutely no evidence the mask mandate worked to slow the spread one iota. In total, in the states that had a mandate in effect, there

were 9,605,256 confirmed COVID cases over 5,907 total days, an average of 27 cases per 100,000 per day. When states did not have a statewide order (which includes the states that never had them and the period of time masking states did not have the mandate in place) there were 5,781,716 cases over 5,772 total days, averaging 17 cases per 100,000 people per day.”

5) [The CDC’s Mask Mandate Study: Debunked](#), Alexander, 2021 “Thus, it is not surprising that the CDC’s own recent conclusion on the use of [nonpharmaceutical measures such as face masks in pandemic influenza](#), warned that scientific “evidence from 14 randomized controlled trials of these measures did not support a substantial effect on transmission...” Moreover, in the [WHO’s 2019 guidance document](#) on nonpharmaceutical public health measures in a pandemic, they reported as to face masks that “there is no evidence that this is effective in reducing transmission...” Similarly, in the fine print to a recent double-blind, double-masking simulation [the CDC stated](#) that “The findings of these simulations [supporting mask usage] should neither be generalized to the effectiveness ...nor interpreted as being representative of the effectiveness of these masks when worn in real-world settings.”

6) [Phil Kerpin](#), tweet, 2021

[The Spectator](#) “The first ecological study of state mask mandates and use to include winter data: “Case growth was independent of mandates at low and high rates of community spread, and mask use did not predict case growth during the Summer or Fall-Winter waves.”

7) [How face masks and lockdowns failed](#), SPR, 2021 “Infections have been driven primarily by seasonal and endemic factors, whereas mask mandates and lockdowns have had no discernible impact”

8) [Analysis of the Effects of COVID-19 Mask Mandates on Hospital Resource Consumption and Mortality at the County Level](#), Schauer, 2021 “There was no reduction in per-population daily mortality, hospital bed, ICU bed, or ventilator occupancy of COVID-19-positive patients attributable to the implementation of a mask-wearing mandate.”

9) [Do we need mask mandates](#), Harris, 2021 “But masks proved far less useful in the subsequent 1918 Spanish flu, a viral disease spread by pathogens smaller than bacteria. California’s Department of Health, for instance, [reported](#) that the cities of Stockton, which required masks, and Boston, which did not, had scarcely different death rates, and so advised against mask mandates except for a few high-risk professions such as barbers....Randomized controlled trials (RCTs) on mask use, generally more reliable than observational studies, though not infallible, typically show that cloth and surgical masks offer little protection. A few RCTs suggest that perfect adherence to an exacting mask protocol may guard against influenza, but meta-analyses find little on the whole to suggest that masks offer meaningful protection. [WHO guidelines](#) from 2019 on influenza say that despite “mechanistic plausibility for the potential effectiveness” of masks, studies showed a benefit too small to be established with any certainty. Another [literature review](#) by researchers from the University of Hong Kong agrees. Its best estimate for the protective effect of surgical masks against influenza, based on ten RCTs published through 2018, was just 22 percent, and it could not rule out zero effect.”

February 2, 2022

Dear Chairman Ladd and members of the House Education Committee,

I am submitting written testimony in opposition of HB 12³23 prohibiting higher education institutions receiving state funds from requiring face masks and Covid-19 vaccinations for attendance. Historically, educational institutions have had the right to establish requirements for their employees and/or students to protect the health and safety of those same individuals and members of the public. With the pandemic still raging, evidence-based interventions to decrease the spread include vaccinations, masking and social distancing

I am a registered nurse and I am employed as an associate professor of nursing at a private university in New Hampshire. I can confidently state that from a public health perspective I feel safer on my campus, which requires both vaccination and masking than I do in any other public location. Students and employees at public universities and colleges in NH should have the same level of confidence. Vaccines and masks are evidence-based effective tools that decrease the transmission of covid-19 and decrease the risk of developing severe symptomatic disease that may lead to significant complications, hospitalization, ventilation, and death.

From a financial perspective, a complex Covid-19 hospitalization is one in which a patient is admitted to the hospital and required ventilation or admission to the intensive care unit. In NH a complex Covid-19 hospitalization costs on average \$256,069. The average cost for a noncomplex hospitalization in NH is \$62,621. The burden of these costs falls on everyone, not just the patient, but the NH taxpayer and healthcare systems.

I urge you to oppose HB1223 and allow each university/college to have the choice to implement vaccine or mask requirements. Further restricting the use of proven interventions to decrease the spread of Covid-19 will prolong the pandemic and result in continuing strain on healthcare resources and preventable illness and death.

Best Regards,
Carla Smith MSN, RN
28 Ann Lane
Fremont, NH 03044



Community College System of New Hampshire (CCSNH)
Testimony for **HB1233**, *prohibiting higher education institutions receiving state funds
from requiring face masks and COVID-19 vaccinations for attendance*
House Committee on Education
February 2, 2022

Thank you for the opportunity to provide testimony on House Bill HB1233, prohibiting higher education institutions receiving state funds from requiring face masks and COVID-19 vaccinations for attendance. CCSNH is opposed to this bill.

HB1233 removes the ability of our institutions to manage campus environments in ways that support on-site learning and that can evolve as circumstances change. While CCSNH does not have a COVID-19 vaccination requirement, we do consider the ability to require that masks be worn in certain circumstances to be an important tool to keep our campuses open for in-person learning. We are, therefore, opposed to a statutory prohibition on our colleges' ability to require masks or other facial coverings.

Community colleges are known for hands-on learning, ranging from programs like nursing, respiratory therapy, radiation therapy and dental assisting to firefighting to welding, diesel technology, HVAC and many more. Focused on-site in-person classroom and lab work is critical and indispensable to these, and many other programs we offer.

Our colleges shifted almost entirely to remote learning in March of 2020, as did the majority of colleges and universities in the country. In the summer of 2020, we began bringing students back to on-site instruction, beginning with lab courses. In bringing students back, we implemented several strategies to mitigate the potential spread of COVID-19. These included reconfiguring classrooms and lab spaces, installing Plexiglass dividers, improving ventilation, adjusting scheduling, reducing class sizes, and in certain cases requiring students and instructors to wear masks. We have adjusted our approach as local circumstances have evolved, following community transmission rates and being responsive to other specific situations on each of our campuses.

The use of masks in certain conditions, such as indoors when people are likely to be in close proximity for sustained periods of time, continues to be the recommendation of public health authorities. Masking is a tool we can employ to keep our colleges open, to keep educating New Hampshire students, and to keep graduating Granite Staters who will go on to become the skilled workforce needed in our communities and state.

Our duty to educate students is very much related to our ability, and responsibility, to keep incidences of COVID-19 as low as possible on our campuses. We train students for the professions that are in high demand, and this is even more important given the present labor market dynamics. Unprecedented numbers of people are opting out of the workforce – whether displaced, “stopping out” while home lives and domestic economies are disrupted, or choosing to be part of the “Great Resignation.” Our students are enrolled in our community college programs because they want to work. They want to complete their training and take their place as nurses, medical assistants, electrical line workers, CDL drivers, firefighters and paramedics, chefs, pipe welders, childcare teachers, cybersecurity specialists and law enforcement professionals, substance abuse counselors, and much more. We can only help them do that if we have the tools to keep their learning environments open and accessible to them, and to the faculty whose role is critical to preparing the next wave of our state’s workforce. We strongly believe that requiring masks in certain circumstances has been a key element in our ability to do that.

For example – just last month, we graduated a class of nearly 40 new LPNs from River Valley Community College. These students were able to complete their program of study without significant disruption, and we believe the fact that they wore masks while working together in classrooms and labs – as they will in the workplace - was an important part of their ability to complete the program. These 40 LPNs, and the newer cohorts of students presently making their way through the program, are desperately needed in New Hampshire’s assisted living facilities, medical practices and other healthcare settings, as you are no doubt hearing from facilities in your districts and across the state. We do not believe that masking is too high a burden to protect the education of students like these new nurses.

HB1233 also prohibits CCSNH from requiring COVID-19 vaccinations as a condition of attendance. HB220 was passed last year and already prevents such a requirement. CCSNH had not, and has not, given consideration to doing so. We would only suggest that laws relating to congregate settings be applied consistently. Our testimony today seeks to preserve our ability to require masks when we deem it in the best interests of our students and faculty.

Contact: Shannon Reid, CCSNH Director of Government Affairs and Communications, sreid@ccsnh.edu, 603-230-3504

Elizabeth Odiorne
66 Grant Street
Laconia, NH 03246

January 30, 2022.

NH House of Representatives
Committee on Education
NH State House
Concord, NH 03301

Dear Chairman Ladd and Members of the Committee:

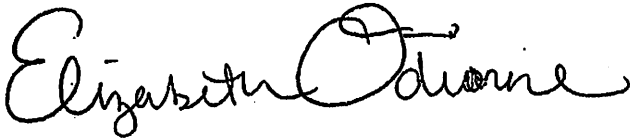
I am a nursing student at NHTI, Concord's Community College. At present, I am in my first year of the program and plan to specialize in maternity, women's health, or pediatrics upon graduating and earning my nursing license. As somebody who has lived in the Lakes Region throughout my life, I hope to work locally, providing nursing care to fellow New Hampshire residents in either the hospital or outpatient setting.

I would oppose HB1233 because wearing masks is what makes me feel safe going to my classes, labs, and clinical assignments. It is also a standard practice in healthcare and has helped to protect they patients I work with each week in clinical.

Nursing is not a field that can be studied purely online, so it is essential that we are able to participate in on-site, hands-on learning. I feel strongly that wearing masks has prevented outbreaks arising from classroom time, kept students from becoming sick and needing to isolate, and therefore kept on-site learning opportunities open to me and my classmates. At this time in particular, when nurses are needed more than ever, it is imperative that we are able to gain the knowledge and skills to provide patients the best care possible; that is something that simply cannot be done when classes are forced to go online.

For me, the ability to continue in-person learning to pursue my profession is crucial. I believe the college has made the right decisions when transmission rates are high, and masks have been required. It would be highly detrimental and unfortunate if nursing students (and students in other hands-on professions) had to suspend their learning because of outbreaks of COVID.

Sincerely,



Elizabeth Odiorne, Laconia
NHTI Nursing Class of 2022

01/28/2022

New Hampshire House of Representatives

RE: House Bill 1233

Dear Representatives,

My name is Kyle Durgin, and I am a second-semester Respiratory Care Practitioner student attending River Valley Community College. I am writing in strong opposition to HB 1233.

The high quality of the Allied Health programs in New Hampshire's community college network will not only equip me with the skill set needed to care for the state's sickest patients but afford me the financial stability to support my family. It is of the highest importance to me that the state's representatives support its higher education system with bills that promote a safe learning environment, meet professional standards that currently exist in health care settings, and keep students attending in-person classes, and HB 1233 does not support these goals.

A recent study published in the American Association of Respiratory Care science journal "Respiratory care" found that 79% of RRTs reported burnout. Working increased hours with inadequate staffing were two reasons found to contribute to feelings of burnout significantly. If I am to successfully join the ranks to support these vitally important health care workers, we must require PPE and other science-backed policies that protect both the professional and the patient starting not in the ICU but the classroom. This ensures the graduation of healthy professionals well versed in hospital policy and standard practices and procedures.

I am fearful that the consequences should HB 1233 pass would include decreased attendance, elimination of most hands-on learning, increased Covid spread between students and our families like mine that provides for high-risk individuals, fewer professionals to alleviate staffing shortages and burnout, and increased deaths.

As representatives of our great state of New Hampshire, I hope that you listen to the voices of medical professionals and students before taking action on this Bill. I thank you for your time and your service in improving our communities.

Gratefully,

Kyle Durgin

Dear Shannon Reid,

As an association growing out of COVID campus closures, Student Government Association is trying to provide more in person opportunities for students on campus, as something the student body has requested. With the responsibility of encouraging in-person gatherings for activities, it is our duty to provide a safe environment to protect the health and wellness of our students.

It has been brought to my attention that bill HB1233, prohibiting the University and Community College system of New Hampshire from requiring mask mandates on their campuses, will be heard in the House of Education on Wednesday, February 2nd.

This bill would disrupt the precautionary systems we have in place to ensure the safety of our students from the exposure of the COVID-19 illness under our care. We know that layered measures such as immunizations, masks, sufficient ventilation, and other regulations may help save lives and guarantee that our students and instructors can remain in in-person educational environments. Without the use of masks and other recommended precautions, students are at risk of exposure and illness, creating an unsafe environment that would deter students from returning to campus. Student Government supports the use of masking in indoor educational settings like labs, classes, and extracurricular activities to protect our students.

Valerie Connolly – President

Elsa Leblanc – Vice President

Alex Ferris – Vice President

Student Government Association

Great Bay Community College

HB 1233 - AS INTRODUCED

2022 SESSION

22-2426

04/10

HOUSE BILL **1233**

AN ACT prohibiting higher education institutions receiving state funds from requiring face masks and COVID-19 vaccinations for attendance.

SPONSORS: Rep. Torosian, Rock. 14; Rep. Andrus, Merr. 1; Rep. J. Smith, Carr. 5; Rep. Baxter, Rock. 20; Rep. Wallace, Rock. 12

COMMITTEE: Education

ANALYSIS

This bill prohibits higher education institutions from requiring a COVID-19 vaccination or face masks for enrollment or attendance.

Explanation: Matter added to current law appears in ***bold italics***.
Matter removed from current law appears ~~[in brackets and struckthrough.]~~
Matter which is either (a) all new or (b) repealed and reenacted appears in regular type.

STATE OF NEW HAMPSHIRE

In the Year of Our Lord Two Thousand Twenty Two

AN ACT prohibiting higher education institutions receiving state funds from requiring face masks and COVID-19 vaccinations for attendance.

Be it Enacted by the Senate and House of Representatives in General Court convened:

1 1 New Section; University System of New Hampshire; Vaccination and Mask Mandate
2 Prohibited. Amend RSA 187-A by inserting after section 16-b the following new section:

3 187-A:16-c Vaccination and Mask Mandates Prohibited. No institution in the university system
4 of New Hampshire that receives state funds shall require that a student receive a COVID-19
5 vaccination or wear a face mask or other face covering as a condition for enrollment or attendance.

6 2 New Section; Community College System of New Hampshire; Vaccination or Mask Mandate
7 Prohibited. Amend RSA 188-F by inserting after section 21-a the following new section:

8 188-F:21-b Vaccination and Mask Mandates Prohibited. No institution in the community
9 college system of New Hampshire that receives state funds shall require that a student receive a
10 COVID-19 vaccination or wear a face mask or other face covering as a condition for enrollment or
11 attendance.

12 3 Effective Date. This act shall take effect upon its passage.