

## **Electronic Supplementary Material**

### **Appendix A**

#### **Additional information on methods and exclusion criteria**

Our inclusion criteria for the MTurk responders were to be a United States resident with 97% and higher HIT (Human Intelligence Tasks) approval rating and at least 5000 HITs approved. We provide summary statistics for sample characteristics in this appendix document (Appendix Table A1). Data were collected using Qualtrics, and Stata (version 15.1) was used for statistical analyses.

#### **PACV and VCI scoring**

To compute the PACV score that we use in our regression analysis, a hesitant response was assigned a value of 2, a don't know response was assigned a value of 1 and a non-hesitant response was assigned a value of 0. We also take the average across the four VCI survey responses before we multiply it by -1 such that a higher number denotes higher hesitancy.

#### **Government and Scientists treatments**

In the *Government* treatment, the order of the presented scenarios was counter-balanced across participants with half of participants completing the *Non-Betrayal* condition first followed by the two *Government* active betrayal scenarios and the other half undergoing the opposite order. We also counter-balanced the order presentation of the Democrat versus Republican scenarios across participants. In the *Scientists* treatment, we elicit willingness to get the vaccine when the 0.01% risk of active betrayal is caused by scientists developing the vaccine too rapidly while overlooking certain safety concerns in the process. The scientists were described as either working for pharmaceutical companies or for the government (again counter-balancing the order of conditions and scenarios as before).

#### **Controlling for individual characteristics**

To establish the robustness of our findings, we control for individual and socioeconomic characteristics. Women and democrats, for example, reported significantly higher fear of the COVID-19 pandemic ( $M_{difference_{men-women}} = -0.600$ : Two-sided t-test:  $P < 0.0001$ ;  $M_{difference_{Republican-Democrat}} = -1.057$ : Two-sided t-test:  $P < 0.0001$ ). Thus, controlling our comprehensive set of controls help in isolating the effects of our key variables of interest. Almost all survey responses were provided on a 7-point Likert scale, with the exception of the PACV (5-point Likert scale) and binary questions. To identify the responder's geographic location, participants provide their ZIP code numbers that were matched to counties and states using a publicly available ZIP code database ([www.unitedstateszipcodes.org/zip-code-database](http://www.unitedstateszipcodes.org/zip-code-database)). We then use the Bureau of Economic Analysis (BEA) region classification that is widely used by economists to group states into one of 8 regions: New England, Mideast, Great Lakes, Plains, Southeast, Southwest, Rocky Mountain, and Far West <sup>2</sup>.

## Appendix B

### Supplementary tables

**Appendix Table A1.** Summary statistics.

Woman, %	42.23
Man, %	57.43
Non-binary, %	0.34
Age, Mean (SD)	40.87 (12.45)
Hispanic, %	6.6
Caucasian, %	76.1
Education:	
High School and Less, %	12.4
Some college, %	25.2
Bachelor, %	48.8
Masters or above, %	13.6
Work full time, %	73.5
Political Orientation:	
Independent, %	28.2
Republican, %	22.9
Democrat, %	49.0
Bureau of Economic Analysis (BEA) Regions:	
Far West, %	16.5
Great Lakes, %	15.2
Mideast, %	16.7
New England, %	5.3
Plains, %	5.7
Rocky Mountain, %	3.3
Southeast, %	24.9
Southwest, %	12.4
Total number of responses	897
Unmatched ZIP code	1
Failed check question criteria	8
Sample used in analysis after exclusions:	888

**Appendix Table A2.** Willingness to get the vaccine disassociated by motivation, controlling for PACV (Fixed effect linear regressions).

Dependent variable:	(a)	(b)	(c)	(d)	(e)
Willingness to vaccinate	Benchmark	To protect oneself	To protect others	Wait and see	Only if required
Message	.676** (.214)	.304 (.263)	.283** (.082)	-.198 (.217)	-.033 (.126)
Woman	-.162 (.255)	-.316 (.224)	-.192 (.132)	.267*** (.05)	.281* (.139)
Age/100	.867 (.713)	1.156 (.654)	.43 (.539)	-1.889** (.582)	-1.246** (.369)
Hispanic	-.4 (.409)	-.743* (.343)	.171 (.099)	.246* (.105)	.615** (.231)
Caucasian	.112 (.294)	-.042 (.375)	-.068 (.11)	.057 (.217)	-.137 (.197)
Education (Base: high school or less)					
Some college	-.288 (.599)	-.348 (.555)	.103 (.153)	-.111 (.478)	-.032 (.244)
Bachelor	.114 (.266)	.158 (.355)	.179 (.115)	-.283 (.325)	-.227 (.316)
Masters or above	.67 (.357)	.459 (.363)	.349** (.113)	-.428 (.275)	-.587** (.202)
Work full time	.042 (.256)	-.078 (.211)	.046 (.147)	-.016 (.149)	-.003 (.055)
Political orientation (Base: Democrat)					
Independent	-.263 (.353)	-.295 (.313)	-.072 (.228)	.357 (.199)	.255** (.102)
Republican	.174 (.546)	.051 (.438)	.085 (.168)	-.031 (.108)	.097 (.188)
PACV	-.394*** (.108)	-.402** (.126)	-.113*** (.018)	.265*** (.036)	.248*** (.062)
Constant	6.087*** (.449)	6.494*** (.451)	.356* (.168)	-.725 (.551)	-1.431*** (.334)
Region (BEA) fixed effects	Yes	Yes	Yes	Yes	Yes
Observations	199	199	199	199	199
R-squared	.207	.198	.13	.228	.219

Standard errors (clustered at the region level) are in parentheses. Likert-scale (7-point) measures, including dependent variable, are standardized at the individual level (z-score). A more positive score on PACV or VCI denotes higher hesitancy. One responder is dropped from analysis: reported a non-binary gender. (Tables created using asdoc, a Stata program written by Shah (2020)) \*\*\*  $p < .01$ , \*\*  $p < .05$ , \*  $p < .1$

**Appendix Table A3.** Willingness to get the vaccine disassociated by motivation, controlling for VCI (average of four z-scored measures) (Fixed effect linear regressions)

Dependent variable:	(a)	(b)	(c)	(d)	(e)
Willingness to vaccinate	Benchmark	To protect oneself	To protect others	Wait and see	Only if required
Message	.661** (.21)	.29 (.261)	.279** (.081)	-.193 (.218)	-.03 (.118)
Woman	-.12 (.319)	-.273 (.303)	-.179 (.14)	.237* (.107)	.253 (.201)
Age/100	1.459* (.633)	1.758** (.569)	.599 (.496)	-2.268** (.686)	-1.596*** (.222)
Hispanic	-.094 (.415)	-.419* (.191)	.262*** (.074)	-.018 (.163)	.348 (.317)
Caucasian	.011 (.24)	-.142 (.298)	-.097 (.088)	.114 (.238)	-.086 (.15)
Education (Base: high school or less)					
Some college	-.516** (.218)	-.586*** (.163)	.036 (.09)	.065 (.223)	.141 (.104)
Bachelor	-.148 (.29)	-.115 (.347)	.102 (.147)	-.083 (.174)	-.03 (.225)
Masters or above	.481 (.382)	.263 (.365)	.294 (.159)	-.287 (.256)	-.45 (.254)
Work full time	.122 (.257)	.002 (.227)	.068 (.153)	-.056 (.164)	-.036 (.098)
Political orientation (Base: Democrat)					
Independent	-.434 (.433)	-.47 (.454)	-.121 (.251)	.47* (.21)	.36** (.127)
Republican	-.043 (.496)	-.172 (.39)	.022 (.175)	.121 (.107)	.243 (.184)
VCI (average)	-.614* (.3)	-.671** (.252)	-.188** (.055)	.642*** (.175)	.68*** (.114)
Constant	4.27*** (.323)	4.622*** (.364)	-.169 (.162)	.584 (.583)	-.172 (.202)
Region (BEA) fixed effects	Yes	Yes	Yes	Yes	Yes
Observations	199	199	199	199	199
R-squared	.098	.084	.085	.152	.16

Standard errors (clustered at the region level) are in parentheses. Likert-scale (7-point) measures, including dependent variable, are standardized at the individual level (z-score). A more positive score on PACV or VCI denotes higher hesitancy. One responder is dropped from analysis: reported a non-binary gender. \*\*\* $p < .01$ , \*\* $p < .05$ , \* $p < .1$

**Appendix Table A4.** Betrayal aversion to side effects and message treatment (Fixed effect linear regressions).

Dependent variable:	(a) Betrayal Aversion	(b) Betrayal Aversion
Message	-.059 (.091)	-.063 (.088)
Non-Betrayal scenario first	.262*** (.064)	.273*** (.065)
Woman	.146 (.122)	.143 (.116)
Age/100	-.014 (.224)	-.012 (.239)
Hispanic	.052 (.217)	.052 (.21)
Caucasian	.047 (.138)	.028 (.124)
Education (Base: high school or less)		
Some college	-.008 (.11)	-.021 (.104)
Bachelor	.055 (.094)	.033 (.087)
Masters or above	.183 (.126)	.171 (.118)
Work full time	.05 (.115)	.051 (.111)
Political orientation (Base: Democrat)		
Independent	-.008 (.091)	-.028 (.109)
Republican	-.096 (.055)	-.109 (.067)
PACV	-.023 (.023)	-
VCI (average)	-	-.154 (.117)
Constant	.144 (.238)	.008 (.25)
Region (BEA) fixed effects	Yes	Yes
Observations	394	394
R-squared	.048	.052

Standard errors (clustered at the region level) are in parentheses. Likert-scale (7-point) measures are standardized at the individual level (z-score). Dependent variable is constructed by taking the difference between the z-scored willingness to get the vaccine across the non-betrayal and active betrayal conditions. A more positive score on PACV or VCI denotes higher hesitancy. One responder is dropped from analysis: reported a non-binary gender. \*\*\*  $p < .01$ , \*\*  $p < .05$ , \*  $p < .1$

**Appendix Table A5.** Willingness to get the vaccine and message treatment (Fixed effect linear regressions).

Dependent variable:	(a)	(b)	(c)	(d)
Willingness to vaccinate	Non Betrayal	Non Betrayal	Active Betrayal (Side effects)	Active Betrayal (Side effects)
Message	.251** (.073)	.253*** (.07)	.31*** (.059)	.316*** (.067)
Non-Betrayal scenario first	.073 (.092)	.116 (.09)	-.19 (.11)	-.156 (.114)
Woman	-.105 (.056)	-.126 (.08)	-.251 (.163)	-.269 (.178)
Age/100	-.782 (.481)	-.692 (.472)	-.769 (.503)	-.681 (.479)
Hispanic	.124 (.166)	.086 (.197)	.072 (.298)	.033 (.333)
Caucasian	.143 (.079)	.089 (.081)	.097 (.107)	.061 (.136)
Education (Base: high school or less)				
Some college	.173 (.18)	.149 (.195)	.181 (.106)	.17 (.139)
Bachelor	.267 (.156)	.246 (.148)	.213 (.118)	.213 (.135)
Masters or above	.259 (.259)	.256 (.226)	.076 (.221)	.085 (.201)
Work full time	-.062 (.071)	-.082 (.06)	-.112 (.108)	-.132 (.102)
Political orientation (Base: Democrat)				
Independent	-.021 (.073)	-.171* (.088)	-.014 (.096)	-.143 (.112)
Republican	-.137** (.047)	-.297*** (.066)	-.041 (.072)	-.187** (.078)
PACV	-.179*** (.021)	-	-.156*** (.028)	-
VCI (average)	-	-.549*** (.133)	-	-.395*** (.073)
Constant	.868* (.393)	-.025 (.347)	.724** (.265)	-.033 (.255)
Region (BEA) fixed effects	Yes	Yes	Yes	Yes
Observations	394	394	394	394
R-squared	.212	.15	.143	.097

Standard errors (clustered at the region level) are in parentheses. Likert-scale (7-point) measures, including dependent variable, are standardized at the individual level (z-score). A more positive score on PACV or VCI denotes higher hesitancy. One responder is dropped from analysis: reported a non-binary gender. \*\*\*  $p < .01$ , \*\*  $p < .05$ , \*  $p < .1$

**Appendix Table A6.** Betrayal aversion across different source conditions (Fixed effect linear regressions).

Dependent variable:	(a) Betrayal Aversion	(b) Betrayal Aversion
Betrayal condition (Base: Side-Effects)		
Active betrayal (Counter-productivity)	-.003 (.072)	-.004 (.068)
Government (maximum betrayal)	.346*** (.061)	.346*** (.057)
Scientists (maximum betrayal)	.395*** (.074)	.388*** (.074)
Message	-.085 (.092)	-.093 (.088)
Non-Betrayal scenario first	.247*** (.059)	.251*** (.059)
Woman	.175 (.097)	.179* (.091)
Age/100	-.319 (.174)	-.32 (.187)
Hispanic	-.162 (.176)	-.158 (.175)
Caucasian	.056 (.093)	.041 (.087)
Education (Base: high school or less)		
Some college	.079 (.149)	.063 (.146)
Bachelor	.053 (.091)	.025 (.087)
Masters or above	.132 (.133)	.109 (.135)
Work full time	.023 (.09)	.024 (.086)
Political orientation (Base: Democrat)		
Independent	-.071 (.111)	-.067 (.119)
Republican	.029 (.082)	.038 (.09)
PACV	-.013 (.015)	-
VCI (average)	-	-.173*** (.049)
Constant	.237 (.203)	.126 (.161)
Region (BEA) fixed effects	Yes	Yes
Observations	684	684
R-squared	.077	.083

Standard errors (clustered at the region level) are in parentheses. Likert-scale (7-point) measures are standardized at the individual level (z-score). Dependent variable is constructed by taking the difference between the z-scored willingness to get the vaccine across the non-betrayal and active betrayal conditions. A more positive score on PACV or VCI denotes higher hesitancy. Four responders are dropped from analysis: two reported a non-binary gender, and one provided a non-existent Zip code, and another indicated an age above 150. \*\*\*  $p < .01$ , \*\*  $p < .05$ , \*  $p < .1$



**Appendix Table A7. Willingness to get COVID-19 vaccination (Fixed effect linear regressions).**

Dependent variable:	(a) Willingness to accept COVID-19 vaccine	(b) Willingness to accept COVID-19 vaccine	(c) Willingness to accept COVID-19 vaccine	(d) Willingness to accept COVID-19 vaccine
Willingness to vaccinate				
Non-betrayal (benchmark)	.435*** (.057)	.467*** (.047)	-	-
Risk-only (benchmark)	-	-	.349** (.127)	.42** (.134)
Non-Betrayal scenario first	-.017 (.057)	.004 (.051)	-	-
Message	-.068 (.107)	-.085 (.092)	-.024 (.113)	-.046 (.106)
Woman	-.132 (.075)	-.125* (.061)	-.017 (.17)	.012 (.126)
Age/100	1.195*** (.154)	1.264*** (.134)	.583* (.293)	.782** (.243)
Hispanic	-.146 (.141)	-.14 (.131)	-.136 (.259)	.134 (.298)
Caucasian	-.1 (.057)	-.143* (.073)	.304* (.138)	.278** (.082)
Education (Base: high school or less)				
Some college	.257*** (.032)	.202*** (.057)	.042 (.372)	-.098 (.248)
Bachelor	.251*** (.049)	.158** (.064)	.318 (.34)	.154 (.23)
Masters or above	.322*** (.072)	.242* (.104)	.515 (.348)	.386 (.238)
Work full time	.148*** (.035)	.135** (.042)	.166 (.237)	.168 (.207)
Political orientation (Base: Democrat)				
Independent	-.29** (.099)	-.344*** (.098)	-.159 (.2)	-.224 (.185)
Republican	-.282** (.09)	-.332*** (.091)	-.516*** (.117)	-.634*** (.107)
PACV	-.134*** (.02)	-	-.174*** (.045)	-
VCI (average)	-	-.636*** (.118)	-	-.713*** (.171)
Constant	.429*** (.122)	-.339*** (.084)	.379 (.491)	-.581 (.313)
Region (BEA) fixed effects	Yes	Yes	Yes	Yes
Observations	684	684	199	199
R-squared	.388	.409	.347	.379

Standard errors (clustered at the region level) are in parentheses. Likert-scale (7-point) measures are standardized at the individual level (z-score). Responses for participants who indicated being fully or partially vaccinated (N=269) were coded as definitely willing to get COVID-19 vaccination (this variable was also standardized using the mean and standard deviation of all other Likert-scale (7-point) measures). A more positive score on PACV or VCI denotes higher hesitancy. Five responders are dropped from analysis: three reported a non-binary gender, and one provided a non-existent Zip code, and another indicated an age above 150. \*\*\* $p < .01$ , \*\* $p < .05$ , \* $p < .1$

## Appendix C.

### Administered survey

**[everything that is underlined and/or in square brackets is not shown to participants]**

Please answer the following questions about the following hypothetical scenario.

[For treatments *Side Effects*, *Side Effects'*, *Side Effects w/ Message* and *Side Effects w/ Message'*]

In today's study, you will be asked to complete two tasks involving hypothetical scenarios. After you complete both tasks, you will be asked to answer survey questions about real world experiences and demographic characteristics.

Please proceed to the next page to begin the first task. Note the highlighted bold text in each hypothetical scenario, which reflects some differences between the two scenarios. Please make sure to read each scenario carefully before selecting your choices.

[next page – *Non-betrayal*; order randomized between *Side Effects*, *Side Effects'*]

Please answer the question based on the following hypothetical scenario:

In the future, a new deadly, highly infectious disease has been spreading across the world. In response, a vaccine has been developed by the scientific community to prevent the spread of the disease.

Suppose you are given the opportunity to get the free vaccine for the highly infectious deadly virus (via an easy-to-take pill) at a convenient location.

**[message condition -shown only in message treatments]**

*The following statement has been circulated to the public: "There is no chance you will regret getting the vaccine, but, if you don't get it then you may either get sick and might die or may get other people sick meaning that they might die, and you could regret it. Imagine how you would*

*feel if you passed the virus to someone else. Just try to imagine how that would feel. Now tell us that you should not do a lot to prevent that terrible feeling of regret that you didn't get the vaccination earlier."*

You are also informed that scientific tests indicate that there is a 2% chance that people like you, who are not treated with the vaccine, will contract the virus and die as a result. Scientific tests also indicate that there is a 1% chance that people treated with the vaccine will contract the virus and die as a result. However, some people who are treated with the vaccine, and who would not have died if they did not get the vaccine, may die in another way.

Specifically, some people that get the vaccine may die due to problems unrelated to the vaccine. Medical tests indicate that there is an additional one chance in 10,000 (0.01%) that someone who is treated with the vaccine will die **due to problems unrelated to the vaccine.**

1. Would you accept or reject getting the vaccine?
  - a. Definitely reject (1)
  - b. Reject (2)
  - c. Unsure, but leaning towards reject (3)
  - d. Indifferent between accepting and rejecting (4)
  - e. Unsure, but leaning towards accept (5)
  - f. Accept (6)
  - g. Definitely accept (7)

[next page – *Side Effects*; order randomized between *Side Effects* and *Side Effects'*]

Please answer the question based on the following hypothetical scenario:

In the future, a new deadly, highly infectious disease has been spreading across the world. In response, a vaccine has been developed by the scientific community to prevent the spread of the disease.

Suppose you are given the opportunity to get the free vaccine for the highly infectious deadly virus (via an easy-to-take pill) at a convenient location.

**[message condition -shown only in message treatments]**

The following statement has been circulated to the public: **"There is no chance you will regret getting the vaccine, but, if you don't get it then you may either get sick and might die or may get other people sick meaning that they might die, and you could regret it. Imagine how you would feel if you passed the virus to someone else. Just try to imagine how that would feel. Now tell us that you should not do a lot to prevent that terrible feeling of regret that you didn't get the vaccination earlier."**

You are also informed that scientific tests indicate that there is a 2% chance that people like you, who are not treated with the vaccine, will contract the virus and die as a result. Scientific tests also indicate that there is a 1% chance that people treated with the vaccine will contract the virus and die as a result. However, some people who are treated with the vaccine, and who would not have died if they did not get the vaccine, may die in another way.

Specifically, some people that get the vaccine may die due to vaccine-induced complications (side effects). Medical tests indicate that there is an additional one chance in 10,000 (0.01%) that someone who is treated with the vaccine will die **due to vaccine-induced complications (side effects)**.

2. Would you accept or reject getting the vaccine?
  - a. Definitely reject (1)

- b. Reject (2)
- c. Unsure, but leaning towards reject (3)
- d. Indifferent between accepting and rejecting (4)
- e. Unsure, but leaning towards accept (5)
- f. Accept (6)
- g. Definitely accept (7)

[For treatments *Risk-Only* and *Risk-Only w/ Message*]

#### Instructions

In today's study, you will be asked to complete one task involving a hypothetical scenario. After you complete the task, you will be asked to answer survey questions about real world experiences and demographic characteristics.

Please proceed to the next page to begin the task. Please make sure to read the scenario carefully before selecting your choices.

[next page – no risk; get either *Risk-Only* and *Risk-Only w/ Message*]

*In the future, a new deadly, highly infectious disease has been spreading across the world. In response, a vaccine has been developed by the scientific community to prevent the spread of the disease.*

Suppose you are given the opportunity to get the free vaccine for the highly infectious deadly virus (via an easy-to-take pill) at a convenient location.

**[message condition -shown only in message treatment]**

The following statement has been circulated to the public: "**There is no chance you will regret getting the vaccine, but, if you don't get it then you may either get sick and might die or may**

**get other people sick meaning that they might die, and you could regret it. Imagine how you would feel if you passed the virus to someone else. Just try to imagine how that would feel. Now tell us that you should not do a lot to prevent that terrible feeling of regret that you didn't get the vaccination earlier."**

You are also informed that scientific tests indicate that there is a 2% chance that people like you, who are not treated with the vaccine, will contract the virus and die as a result. Scientific tests also indicate that there is a 1.01% chance that people treated with the vaccine will contract the virus and die as a result.

1. Would you accept or reject getting the vaccine?
  - a. Definitely reject (1)
  - b. Reject (2)
  - c. Unsure, but leaning towards reject (3)
  - d. Indifferent between accepting and rejecting (4)
  - e. Unsure, but leaning towards accept (5)
  - f. Accept (6)
  - g. Definitely accept (7)

[DR/R/UR/ID/UA/A/DA]

Please indicate the extent by which you agree or disagree with the following statements.

2. I will accept getting the vaccine to protect myself
3. I will accept getting the vaccine to protect friends, family, and at-risk groups.
4. I will wait and see how the vaccine is working before getting it.

5. I will only get the vaccine if it was required by my work or school.
- a. Strongly disagree (1)
  - b. Disagree (2)
  - c. Mildly disagree (3)
  - d. Neither agree nor disagree (4)
  - e. Mildly agree (5)
  - f. Agree (6)
  - g. Strongly agree (7)

[SD/D/MD/NAD/MA/A/SA]

**[follow-up treatments: not pre-registered]**

**[Non-betrayal: benchmark as before]**

Specifically, some people that get the vaccine may die *due to problems unrelated to the vaccine*. Medical tests indicate that there is an additional one chance in 10,000 (0.01%) that someone who is treated with the vaccine will die **due to problems unrelated to the vaccine**.

**[participants were randomly assigned to one of three treatments: Counter-Productivity, Government or Scientists (consult treatments Table in main text)]**

**[Active betrayal 2: by safety device's counter-productivity]**

Specifically, some people that get the vaccine may die *due to the vaccine lowering the recipient's immunity making them more prone to catching the virus*. Medical tests indicate that there is an additional one chance in 10,000 (0.01%) that someone who is treated with the vaccine will die **due to the vaccine lowering the recipient's immunity making them more prone to catching the virus**.

**[Government: Democrat led]**

Specifically, some people that get the vaccine may die *due to a Democrat government in charge that approved the vaccine too rapidly, overlooking certain safety concerns*. Medical tests indicate that there is an additional one chance in 10,000 (0.01%) that someone who is treated with the vaccine will die **due to a Democrat government in charge that approved the vaccine too rapidly, overlooking certain safety concerns**.

**[Government: Republican led]**

Specifically, some people that get the vaccine may die *due to a Republican government in charge that approved the vaccine too rapidly, overlooking certain safety concerns*. Medical tests indicate that there is an additional one chance in 10,000 (0.01%) that someone who is treated with the vaccine will die **due to a Republican government in charge that approved the vaccine too rapidly, overlooking certain safety concerns**.

**[Scientists: pharmaceutical companies]**

Specifically, some people that get the vaccine may die *due to scientists working for pharmaceutical companies developing the vaccine too rapidly, overlooking certain safety concerns*. Medical tests indicate that there is an additional one chance in 10,000 (0.01%) that someone who is treated with the vaccine will die **due to scientists working for pharmaceutical companies developing the vaccine too rapidly, overlooking certain safety concerns**.

**[Scientists: government]**

Specifically, some people that get the vaccine may die *due to scientists working for the government developing the vaccine too rapidly, overlooking certain safety concerns*.



Medical tests indicate that there is an additional one chance in 10,000 (0.01%) that someone who is treated with the vaccine will die **due to *scientists working for the government* developing the vaccine too rapidly, overlooking certain safety concerns.**

**Indicate your preference below:**

Would you accept or reject getting the vaccine? [DR/R/UR/ID/UA/A/DA]

[next page – real world experiences and demographic characteristics]

Next, you will be asked to answer non-hypothetical survey questions about real world experiences and demographic characteristics.

Please proceed to the next page to begin the survey.

**Part 3: Vaccination History [U.S. specific]**

Please answer the following survey questions on your own experiences:

6. Are you up to date on vaccines? [Y/N]
7. Have you gotten a flu vaccine during the current flu season? [yes/no]
8. In the last 5 years (not including the current flu season), how many times have you got the seasonal flu vaccine? [numeric]
9. As new effective vaccines come out in the future, do you plan on remaining up to date with vaccinations? [Y/N]
10. If you were travelling to a country and your doctor says that its recommended but not mandatory to get a vaccine while traveling (such as for Malaria or for Yellow Fever), would you get the vaccine? [Y/N]

**Vaccine Confidence Index (VCI)**

Please evaluate how much you agree or disagree with the following statements:

[SD/D/MD/NAD/MA/A/SA]

11. It is important for individuals to get vaccinated
12. Overall, I think the vaccines currently available are safe
13. Overall, I think the vaccines currently available are effective
14. Vaccines are compatible with my religious belief

**PACV [5-POINT Likert]**

15. I trust the information I receive about vaccines. [SA/A/NS/D/SD]
16. It is better for my child to develop immunity by getting sick than to get a vaccine (if you do not have children, consider children in general). [SA/A/NS/D/SD]
17. It is better for children to get fewer vaccines at the same time. [SA/A/NS/D/SD]
18. Children get more vaccines than are good for them. [SA/A/NS/D/SD]
19. Overall, how hesitant about childhood vaccines would you consider yourself to be?  
[NAH/NTH/NS/SH/VH]

**Part 4: COVID Vaccine history questions**

20. Have you been vaccinated for COVID-19? [yes, partially, no]
  - a. If yes or partially, under what category you got it?
    - i. 65 years and older
    - ii. Healthcare personnel
    - iii. Educational sector personnel
    - iv. Essential worker (other than health and education: e.g., police, firefighter)
    - v. People aged 16-64 years with underlying medical conditions
    - vi. Other [text field]

21. [If No in 1] If a COVID-19 vaccine became available to you, would you accept or reject getting the vaccine? [DR/R/UR/ID/UA/A/DA]

22. If you have been (or plan to be) vaccinated, why did (or will) you get the vaccine? [check all that apply]

- a. Self-protection
- b. Protecting more vulnerable family members
- c. Protecting more vulnerable peers/social circle
- d. Pressure from family members
- e. Pressure from peers/social circle
- f. To feel more comfortable outside home
- g. To participate in voluntary activities that require being vaccinated
- h. Required by work/school
- i. For travel purposes
- j. To set an example for others
- k. Other [please explain]
- l. Do not plan to get vaccinated

**Part 5: Demographic questions**

23. What is your current zip code?

24. Gender:

- a. Man
- b. Non-binary
- c. Woman
- d. Prefer to self-describe [text field]

25. Age (numeric field)

26. Are you

- a. American citizen
- b. Non-American citizen: please specify country of citizenship

27. Are you Hispanic or Latino?

- a. Yes
- b. no

28. How would you describe yourself?

- c. American Indian or Alaska Native
- d. Asian
- a. Black or African American
- b. Native Hawaiian or Other Pacific Islander
- c. White
- d. Other

29. How many children do you have (include stepchildren or any children whom you are/were a primary caregiver)? [Numeric field]

30. What is your total household income?

- a. Less than \$10,000
- b. \$10,000 to \$19,999
- c. \$20,000 to \$29,999
- d. \$30,000 to \$39,999
- e. \$40,000 to \$49,999
- f. \$50,000 to \$59,999

- g. \$60,000 to \$69,999
- h. \$70,000 to \$79,999
- i. \$80,000 to \$89,999
- j. \$90,000 to \$99,999
- k. \$100,000 to \$149,999
- l. \$150,000 or more

31. Are you a smoker?

- a. yes
- b. no

32. Do you:

- a. Work at a full-time job
- b. Work at a part-time job
- c. Do not have a job

33. Please indicate the highest level of education YOU completed:

- a. Some high school
- b. High school diploma or equivalent
- c. Some college or associate degree
- d. B.A.
- e. M.A./M.S./M.B.A.
- f. M.D./J.D./PhD
- g. Other

34. Generally speaking, what do you usually think of yourself as politically?

- a. Republican

- b. Democrat
- c. Libertarian
- d. Independent
- e. Something else

**Part 6: Other supplementary questions (including some (not all) Global Preference Survey measures)**

35. How willing or unwilling are you to take risks. [SU/U/SWU/NWU/SWW/W/SW]

- c. Strongly unwilling [SU]
- d. Unwilling [U]
- e. Somewhat unwilling [SWU]
- f. Neither willing nor unwilling [NWU]
- g. Somewhat willing [SWW]
- h. Willing [W]
- i. Strongly willing [SW]

36. How willing or unwilling are you to give up something that is beneficial for you today in order to benefit more from that in the future. [SU/U/SWU/NWU/SWW/W/SW]

37. How willing or unwilling are you to punish someone who treats YOU unfairly, even if there may be costs for you. [SU/U/SWU/NWU/SWW/W/SW]

38. How willing or unwilling are you to punish someone who treats OTHERS unfairly, even if there may be costs for you. [SU/U/SWU/NWU/SWW/W/SW]

39. How willing or unwilling are you to give to good causes without expecting anything in return. [SU/U/SWU/NWU/SWW/W/SW]

How much do you agree with each of the following statements?

40. When someone does me a favor, I am willing to return it. [SD/D/MD/NAD/MA/A/SA]

41. People can generally be trusted. [SD/D/MD/NAD/MA/A/SA]

42. Government can generally be trusted. [SD/D/MD/NAD/MA/A/SA]

43. Media can generally be trusted. [SD/D/MD/NAD/MA/A/SA]

44. Scientists can generally be trusted. [SD/D/MD/NAD/MA/A/SA]

Now, we will ask you some questions about future, uncertain outcomes. In each case, try to think about the whole range of possible outcomes and think about how likely they are to occur during the next 12 months. In some of the questions, we will ask you about the PERCENT CHANCE of something happening. The percent chance must be a number between zero and one hundred. Numbers like 2 or 5 percent may be “almost no chance,” 20 percent or so may mean “not much chance,” a 45 or 55 percent chance may be a “pretty even chance,” 80 percent or so may mean a “very good chance,” and a 95 or 98 percent chance may be “almost certain.” The percent chance can also be thought of as the NUMBER OF CHANCES OUT OF 100.

45. Estimate the following:

The percentage of the population you believe are willing to receive at some point, or have already received, a vaccination for COVID-19 [Toggle bar]

46. Estimate the following:

How do you think an average American resident would answer the previous question?

[Toggle bar]

47. To what extent are you afraid of the COVID-19 pandemic?

j. An extremely small extent [ES]

k. A small extent [S]

- l. A somewhat small extent [SWS]
- m. A moderate extent [M]
- n. A somewhat large extent [SWL]
- o. A large extent [L]
- p. An extremely large extent [EL]

How much do you agree with each of the following statements?

48. I have regularly practiced social distancing in response to the Covid-19 pandemic.

49. I believe that one should practice social distancing in response to the COVID-19 pandemic.

[SD/D/MD/NAD/MA/A/SA]

50. Estimate the following:

The percentage of the population who are practicing social distancing in response to the COVID-19 pandemic.

51. Estimate the following:

The percentage of the population who believe that one should practice social distancing in response to the COVID-19 pandemic.

52. Suppose there is a crisis and **other people** make a decision or provide information that

makes matters worse. To what extent would you experience negative emotions (e.g.

sadness or anger) as a result? [ES/S/SWS/M/SWL/L/EL]

- q. An extremely small extent [ES]
- r. A small extent [S]
- s. A somewhat small extent [SWS]
- t. A moderate extent [M]
- u. A somewhat large extent [SWL]



- v. A large extent [L]
  - w. An extremely large extent [EL]
53. Suppose there is a crisis and **the government** makes a decision or provides information that makes matters worse. To what extent would you experience negative emotions (e.g. sadness or anger) as a result? [ES/S/SWS/M/SWL/L/EL]
54. Suppose there is a crisis and **the media** makes a decision or provides information that makes matters worse. To what extent would you experience negative emotions (e.g. sadness or anger) as a result? [ES/S/SWS/M/SWL/L/EL]
55. Suppose there is a crisis and **scientists** make a decision or provides information that makes matters worse. To what extent would you experience negative emotions (e.g. sadness or anger) as a result? [ES/S/SWS/M/SWL/L/EL]

Check questions to be included:

1. There are 12 days in a week (True/False)
2. There are two L's in the word "Log" (True/False)
3. Dogs have wings (True/False)
4. Would you rather have \$50 or \$75?
5. Fish live in water (True/False)

## References

1. Shah, A. ASDOC: Stata module to create high-quality tables in MS Word from Stata output. *Statistical Software Components, S458466, Boston College Department of Economics*, 2020.
2. Metropolitan Statistical Areas (MSAs), Micropolitan Statistical Areas, Metropolitan Divisions, Combined Statistical Areas (CSAs), and BEA Regions. Bureau of Economic Analysis, .at <<https://apps.bea.gov/regional/docs/msalist.cfm?mlist=2>>