

COVID-19– Vaccine Hesitancy

Fielded May 2021

Every month, IBM Watson Health® conducts a health poll that surveys approximately 3,000 Americans to gauge attitudes and opinions on a wide range of healthcare issues.

This health poll is powered by the IBM Watson Health PULSE® Healthcare Survey, an independently funded, multi-modal (land line, cell phone, internet) survey that collects information from approximately 60,000 U.S. households annually.

The results depicted in this report represent responses from 3,005 survey participants interviewed from May 1–15, 2021, with a margin of error of +/- 1.8%.

Executive summary

This health poll asked Americans about coronavirus disease 2019 (COVID-19) and their opinions about receiving a COVID-19 vaccination.

Of all respondents:

56%

said they had received a COVID-19 vaccination, compared with 49% who said the same in April¹ and 32% in March 2021.² These rates tend to increase with age, education and income.

21%

said they are Very Concerned about catching COVID-19 in 2021, while 29% said they are Not at all Concerned.

31%

of those that had not received a COVID-19 vaccine said they planned to receive one, 49% said they would not and 20% said they did not know if they would receive one.

87%

said they are practicing social distancing and 90% said they are wearing masks in public.

23%

of those who had not taken the COVID-19 vaccine said the main reason is because of Concerns Over Side Effects, and 22% said it was Concern Over Safety.

19%

said they never feel depressed, while 9% said they feel depressed all of the time.

Source:

55%

said they feel comfortable joining a vaccine credentialing system. This rate tends to increase with education and income.

1. Results from PULSE Health Poll conducted in April 2021. Read more here: <https://www.ibm.com/watson-health/learn/pulse-health-polls>

2. Results from PULSE Health Poll conducted in March 2021. Read more here: <https://www.ibm.com/watson-health/learn/pulse-health-polls>

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Note: Bolded figures are statistically significant.

Note: Care should be taken when interpreting generation breakdown for questions 2, 3 and 4 due to small sample sizes.

Question 1: Have you received the COVID-19 vaccination?

Question 2: If you received the COVID-19 vaccination, are you a medical worker?

Age group (in years)	Yes	No
<35	42.1%	55.7%
35 - 64	53.7%	44.9%
65+	79.1%	20.6%
Total	56.2%	42.5%

Age group (in years)	Yes	No
<35	12.3%	87.7%
35 - 64	5.0%	95.0%
65+	1.7%	98.3%
Total	5.5%	94.5%

Education level	Yes	No
HS or Less	40.3%	58.3%
Some College/Associate	47.8%	51.4%
College+	69.5%	28.8%
Total	56.2%	42.5%

Education level	Yes	No
HS or Less	2.2%	97.8%
Some College/Associate	7.9%	92.1%
College+	5.5%	94.5%
Total	5.5%	94.5%

Generation	Yes	No
Silent Generation	85.3%	14.7%
Baby Boomers	75.0%	24.4%
Generation X	53.9%	44.5%
Millennials	42.2%	55.9%
Total	56.2%	42.5%

Generation	Yes	No
Silent Generation	3.5%	96.5%
Baby Boomers	2.1%	97.9%
Generation X	4.6%	95.4%
Millennials	11.3%	88.7%
Total	5.5%	94.5%

Annual income	Yes	No
<\$25k	39.5%	58.5%
\$25k - \$49.9k	51.8%	47.0%
\$50k - \$99.9k	62.4%	36.8%
\$100k+	70.1%	28.3%
Total	56.2%	42.5%

Annual income	Yes	No
<\$25k	5.0%	95.0%
\$25k - \$49.9k	6.8%	93.2%
\$50k - \$99.9k	5.7%	94.3%
\$100k+	4.2%	95.8%
Total	5.5%	94.5%

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Note: Care should be taken when interpreting generation breakdown for questions 2, 3 and 4 due to small sample sizes.

Question 3: If you received the COVID-19 vaccination, are you a front line worker?

Question 4: If you received the COVID-19 vaccination, are you a senior citizen?

Age group (in years)	Yes	No
<35	14.9%	85.1%
35 - 64	10.7%	89.3%
65+	1.4%	98.6%
Total	8.6%	91.4%

Age group (in years)	Yes	No
<35	2.6%	97.4%
35 - 64	1.2%	98.8%
65+	84.6%	15.4%
Total	28.0%	72.0%

Education level	Yes	No
HS or Less	7.2%	92.8%
Some College/Associate	11.4%	88.6%
College+	7.9%	92.1%
Total	8.6%	91.4%

Education level	Yes	No
HS or Less	30.6%	69.4%
Some College/Associate	27.4%	72.6%
College+	27.4%	72.6%
Total	28.0%	72.0%

Generation	Yes	No
Silent Generation	1.2%	98.8%
Baby Boomers	3.2%	96.8%
Generation X	9.8%	90.2%
Millennials	15.5%	84.5%
Total	8.6%	91.4%

Generation	Yes	No
Silent Generation	92.1%	7.9%
Baby Boomers	64.6%	35.4%
Generation X	0.9%	99.1%
Millennials	2.6%	97.4%
Total	28.0%	72.0%

Annual income	Yes	No
<\$25k	9.1%	90.9%
\$25k - \$49.9k	8.7%	91.3%
\$50k - \$99.9k	8.5%	91.5%
\$100k+	8.9%	91.1%
Total	8.6%	91.4%

Annual income	Yes	No
<\$25k	26.0%	74.0%
\$25k - \$49.9k	29.1%	70.9%
\$50k - \$99.9k	29.1%	70.9%
\$100k+	23.4%	76.6%
Total	28.0%	72.0%

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Question 5: If you haven't received the COVID-19 vaccination, are you more likely to get a vaccine now that approximately 25% of Americans are fully vaccinated?

Age group (in years)	Yes	No	Don't know
<35	28.4%	58.4%	13.3%
35 - 64	30.7%	50.4%	18.9%
65+	16.7%	51.3%	31.5%
Total	28.3%	53.4%	18.2%

Education level

HS or Less	23.6%	55.3%	21.1%
Some College/Associate	25.7%	55.7%	18.5%
College+	36.1%	49.0%	14.8%
Total	28.3%	53.4%	18.2%

Generation

Silent Generation	26.8%	35.8%	37.4%
Baby Boomers	16.7%	56.5%	26.5%
Generation X	32.5%	47.8%	19.7%
Millennials	28.6%	57.4%	14.0%
Total	28.3%	53.4%	18.2%

Annual income

<\$25k	20.3%	58.4%	21.3%
\$25k - \$49.9k	28.8%	52.5%	18.7%
\$50k - \$99.9k	31.8%	52.7%	15.4%
\$100k+	38.6%	47.2%	14.3%
Total	28.3%	53.4%	18.2%

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Question 6: If you haven't received the COVID-19 vaccination, do you plan on getting the COVID-19 vaccination?

Age group (in years)	Yes	No	Don't know
<35	32.7%	54.4%	12.7%
35 - 64	32.7%	45.8%	21.5%
65+	18.7%	48.2%	32.7%
Total	31.2%	49.2%	19.5%

Education level

HS or Less	26.3%	54.3%	19.4%
Some College/Associate	26.7%	53.5%	19.6%
College+	41.1%	39.3%	19.4%
Total	31.2%	49.2%	19.5%

Generation

Silent Generation	31.6%	35.8%	32.6%
Baby Boomers	19.4%	53.0%	27.2%
Generation X	35.2%	43.0%	21.7%
Millennials	31.6%	53.2%	15.0%
Total	31.2%	49.2%	19.5%

Annual income

<\$25k	23.2%	57.9%	18.8%
\$25k - \$49.9k	31.6%	47.2%	21.1%
\$50k - \$99.9k	33.1%	48.3%	18.4%
\$100k+	44.8%	36.8%	18.4%
Total	31.2%	49.2%	19.5%

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Question 7: (For those who have not received the COVID-19 vaccination) What is the main reason you have not received the COVID-19 vaccination? (Note: Details excluded for categories with less than 5% response rate)

	Not available/ offered	Safety concerns	Side effects	I don't need in general	Questions/ Concerns about vaccine	Appointment scheduled
Age group (in years)						
<35	8.8%	19.5%	18.7%	16.9%	6.9%	5.7%
35 - 64	8.8%	20.6%	23.6%	10.5%	8.9%	8.3%
65+	1.9%	34.2%	32.3%	9.4%	7.0%	7.3%
Total	8.1%	21.7%	22.7%	12.7%	8.0%	7.2%
Education level						
HS or Less	8.4%	21.6%	26.9%	12.5%	6.3%	3.6%
Some College/Associate	8.0%	25.0%	19.7%	12.9%	10.4%	5.5%
College+	7.7%	18.1%	21.6%	12.7%	7.1%	12.8%
Total	8.1%	21.7%	22.7%	12.7%	8.0%	7.2%
Generation						
Silent Generation	3.5%	48.8%	18.9%	0.0%	0.0%	6.5%
Baby Boomers	2.3%	29.3%	32.9%	11.2%	8.3%	6.2%
Generation X	7.9%	22.5%	22.8%	9.2%	9.8%	8.1%
Millennials	10.1%	18.0%	19.6%	16.3%	6.7%	6.8%
Total	8.1%	21.7%	22.7%	12.7%	8.0%	7.2%
Annual income						
<\$25k	7.0%	20.4%	23.6%	14.2%	6.4%	4.3%
\$25k - \$49.9k	9.3%	24.3%	24.0%	11.1%	8.1%	5.6%
\$50k - \$99.9k	8.3%	21.1%	22.9%	12.7%	9.4%	8.2%
\$100k+	6.0%	18.3%	16.5%	14.0%	6.5%	16.3%
Total	8.1%	21.7%	22.7%	12.7%	8.0%	7.2%

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Question 7: (For those who have not received the COVID-19 vaccination) What is the main reason you have not received the COVID-19 vaccination? (Note: Details excluded for categories with less than 5% response rate)

	Other	Concern about vaccine giving COVID-19	Don't know	No insurance (cost)	Already had COVID-19	Refused	Insurance may not cover (cost)
Total	4.9%	4.1%	2.5%	2.1%	3.5%	1.3%	1.2%

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Question 8: How often do you feel depressed? Would you say...?

Age group (in years)	All of the time	Most of the time	Sometimes	Rarely	Never
<35	15.5%	19.0%	33.2%	20.2%	11.4%
35 - 64	8.7%	9.6%	34.6%	29.8%	16.7%
65+	0.8%	3.0%	19.5%	41.3%	35.2%
Total	8.8%	10.7%	30.8%	29.7%	19.4%

Education level

HS or Less	14.2%	11.6%	33.4%	24.1%	16.0%
Some College/Associate	5.7%	12.9%	31.1%	28.1%	21.9%
College+	8.0%	9.0%	29.4%	33.5%	19.5%
Total	8.8%	10.7%	30.8%	29.7%	19.4%

Generation

Silent Generation	0.0%	2.1%	10.4%	51.2%	36.3%
Baby Boomers	1.4%	3.8%	23.5%	38.6%	32.6%
Generation X	7.7%	10.4%	34.8%	30.1%	16.4%
Millennials	16.1%	16.9%	34.2%	20.8%	11.3%
Total	8.8%	10.7%	30.8%	29.7%	19.4%

Annual income

<\$25k	12.4%	16.5%	36.6%	18.3%	15.3%
\$25k - \$49.9k	8.1%	12.2%	30.2%	30.8%	18.4%
\$50k - \$99.9k	7.3%	8.2%	30.6%	31.3%	22.0%
\$100k+	9.6%	6.9%	27.5%	35.0%	20.7%
Total	8.8%	10.7%	30.8%	29.7%	19.4%

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Question 9: (For those who have not received the COVID-19 vaccination) What would it take for you to get the COVID-19 vaccination? (Note: Details excluded for categories with less than 5% response rate)

Age group (in years)	Availability	Will not take vaccine	Additional safety information	Additional side effect information
<35	10.6%	32.5%	7.4%	13.7%
35 - 64	9.1%	35.1%	9.4%	8.7%
65+	4.0%	34.4%	15.4%	7.6%
Total	9.1%	34.1%	9.3%	10.4%

Education level

HS or Less	7.5%	36.8%	9.6%	10.7%
Some College/Associate	8.1%	36.1%	9.9%	9.9%
College+	12.2%	28.6%	8.2%	10.8%
Total	9.1%	34.1%	9.3%	10.4%

Generation

Silent Generation	9.5%	38.3%	5.7%	12.3%
Baby Boomers	4.4%	36.6%	11.7%	8.6%
Generation X	8.0%	35.3%	10.7%	7.2%
Millennials	11.4%	32.2%	7.6%	13.4%
Total	9.1%	34.1%	9.3%	10.4%

Annual income

<\$25k	9.5%	37.8%	8.0%	8.1%
\$25k - \$49.9k	8.1%	34.3%	10.0%	11.4%
\$50k - \$99.9k	9.0%	32.2%	10.1%	10.1%
\$100k+	13.2%	28.5%	7.6%	12.8%
Total	9.1%	34.1%	9.3%	10.4%

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Question 9: (For those who have not received the COVID-19 vaccination) What would it take for you to get the COVID-19 vaccination? (Note: Details excluded for categories with less than 5% response rate)

Age group (in years)	Doctor recommendation	Additional education	Larger numbers of vaccinations		
<35	6.4%	7.9%	5.3%		
35 - 64	4.0%	6.1%	6.5%		
65+	7.4%	5.8%	3.8%		
Total	5.3%	6.8%	5.7%		
Education level					
HS or Less	3.4%	5.1%	5.4%		
Some College/Associate	4.3%	7.0%	4.1%		
College+	8.8%	8.3%	8.1%		
Total	5.3%	6.8%	5.7%		
Generation					
Silent Generation	23.3%	0.0%	0.0%		
Baby Boomers	3.4%	5.9%	4.2%		
Generation X	4.5%	6.0%	8.1%		
Millennials	6.0%	7.8%	4.5%		
Total	5.3%	6.8%	5.7%		
Annual income					
<\$25k	4.5%	6.5%	3.4%		
\$25k - \$49.9k	5.3%	6.6%	5.4%		
\$50k - \$99.9k	6.6%	8.1%	7.7%		
\$100k+	5.2%	5.2%	9.1%		
Total	5.3%	6.8%	5.7%		
Total	10.0%	4.1%	4.8%	0.4%	

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Question 10: Are you comfortable joining a vaccine credentialing system that would allow you to prove your vaccinated status?

Age group (in years)	Yes	No	Don't know
<35	51.5%	38.5%	9.4%
35 - 64	56.6%	29.8%	12.9%
65+	55.9%	24.1%	19.9%
Total	55.0%	30.9%	13.5%

Education level

HS or Less	44.1%	41.6%	13.6%
Some College/Associate	48.4%	36.5%	14.5%
College+	64.6%	22.0%	12.9%
Total	55.0%	30.9%	13.5%

Generation

Silent Generation	60.5%	20.7%	18.8%
Baby Boomers	55.2%	26.4%	18.3%
Generation X	57.6%	28.7%	13.0%
Millennials	51.7%	37.4%	10.2%
Total	55.0%	30.9%	13.5%

Annual income

<\$25k	44.4%	40.4%	14.5%
\$25k - \$49.9k	53.3%	32.7%	13.4%
\$50k - \$99.9k	55.8%	29.3%	14.4%
\$100k+	70.0%	19.8%	9.7%
Total	55.0%	30.9%	13.5%

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Question 11: How concerned are you about catching COVID-19 in 2021?

Age group (in years)	Very concerned	Somewhat concerned	A little concerned	Not at all concerned
<35	22.1%	22.4%	27.4%	26.7%
35 - 64	24.7%	21.6%	25.2%	27.4%
65+	11.3%	18.3%	36.5%	33.1%
Total	20.9%	21.1%	28.4%	28.5%

Education level

HS or Less	24.1%	19.2%	29.0%	25.8%
Some College/Associate	15.8%	22.6%	29.4%	31.2%
College+	22.5%	21.1%	27.5%	28.2%
Total	20.9%	21.1%	28.4%	28.5%

Generation

Silent Generation	4.4%	15.9%	43.3%	34.7%
Baby Boomers	12.2%	19.0%	34.8%	33.6%
Generation X	26.2%	22.7%	22.8%	27.5%
Millennials	23.7%	21.6%	27.8%	25.3%
Total	20.9%	21.1%	28.4%	28.5%

Annual income

<\$25k	22.7%	17.5%	29.0%	28.6%
\$25k - \$49.9k	16.3%	23.3%	28.9%	30.6%
\$50k - \$99.9k	21.4%	20.7%	31.9%	25.1%
\$100k+	26.4%	21.6%	20.3%	31.1%
Total	20.9%	21.1%	28.4%	28.5%

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Question 12: Are you still practicing social distancing?

Age group (in years)	Yes	No
<35	81.5%	15.6%
35 - 64	88.1%	10.7%
65+	90.2%	9.2%
Total	86.7%	11.7%

Education level

HS or Less	86.9%	12.0%
Some College/Associate	84.4%	13.8%
College+	88.1%	10.4%
Total	86.7%	11.7%

Generation

Silent Generation	90.3%	8.9%
Baby Boomers	89.1%	10.3%
Generation X	90.1%	8.8%
Millennials	81.5%	16.0%
Total	86.7%	11.7%

Annual income

<\$25k	85.1%	12.0%
\$25k - \$49.9k	85.8%	12.9%
\$50k - \$99.9k	88.3%	10.4%
\$100k+	87.2%	12.2%
Total	86.7%	11.7%

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Question 13: Are you still wearing a mask in public?

Age group (in years)	Yes	No
<35	86.2%	12.1%
35 - 64	90.6%	8.9%
65+	93.2%	6.4%
Total	90.0%	9.2%

Education level

HS or Less	89.6%	10.2%
Some College/Associate	86.7%	11.8%
College+	92.1%	7.2%
Total	90.0%	9.2%

Generation

Silent Generation	94.4%	5.6%
Baby Boomers	91.8%	7.7%
Generation X	91.6%	7.9%
Millennials	86.6%	12.0%
Total	90.0%	9.2%

Annual income

<\$25k	88.0%	10.6%
\$25k - \$49.9k	89.0%	9.7%
\$50k - \$99.9k	91.2%	8.6%
\$100k+	92.0%	7.6%
Total	90.0%	9.2%

Learn More

Explore other PULSE Health Polls here:
<https://www.ibm.com/watson-health/learn/pulse-health-polls>

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