

# How Many Adults Are at Risk of Serious Illness If Infected with Coronavirus?

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As the number of people in the U.S. with coronavirus disease (COVID-19) continues to grow, there is increasing concern for adults who have a higher risk of developing serious illness if they are infected. [The majority of people who become infected are expected to be asymptomatic or recover without needing special treatment](#), according to the World Health Organization. However, based on the most current information made available by the Centers for Disease Control and Prevention (CDC), [older people and younger adults with serious medical conditions](#), such as heart disease, diabetes and lung disease, have a greater risk of becoming severely ill if they get infected with coronavirus. CDC has issued specific [guidance](#) for people who fall into these categories.

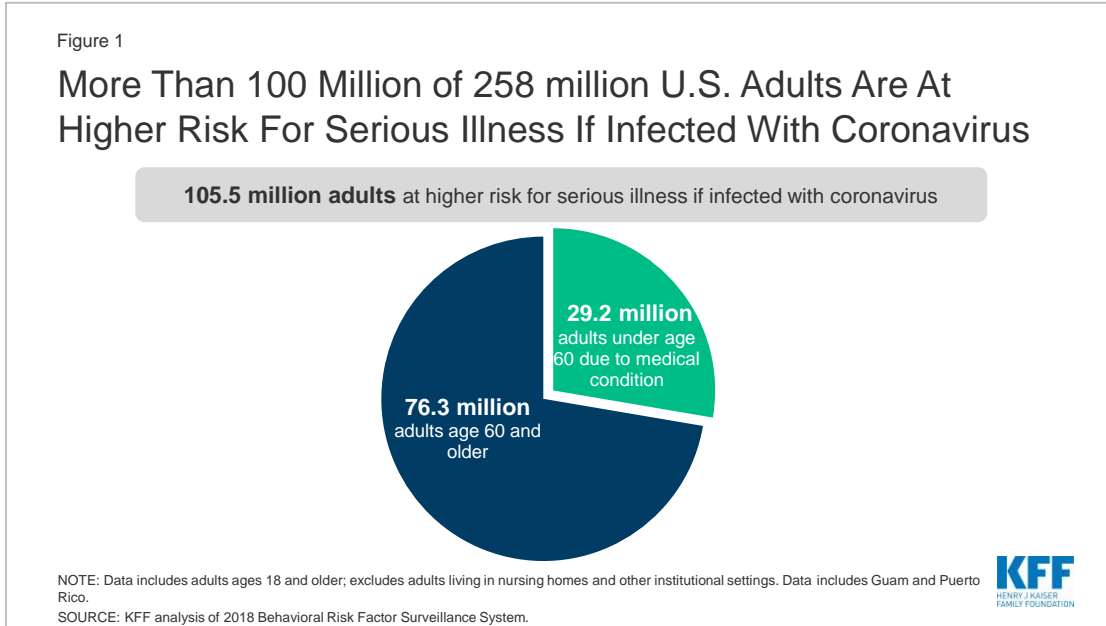
To inform discussions about the challenges associated with coronavirus in the U.S., we analyzed data from the 2018 Behavioral Risk Factor Surveillance System (BRFSS) to estimate the total number of adults nationwide, and by state, who have an elevated risk of serious illness if they are infected with coronavirus. We recognize that our collective understanding of risk factors will continue to evolve as the disease spreads, and as CDC and others learn more about its effects on different populations. Based on information currently available, our definition of high risk includes older adults ([ages 60 or older](#)) and younger adults between the [ages of 18 and 59 with heart disease, cancer, chronic obstructive pulmonary disease \(COPD\) or diabetes](#). We were unable to include hypertension as a risk factor because it is not tracked by the survey.

## Key Findings

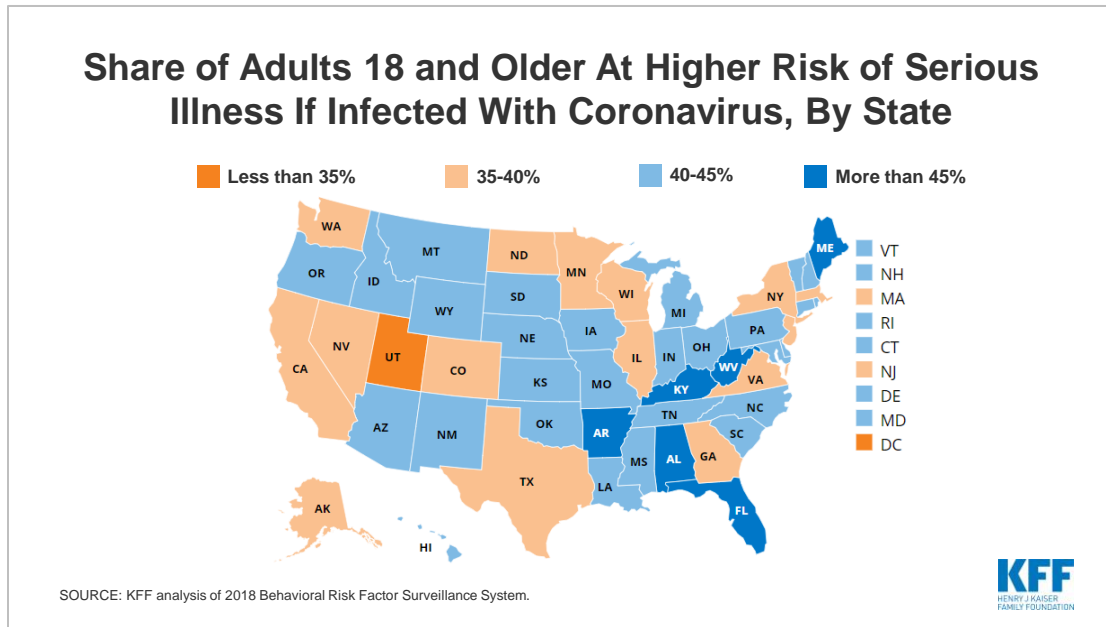
- About four in ten adults (41%) ages 18 and older in the U.S. (105.5 million people) have a higher risk of developing serious illness if they are infected with coronavirus, due to their older age (60 and older) or health condition (**Figure 1; Table 1**).
- Most of those at higher risk of developing a serious illness are older (72.4% or 76.3 million adults); however, the remaining 29.2 million adults ages 18-59 are at risk due to an underlying medical condition.
- Adults who are both older and have these underlying medical conditions have an even greater risk of developing severe illness if they become infected. Among adults age 60 or older, more than half also have a serious medical condition (54%), rising to nearly two thirds (62%) of people age 80 and older.
- The share of adults ages 18 and older who have a higher risk of developing a more serious illness varies across the country, ranging from 31 percent (Washington, D.C.) to 51 percent (West Virginia). In

Washington State, California and New York, some of the states hardest hit by COVID-19 thus far, the share of adults at high risk is 40 percent, 37 percent and 40 percent respectively.

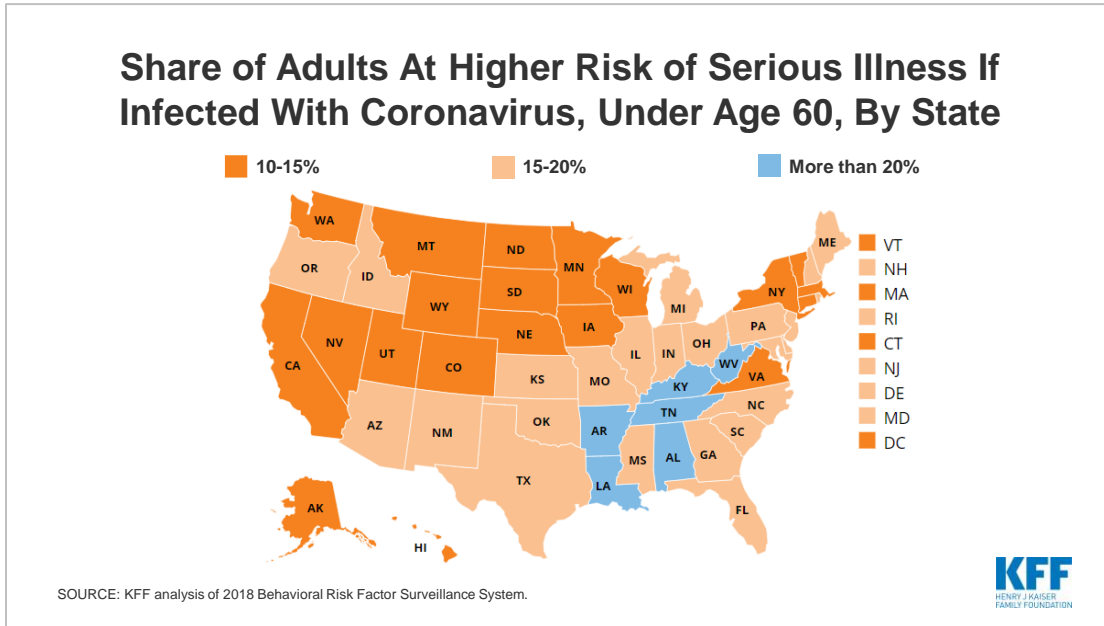
- An estimated 5.7 million adults who are at higher risk of getting a serious illness if they become infected with coronavirus are uninsured, including 3.9 million adults under age 60 and 1.8 million who are ages 60-64.



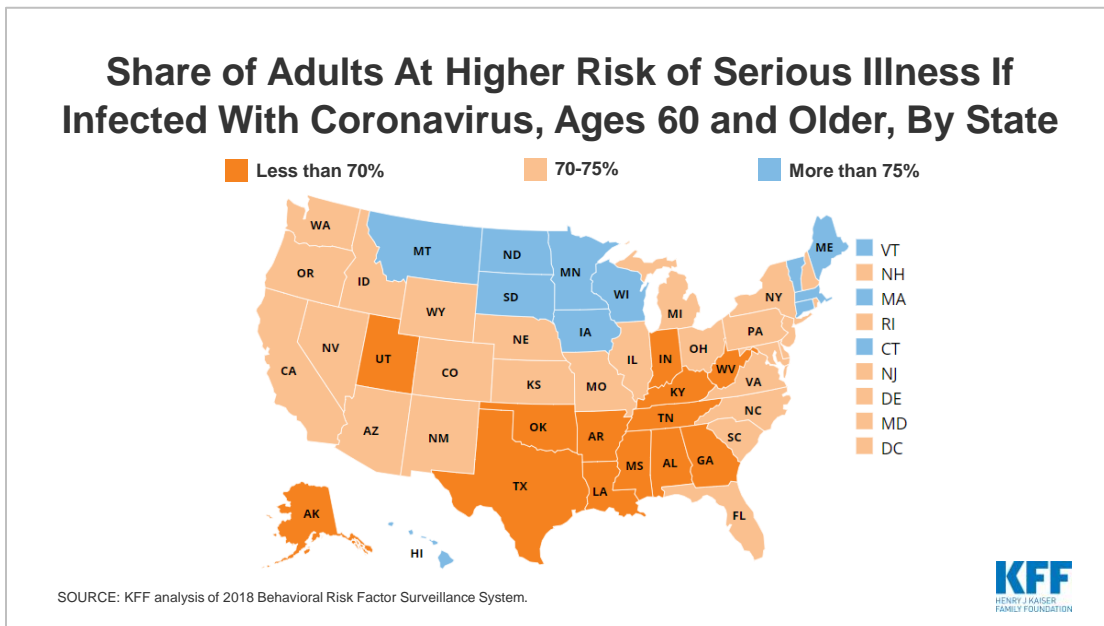
## Interactive 1. Share of Adults 18 and Older At Higher Risk of Serious Illness If Infected With Coronavirus, By State



## Interactive 2. Share of Adults At Higher Risk of Serious Illness If Infected With Coronavirus, Under Age 60, By State



## Interactive 3. Share of Adults At Higher Risk of Serious Illness If Infected With Coronavirus, Ages 60 and Older, By State



## Discussion

The majority of people who become infected with coronavirus are not expected to become seriously ill, but a large segment of the U.S. adult population – 41 percent of adults ages 18 and older – have a higher risk of serious illness if they do become infected due to their age or underlying medical condition. One group particularly at risk are the [1.3 million people living in nursing homes in the US](#). As the number of people who test positive for coronavirus continues to rise, and as more is learned about the progression of illness and treatment among those who become seriously ill, the current set of risk factors available to estimate the size of the at-risk population is likely to be refined. Given the paucity of data at this stage of the pandemic, and the high stakes involved for people who do get seriously ill, these estimates confirm the need to take unprecedented efforts to minimize the spread of the coronavirus.

### Methods

This brief analyzes data from the nationally-representative, cross-sectional 2018 Behavioral Risk Factor Surveillance System (BRFSS) of adults ages 18 and older living in the community. All analysis incorporated BRFSS survey weights to account for the complex sampling design. Data represent adults who report ever being told by a doctor that they have one of the listed conditions. BRFSS is an ongoing, state-based, random-digit-dialed telephone survey of non-institutionalized civilian adults. Information about the BRFSS is available at <http://www.cdc.gov/brfss/index.html>.

**Table 1: Number of U.S. Adults At Higher Risk Of Serious Illness If Infected With Coronavirus**

	Total, adults ages 18 and older			Adults under age 60			Adults age 60 and older	
	Total number, adults 18 and older	Number at risk, adults 18 and older	At-risk adults, as a share of all adults ages 18 and older	Total number, adults under age 60	Number at risk due to health conditions, adults under age 60	Share of adults under age 60 at risk	Total number, adults age 60 and older	Older adults, as a share of all at-risk adults
Overall	258,073,390	105,508,720	40.9%	181,732,900	29,168,230	16.1%	76,340,490	72.4%
Alabama	3,810,260	1,756,630	46.1%	2,620,083	566,450	21.6%	1,190,170	67.8%
Alaska	556,390	196,440	35.3%	419,878	59,930	14.3%	136,510	69.5%
Arizona	5,497,320	2,320,930	42.2%	3,810,152	633,770	16.6%	1,687,160	72.7%
Arkansas	2,321,220	1,079,560	46.5%	1,598,536	356,880	22.3%	722,680	66.9%
California	30,806,310	11,405,140	37.0%	22,523,811	3,122,640	13.9%	8,282,500	72.6%
Colorado	4,444,870	1,616,650	36.4%	3,242,253	414,030	12.8%	1,202,610	74.4%
Connecticut	2,852,650	1,163,280	40.8%	1,964,143	274,780	14.0%	888,500	76.4%
Delaware	769,120	337,910	43.9%	518,403	87,190	16.8%	250,720	74.2%
District of Columbia	577,410	178,510	30.9%	450,099	51,200	11.4%	127,310	71.3%
Florida	17,206,330	7,997,800	46.5%	11,219,768	2,011,240	17.9%	5,986,560	74.9%
Georgia	8,074,090	3,189,150	39.5%	5,873,782	988,850	16.8%	2,200,310	69.0%
Hawaii	1,122,170	461,390	41.1%	770,334	109,550	14.2%	351,840	76.3%
Idaho	1,310,470	542,100	41.4%	912,172	143,790	15.8%	398,300	73.5%
Illinois	9,910,660	3,930,010	39.7%	7,044,811	1,064,160	15.1%	2,865,850	72.9%
Indiana	5,141,870	2,203,010	42.8%	3,621,951	683,090	18.9%	1,519,920	69.0%
Iowa	2,434,240	1,002,750	41.2%	1,668,131	236,630	14.2%	766,110	76.4%
Kansas	2,212,590	903,980	40.9%	1,544,045	235,430	15.2%	668,540	74.0%
Kentucky	3,471,410	1,579,790	45.5%	2,384,137	492,520	20.7%	1,087,270	68.8%
Louisiana	3,595,230	1,553,670	43.2%	2,551,197	509,640	20.0%	1,044,030	67.2%
Maine	1,089,320	514,050	47.2%	700,623	125,360	17.9%	388,690	75.6%
Maryland	4,750,690	1,911,910	40.2%	3,376,067	537,290	15.9%	1,374,620	71.9%
Massachusetts	5,539,860	2,160,430	39.0%	3,872,650	493,230	12.7%	1,667,210	77.2%
Michigan	7,830,170	3,389,720	43.3%	5,371,485	931,030	17.3%	2,458,680	72.5%
Minnesota	4,335,800	1,681,520	38.8%	3,029,819	375,540	12.4%	1,305,980	77.7%
Mississippi	2,279,080	993,440	43.6%	1,600,203	314,570	19.7%	678,880	68.3%
Missouri	4,762,640	2,079,890	43.7%	3,301,102	618,360	18.7%	1,461,530	70.3%
Montana	834,170	363,300	43.6%	551,399	80,520	14.6%	282,780	77.8%
Nebraska	1,460,610	583,600	40.0%	1,025,529	148,520	14.5%	435,080	74.6%
Nevada	2,376,440	944,030	39.7%	1,682,170	249,770	14.8%	694,270	73.5%
New Hampshire	1,095,210	486,830	44.5%	738,454	130,070	17.6%	356,760	73.3%
New Jersey	7,078,480	2,818,780	39.8%	5,008,891	749,200	15.0%	2,069,580	73.4%
New Mexico	1,605,610	687,000	42.8%	1,099,806	181,190	16.5%	505,810	73.6%
New York	15,727,230	6,248,460	39.7%	11,130,182	1,651,410	14.8%	4,597,050	73.6%
North Carolina	8,122,850	3,407,310	41.9%	5,697,079	981,530	17.2%	2,425,770	71.2%
North Dakota	580,620	220,390	38.0%	414,022	53,790	13.0%	166,600	75.6%
Ohio	9,110,930	3,956,510	43.4%	6,239,876	1,085,450	17.4%	2,871,060	72.6%
Oklahoma	2,996,630	1,274,750	42.5%	2,105,639	383,760	18.2%	890,990	69.9%
Oregon	3,336,360	1,447,500	43.4%	2,299,991	411,130	17.9%	1,036,370	71.6%
Pennsylvania	10,177,680	4,455,250	43.8%	6,872,191	1,149,760	16.7%	3,305,490	74.2%
Rhode Island	855,850	363,200	42.4%	589,646	96,990	16.4%	266,200	73.3%
South Carolina	4,000,770	1,788,480	44.7%	2,719,708	507,420	18.7%	1,281,060	71.6%
South Dakota	663,690	268,500	40.5%	454,877	59,680	13.1%	208,820	77.8%
Tennessee	5,289,400	2,338,210	44.2%	3,691,691	740,500	20.1%	1,597,710	68.3%
Texas	21,475,630	7,827,970	36.5%	16,091,113	2,443,450	15.2%	5,384,510	68.8%
Utah	2,238,190	749,470	33.5%	1,728,836	240,110	13.9%	509,360	68.0%
Vermont	507,040	220,570	43.5%	331,180	44,710	13.5%	175,860	79.7%
Virginia	6,675,220	2,618,840	39.2%	4,758,327	701,950	14.8%	1,916,890	73.2%
Washington	5,891,910	2,331,160	39.6%	4,149,456	588,710	14.2%	1,742,460	74.7%
West Virginia	1,438,650	734,590	51.1%	937,210	233,150	24.9%	501,440	68.3%
Wisconsin	4,545,490	1,804,220	39.7%	3,143,755	402,490	12.8%	1,401,730	77.7%
Wyoming	441,870	179,530	40.6%	308,190	45,840	14.9%	133,680	74.5%
Guam	107,050	32,560	30.4%	88,835	14,350	16.2%	18,210	55.9%

Puerto Rico	2,737,640	1,208,050	44.1%		1,885,209	355,620	18.9%		852,430	70.6%
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NOTE: State counts may not sum to overall due to rounding. Data includes adults ages 18 and older; excludes adults living in nursing homes and other institutional settings.  
SOURCE: KFF analysis of 2018 Behavioral Risk Factor Surveillance System.