



Public Health, Energy & Climate Change

A Maryland Statewide Survey | Fall 2015



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This survey was funded by the Town Creek Foundation of Easton, MD. We thank the Foundation and Executive Director Stuart Clarke for their support. We also thank members of the Climate Communication Consortium of Maryland (climatemaryland.org), many of whom assisted in the development of the survey.

The research was made possible by the expertise and hard work of many individuals, including a team of students at George Mason University. Paige Frasier and Bill Rohring provided invaluable help in coordinating the survey's fielding. They – with additional assistance provided by Mason undergraduate and graduate students Caroline Boules, Premchand Chandra, Aiya Al-Beyati, Refka Al-Beyati, Kristina Clarin, NahJah Gardiner, Brittany Grutter, Danielle Kirby, Deanna Kirby, Stacy Nelson, Emily Novack, Nathalie Rosado-Burgos, Amy Rose, Pary Shuaib, Olivia Stanford, Batel Yona, Roxana Kazemi, Elloise Lotoc, and Suzanne Hewitt – assembled the mailings over a series of long weekends. Paul Weiss from Emory University provided statistical support for the weights. Paul Delamater from George Mason University provided assistance in mapping the survey data. Any errors are those of the authors.

Credits, cover photo:

Crystal Romeo-Upperman, doctoral student at the University of Maryland School of Public Health and program manager at the Maryland Department of Health and Mental Hygiene, holds an inhaler in front of a magnified image of pollen grains. Photographer, David Harp.

Suggested citation:

Akerlof, K., Winch, P., Parker, C., & Buckland, A. (2015). *Public health, energy & climate change, fall 2015*. Fairfax, VA: Center for Climate Change Communication, George Mason University.

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Executive Summary

In 2009, the U.S. Environmental Protection Agency found that the greenhouse gases that cause climate change endanger human health and welfare,¹ making climate change not just an environmental issue, but a public health concern.

Human health is directly and indirectly affected by climate change through higher temperatures, extreme weather, declines in water availability and the productivity of food systems, and increased air pollution. The combustion of fossil fuels by motor vehicles and power plants emits climate change-causing pollution along with other types of air contaminants that directly harm people's health. By reducing the emissions that cause climate change, we also lessen other types of pollution from the same sources, resulting in immediate improvements in health and well-being.

Maryland has been working to clean up its air through policies like the Clean Cars Act and the Healthy Air Act. The latter regulates coal-fired plant emissions and instructs the state to participate in a regional market-based trading system for climate change-causing emissions. Much of Maryland's air pollution originates in other states; yet even so, Maryland has claimed recent successes in lowering air pollution rates.²

Fast facts on climate and health

- The reduction of greenhouse gas emissions through the Greenhouse Gas Reduction Act Plan also **lowers other pollutants that harm air and water quality and human health.**
- **Power generation and transportation are the primary sources of Maryland's greenhouse gas emissions and other air pollutants** that affect a diverse array of human systems (i.e., neurological, cardiovascular, respiratory, immune and reproductive).
- **Heat is the leading cause of deaths related to weather in the United States.** Heat waves increase death rates especially in the elderly and other susceptible populations including children, the mentally ill, those with pre-existing conditions like heart and lung diseases, and those who have occupations that expose them to heat stresses.
- Every year, **air pollution contributes to the top four leading causes of death** in Maryland.^a
- About half of all deaths in Maryland are due to heart disease, cancer, stroke and chronic obstructive heart disease – conditions made worse by air pollution.^a
- **Air pollution is thought to contribute to asthma suffered by one in nine children in Maryland.**^b
- **Poor air quality is associated with a higher risk of pre-term birth and birth defects.**^c

^a Maryland Department of Health and Mental Hygiene. (2012). *Maryland vital statistics annual report, 2012*. Baltimore, MD: Vital Statistics Administration, DHMH. Available at <http://www.dhmf.maryland.gov/vsa/Documents/12annual.pdf>

^b Centers for Disease Control. (2013). *Child current asthma prevalence rate by state or territory: BRFSS 2013*. Available at www.cdc.gov/asthma/brfss/2013/child/c4.pdf

^c Nieuwenhuijsen, M. J., Dadvand, P., Grellier, J., Martinez, D., & Vrijheid, M. (2013). Environmental risk factors of pregnancy outcomes: a summary of recent meta-analyses of epidemiological studies. *Environ Health*, 12(1), 6.

¹ Endangerment and cause or contribute findings for greenhouse gases under section 202(a) of the Clean Air Act, 74 Fed. Reg. 66496-99. (Dec. 2009)

² U.S. EPA. (2015). *Clean data determination [Baltimore, 8-hour ozone]*. Available at <http://www3.epa.gov/airquality/greenbk/adden.html>

For the past three years, we have been asking Maryland residents questions about their understanding of the effects of energy choices and climate change on their health and that of their communities. This year George Mason University partnered with the Johns Hopkins Bloomberg School of Public Health in fielding the survey. This report is one of three released from the 2015 data; other reports highlight attitudes, behaviors and policy preferences on energy, and climate change policies and concerns other than public health.

Key findings from this report include:

1. Most say air pollution and chemicals are the top threats to their health.

- Air pollution (82%) and exposure to chemicals (80%) are the most frequently named “major” or “moderate” personal health risks and have been since 2013.
- Climate change is recognized as a personal health threat by almost two-thirds (63%) of survey respondents.
- A number of the health threats cited more frequently as moderate or major personal risks than climate change include its direct and indirect effects, such as heat waves (53%), polluted water (71%), infectious diseases (74%), and air pollution (82%).

2. Wind and solar energy are not perceived as harmful to health; coal, oil, and nuclear power are perceived as harmful.

- Coal (69%), oil (62%), and nuclear power (57%) are considered “somewhat” or “very harmful” to people’s health by Marylanders. Alternately, two-thirds or more say that wind (69%) and solar (70%) are not at all harmful to public health.

3. Majorities say they are concerned about the effects of air pollution, yet few rate their air quality as poor.

- About two-thirds say air pollution is a personal (68%), family (64%), and community (68%) health concern.
- Very few say the air quality at home is poor or very poor (4%); slightly higher percentages say so for outdoor quality (14%) or where they spend most of their time away from home (16%).

4. Many Marylanders experience chronic health conditions and prolonged stress.

- Hypertension (24%) and arthritis (22%) are the chronic conditions that residents report they have been diagnosed with the most frequently, followed by diabetes (12%), asthma (11%) and cancer (8%).
- Of the 15% who said that someone else in their immediate household had been diagnosed with asthma, half said the person with the most severe case was a child (50%).
- The Southern region of the state alone reported that 50% of its household members with the most severe asthma diagnoses were under the age of 6, compared to 14% in

the four westernmost counties, 17% in the Central region, and 17% on the Eastern Shore.

5. Majorities say reducing air pollution and decreasing rates of respiratory disease should be high priorities for the state.

- More than half of Marylanders say the General Assembly and Governor should make lowering the state's rate of asthma and respiratory disease (59%) and reducing air pollution (68%) a high or very high priority.
- More than half of residents in each of the four regions of the state say respiratory diseases should be a top priority (Western, 51%; Central, 61%; Southern, 51%; Eastern, 58%).

6. Marylanders say that their health – and that of their communities – is vulnerable and harmed by climate change.

- About 7 in 10 Marylanders say they (72%), people in their households (68%), and those in their communities (69%) are vulnerable to the potential health impacts of climate change.
- More than two-thirds say that climate change is already harming them (67%), their community (67%), and people in Maryland (68%).

7. Allergies and respiratory problems top the list of ways residents think their health will worsen due to climate change.

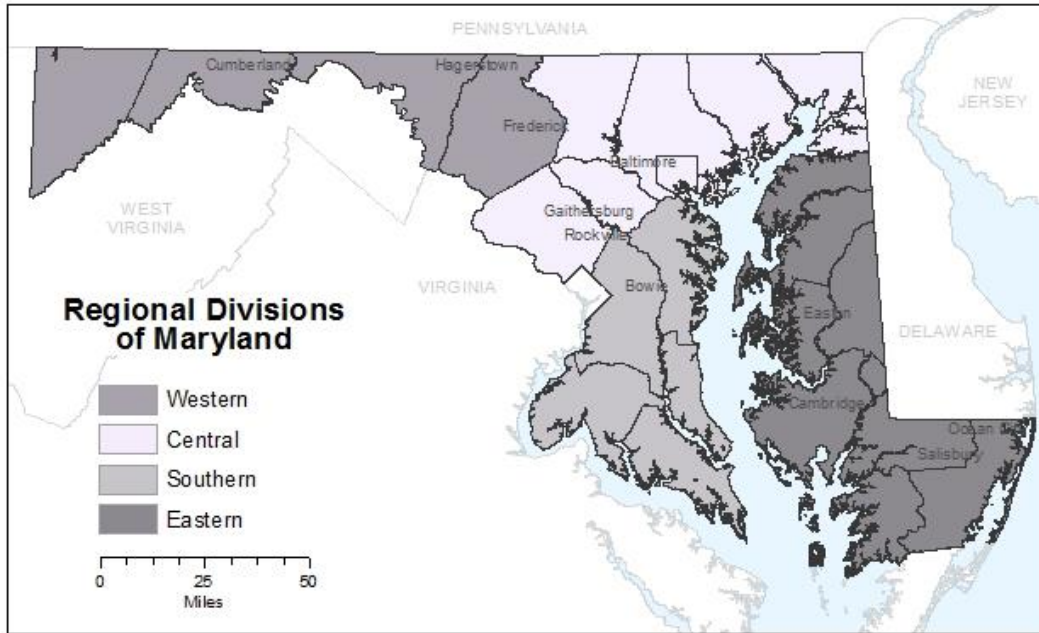
- More than half of Marylanders say climate change will worsen allergies (69%), respiratory and breathing problems (62%), injuries from storms or other extreme weather (58%), and heat stroke (57%).
- Food- and water-borne illness (48%), infectious diseases (37%), and mental health disorders (24%) are less commonly associated with climate change.

Study methodology

The survey was mailed to 6,401 households in the state of Maryland, randomly selected from within each of four regions of the state (Figure 1). We sampled at the regional level to ensure the final data were generalizable to these distinctly different geographic and cultural areas, as well as to the state as a whole. Data were weighted at both the state and regional levels in accordance with U.S. Census population distributions. Households that responded to the survey in 2013 and 2014 were not re-contacted in 2015. The survey was fielded from April 11 to June 24 with a response rate of 27%. The unweighted sample margin of error is +/- 2.5 percentage points at the 95% confidence interval for the state and less than +/- 5.7 percentage points for each region (Study methodology, p. 19).

This report includes survey data from 2013 and 2014 as a basis for comparison. Survey reports from 2013 and 2014 can be found at climatemaryland.org and include a description of the sample and methodology. All three were consistent across years.

Figure 1 | *Four regions of the state were sampled in the survey*



1. Most say air pollution and chemicals are the top threats to their health

Approximately half or more of Marylanders perceive a wide range of environmental threats as a “major” or “moderate” risk to their health (Figure 2). Air pollution (82%) and exposure to chemicals (80%) are the most frequently named risks, and have been since 2013 (Figure 3). Even the least likely threats to be cited – flooding (48%) and sea-level rise (43%) – are named by almost half.

Majorities of Eastern Shore residents say flooding and sea-level rise put them at risk

Air pollution and chemicals are cited as personal health threats by similar percentages of Marylanders across the state’s four regions. The geographical differences range from 78% (Western region) to 83% (Eastern) for air pollution, and 76% (Southern) to 83% (Eastern) for chemicals (Figure 4) (Appendix, Table 1). Understandably, people from the low-lying Eastern Shore point to flooding (55%) and sea-level rise (64%) as personal threats in larger percentages than those from other areas of the state, particularly the mountainous and landlocked four westernmost counties (flooding, 40%; sea-level rise, 32%).

Climate change is recognized as a personal health threat by most

Climate change, while an abstract concept that has been shown to be difficult for most to understand in relationship to health,³ is recognized as a personal health threat by almost two-thirds (63%) of survey respondents. A number of the health threats are direct and indirect effects of climate change, including some more likely to be cited by Marylanders, such as polluted water (71%), infectious diseases (74%), and air pollution (82%).

Few differences exist in the percentages of the state’s regions on perceptions of personal climate change health risks, though spatially there is more variation across the state than for some of the other health concerns, like air pollution (Figures 4-5). Sixty-three percent of the urban Central region, ranging from the suburbs of Washington, D.C. to Baltimore, say climate change is a threat to their health, compared to 55% of Western residents, 60% of Southern inhabitants, and 61% of those on the Eastern Shore (Appendix, Table 1).

³ Maibach, E., Kreslake, J., Roser-Renouf, C., Rosenthal, S., Feinberg, G., & Leiserowitz, A. (in press) Do Americans understand that global warming is harmful to human health? Evidence From a national survey. *Ann. Glob. Health.*

Figure 2 | Air pollution and chemicals are perceived as the biggest personal health threats

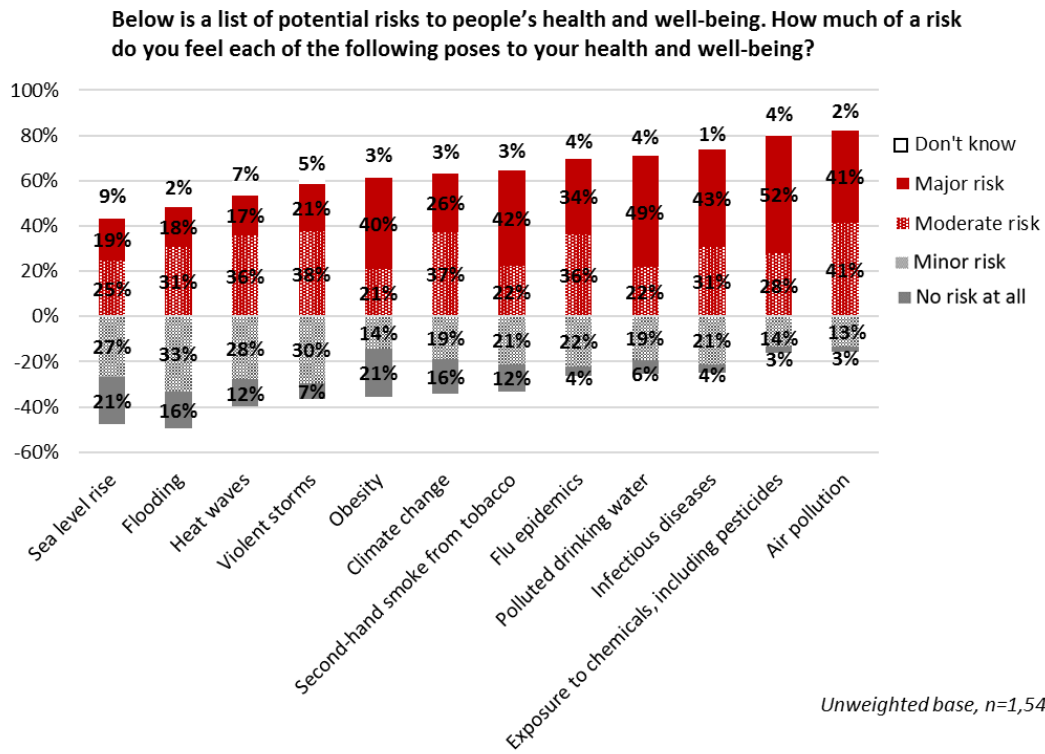


Figure 3 | 63% say climate change is a moderate/major personal health risk in 2014 and 2015

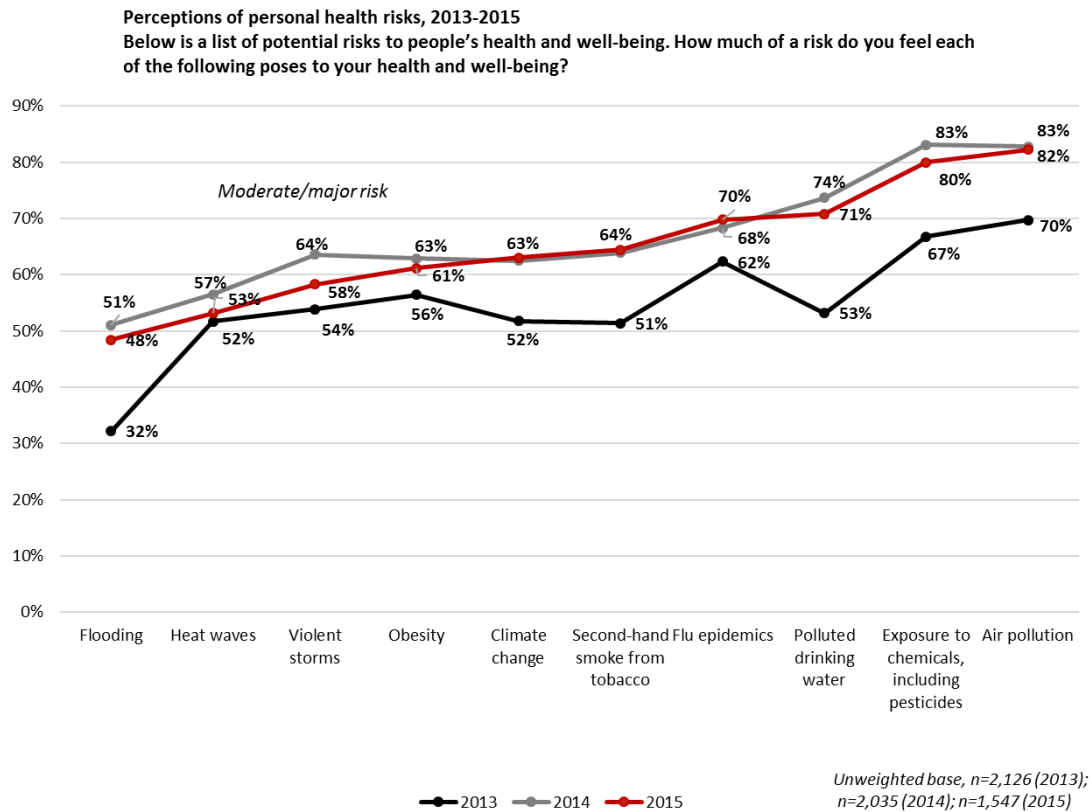


Figure 4 | *Marylanders across the state identify air pollution as a personal health risk*

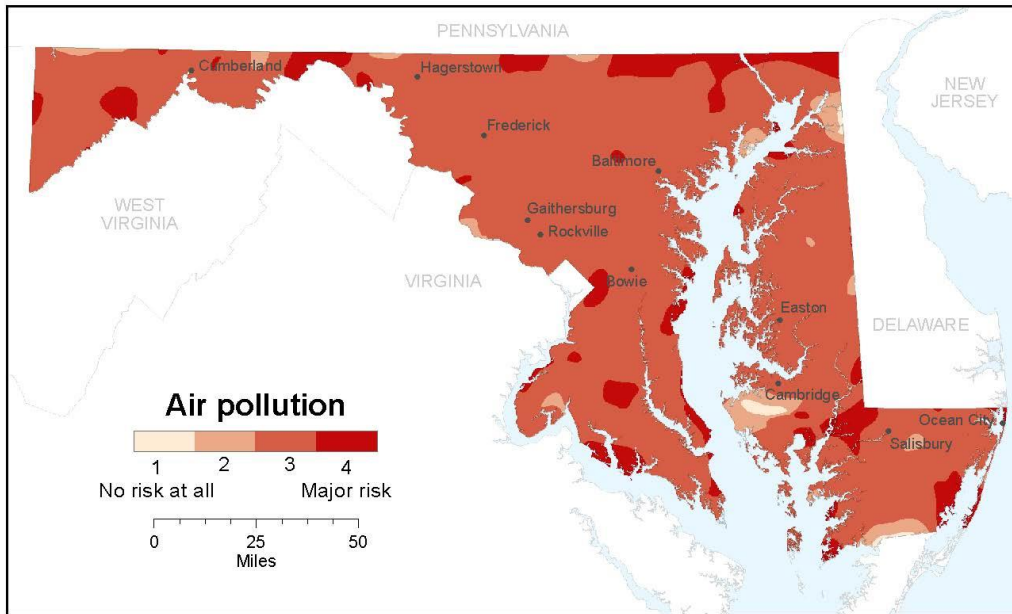
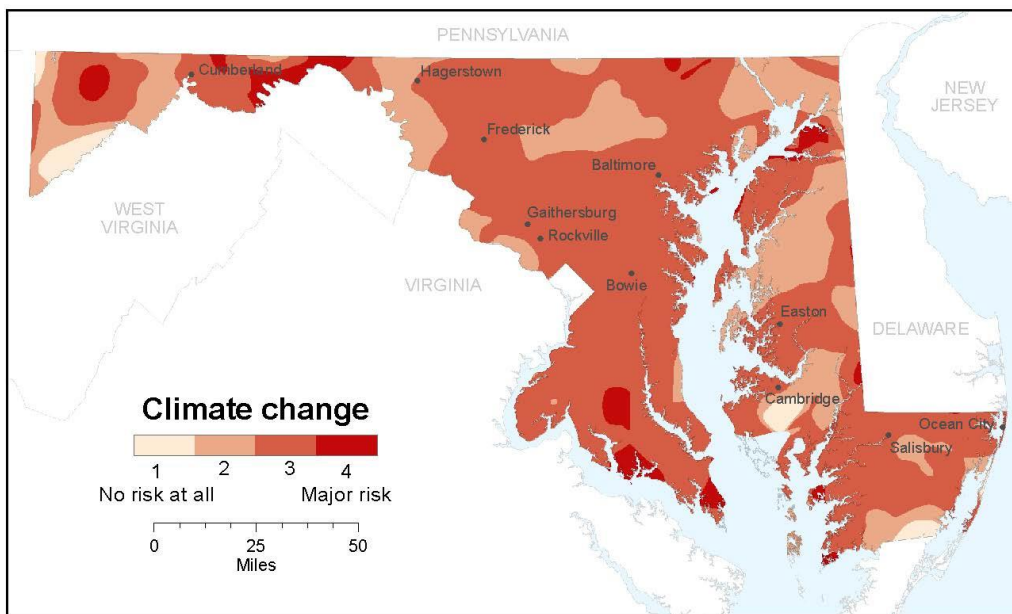


Figure 5 | *Perceptions of degree of personal health risk from climate change vary*



2. Wind and solar energy are not perceived as harmful to health; coal, oil, and nuclear power are perceived as harmful

One of the largest sources of air pollution, and the emissions that cause climate change, is from the generation of power to run industry and keep the lights and heat on in our homes. But not all energy sources are equal; some are more polluting, costly, or technologically easy to implement than others. For the past three years we have asked Marylanders about their perceptions of the health costs of various energy sources. Coal (69%), oil (62%), and nuclear power (57%) are considered “somewhat” or “very harmful” to people’s health (Figure 6). Alternately, two-thirds or more say wind (69%) and solar (70%) power are not at all harmful to public health (Figure 6). This pattern has remained the same over the past few years (Figure 7).

Few people in any area of the state believe wind or solar power to be harmful. Four percent (Western region) to 9% (Eastern) of people think wind power is somewhat or very harmful (Appendix, Table 2). Solar power varies between 3% (Western) and 8% (Southern). The largest regional differences in perceptions are between Eastern Shore residents on non-fracked natural gas (somewhat/very harmful, 36%) compared to Central state residents (23%); and the belief that wood fuel is harmful between the Southern (63%) and Central regions (43%).

Substantial percentages say they don’t know the health effects of energy sources

At least 10% of all respondents admit to not knowing whether various energy sources are harmful to health (Figure 6). For some energy sources, Marylanders are even less likely to be able to make the distinction. Geothermal energy is the least known; 43% say they don’t know if it is harmful to health. Natural gas – extracted using hydraulic fracturing (don’t know, 32%) and from other sources (29%) – ranks next for the highest percentages of those who say they are unsure whether these energy sources are harmful.

Wood fuel is perceived as harmful to health

Between 2014 and 2015 we changed one of the measures from “wood fuel or switchgrass” to just “wood fuel.” This year we also saw a corresponding jump by 15 percentage points in those who say wood fuel is harmful – now at 46% between “fracked” sources of natural gas and nuclear power (Figure 7). One-fifth of Marylanders (20%) say they do not know whether wood fuel is harmful, approximately the same percentage as nuclear power (21%).

Figure 6 | Renewable energy sources are perceived as least harmful to health

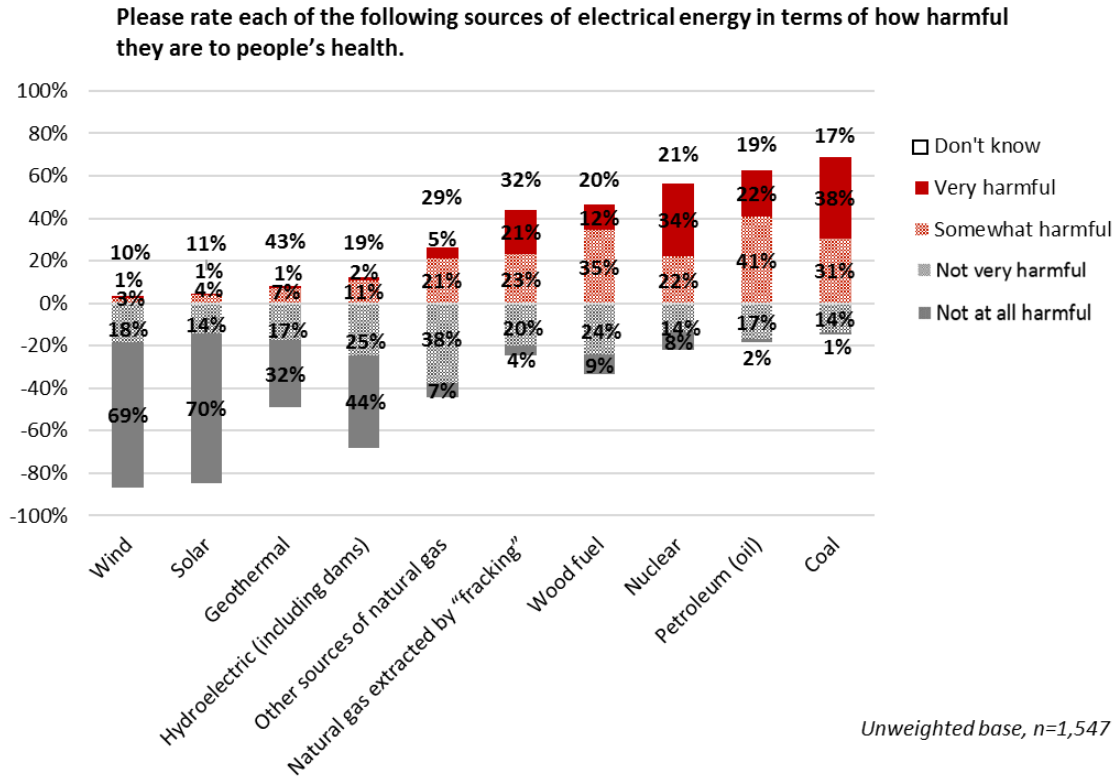
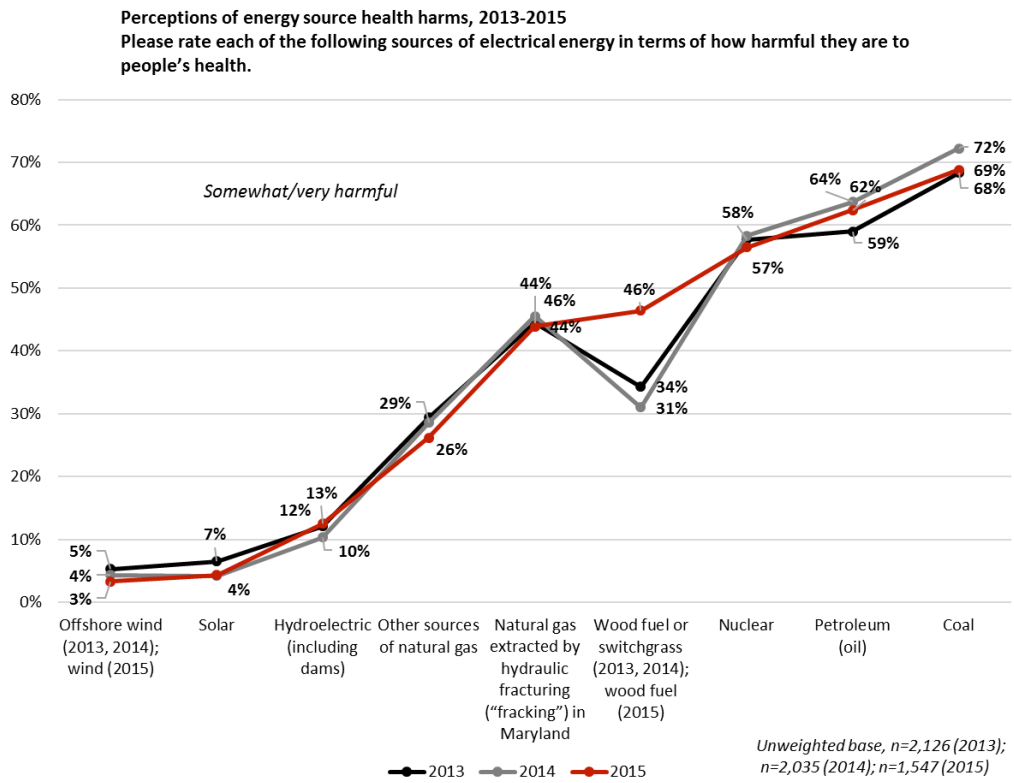


Figure 7 | Natural gas is thought less harmful than other fossil fuels, but more than renewables



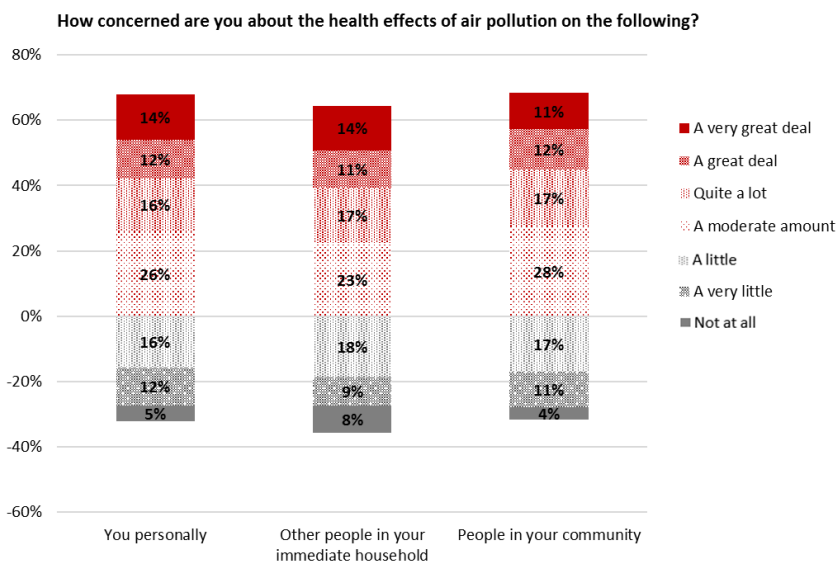
3. Majorities say they are concerned about the effects of air pollution, yet few rate their air quality as poor

Marylanders do not greatly discriminate between concern for the effects of air pollution on themselves, their households, or their communities. About two-thirds say air pollution is a personal (68%), family (64%), and community (68%) health concern (Figure 8). Residents of Maryland’s urban Central region are consistently more likely to say they are concerned about air pollution than other areas of the state (Appendix, Table 3). For example, 62% say their community’s health status due to air pollution is a moderate to great deal of concern while only 50% of those in the Eastern Shore say the same.

Residents rank their homes’ air quality the highest

Given the concerns voiced by Marylanders over air pollution, surprisingly few cite the air quality of their homes, outdoor environments, or areas where they spend the most time outside of home, as “poor” (Figure 9). Very few say the air quality at home is “poor” or “very poor” (4%); slightly higher percentages say so for outdoor quality (14%) or where they spend most of their time away from home (16%). At the same time, only about a third say the air they breathe when not at home is “good” or “very good” (39%); about the same number report that it is “neutral” (37%), or not particularly good or bad. One in five residents in the Southern region of the state (20%) say the air quality where they spend most of their time outside of home is poor or very poor; 10% of Western county residents say the same, 16% in the Central region, and 19% of the Eastern Shore (Appendix, Table 4).

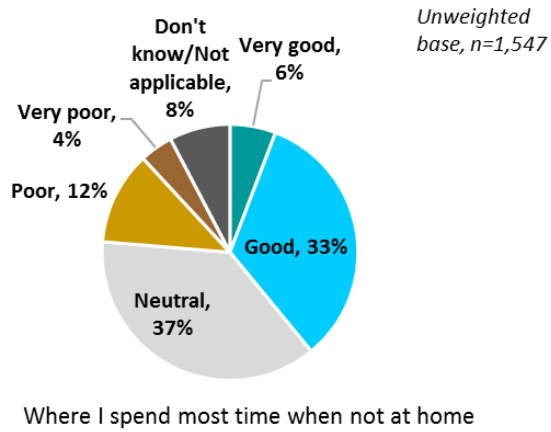
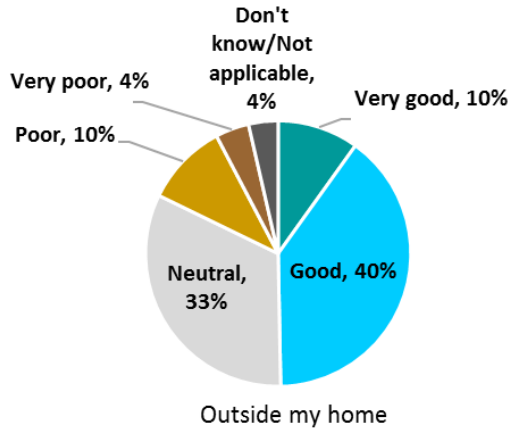
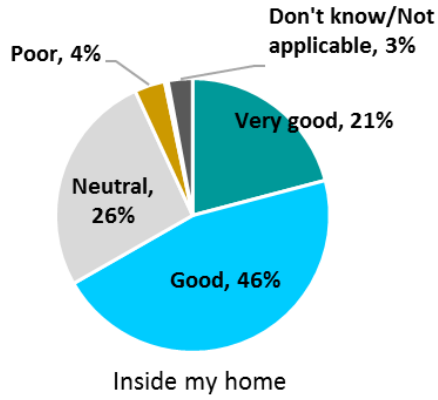
Figure 8 | Marylanders are equally concerned about air pollution on themselves and others



Unweighted base, n=1,547

Figure 9 | Marylanders say air quality is best inside their homes

How would you rate the air quality in these places?



4. Many Marylanders experience chronic health conditions and prolonged stress

Some of the most vulnerable people to environmental threats such as extreme heat, air pollution, and food- and water-borne diseases, are those whose health is already compromised.⁴ Maryland has the highest median income in the United States,⁵ but many of its residents face chronic health conditions such as asthma and experience prolonged stress. Hypertension (24%) and arthritis (22%) are the chronic conditions that residents most frequently report, followed by diabetes (12%), asthma (11%) and cancer (8%) (Appendix, Table 5). Other household members have similar frequencies of these conditions: hypertension (19%), asthma (15%), arthritis (15%), diabetes (14%), and cancer (9%) (Appendix, Table 6). These rates remain fairly consistent across all regions of the state.

More than a third of Marylanders diagnosed with asthma suffered an attack in recent months

Of the 11% who say they have been diagnosed with asthma, most had not experienced an attack or episode in the three months prior to the late-spring survey (59%) (Appendix, Table 7). However, 35% suffered 1 to 5 such episodes during that period, and another 6% endured 6 or more. Three-quarters (76%) of those diagnosed with asthma say that it has not affected their work or usual activities in the last 12 months, but 18% say they lost between 1 to 5 days due to the condition, and another 7% say they missed 6 or more days (Appendix, Table 8).

Half of household members with asthma are children, including a quarter under age 6

Of the 15% who say that someone else in their immediate household has been diagnosed with asthma, half say the person with the most severe case is a child under the age of 18 (50%) (Figure 10). Statewide, more than a quarter told us that the child was younger than 6 years old (27%), with the remainder between age 6 to 11 (13%), and 12 to 17 (10%). The Southern region of the state alone reported 50% of household members with asthma diagnoses under the age of 6, compared to 14% in the four westernmost counties, 17% in the Central region, and 17% on the Eastern Shore.

The vast majority of these household members diagnosed with asthma (81%) did not have an attack or episode in the three months prior to the survey; 18% experienced between 1 to 5 occurrences, and another 1% experienced more than 6 during that period (Appendix, Table 13). Almost two-thirds of respondents in the Eastern region (63%) and 60% in the Western region reported that their immediate household member with the most severe cases of asthma experienced at least one attack or episode in the past three months, approximately double the rate of households in the Central (35%) or Southern (28%) regions of the state (Figure 11).

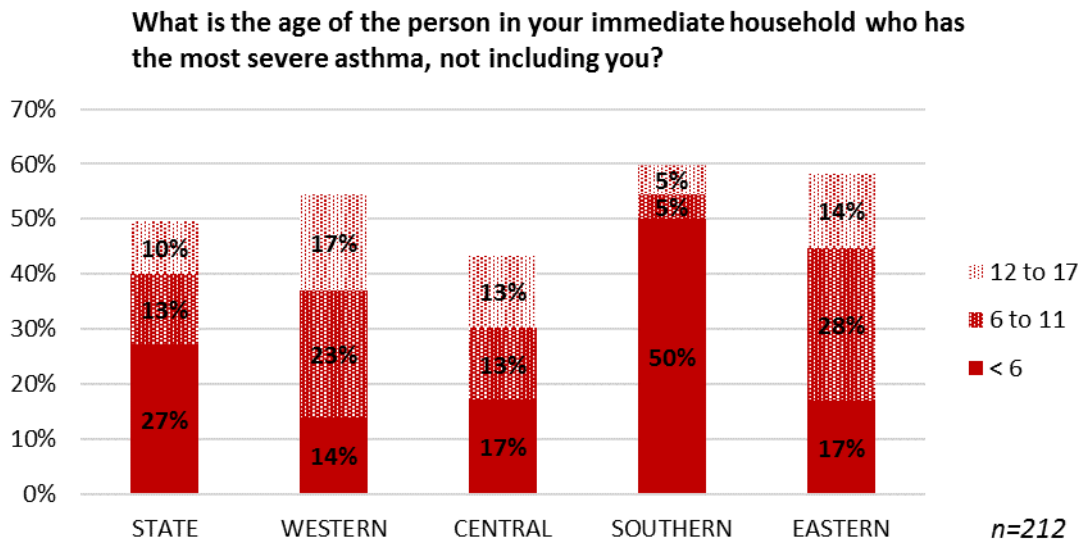
⁴ Balbus, J. M.; Malina, C. Identifying vulnerable subpopulations for climate change health effects in the United States. *J. Occup. Environ. Med.* **2009**, *51*, 33–37.

⁵ Prairie, C. (2015, Sept. 30). State roundup. *Maryland Reporter*. Available at <http://marylandreporter.com/2015/09/30/state-roundup-september-30-2015/>

A quarter of asthmatic household members have lost days of work, school or other activities
 During the 12 months prior to the survey, a quarter (24%) of household members with asthma diagnoses lost one or more days of work, school or other activities (Appendix, Table 14). Across the state, the number ranged from 20% in the Southern counties to 30% on the Eastern Shore.

A majority have experienced prolonged stress in the past year
 About two-thirds of Marylanders say they have experienced one or more periods of prolonged – one month or longer – stress (64%), including 15% who experience constant stress (Figure 12). Stress not only affects health and well-being,⁶ but can influence the way that people respond to risk.⁷ Rates of stress range between 11% in the Southern region to 18% on the Eastern Shore (Appendix, Table 15).

Figure 10 | Half of the most severe asthma cases in southern households are under the age of 6



⁶ Effros, R. B. (2012). Stress and immune system aging. *The Oxford Handbook of Psychoneuroimmunology*, 63.

⁷ Mather, M., & Lighthall, N. R. (2012). Risk and reward are processed differently in decisions made under stress. *Current directions in psychological science*, 21(1), 36-41.

Figure 11 | Eastern and western regions report 50% of severe asthmatics had attacks last year

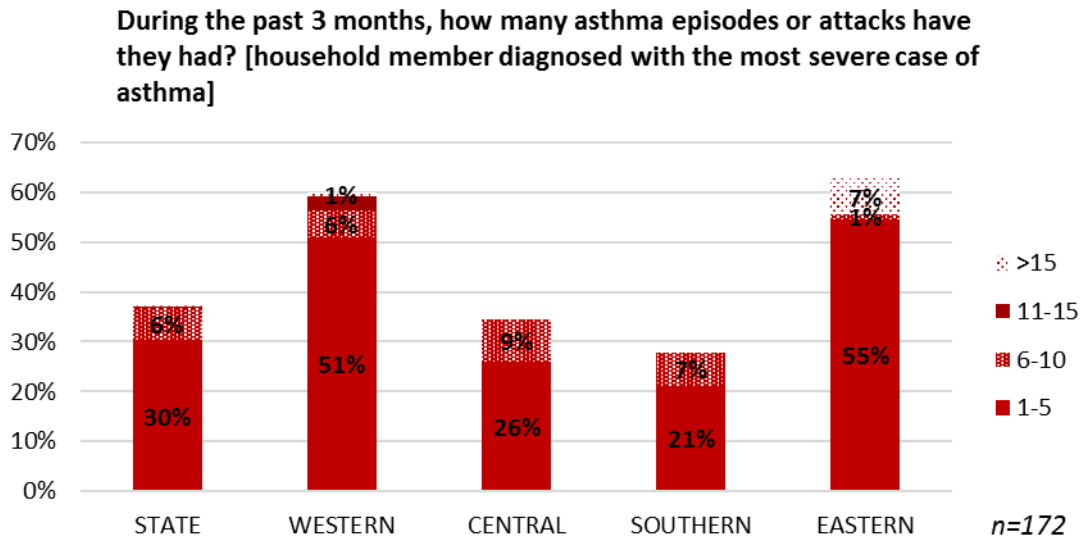
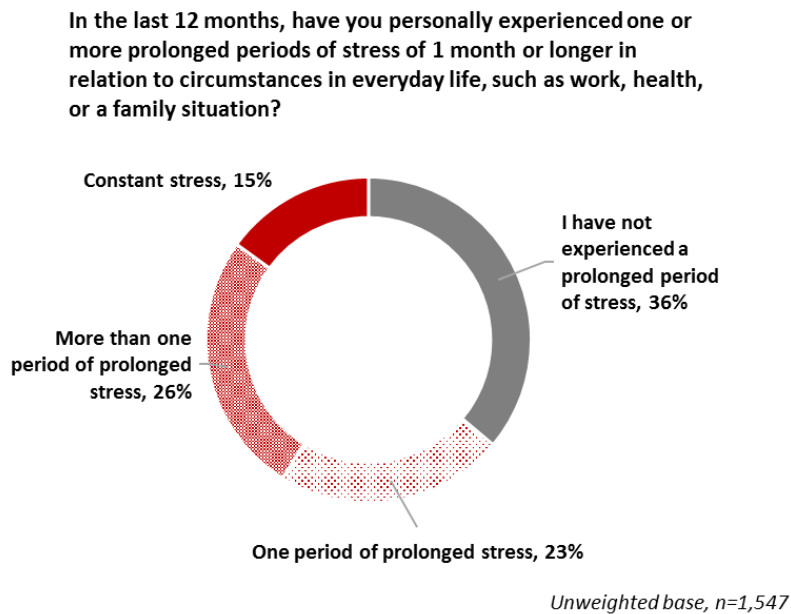


Figure 12 | Only about a third have not experienced a prolonged period of recent stress

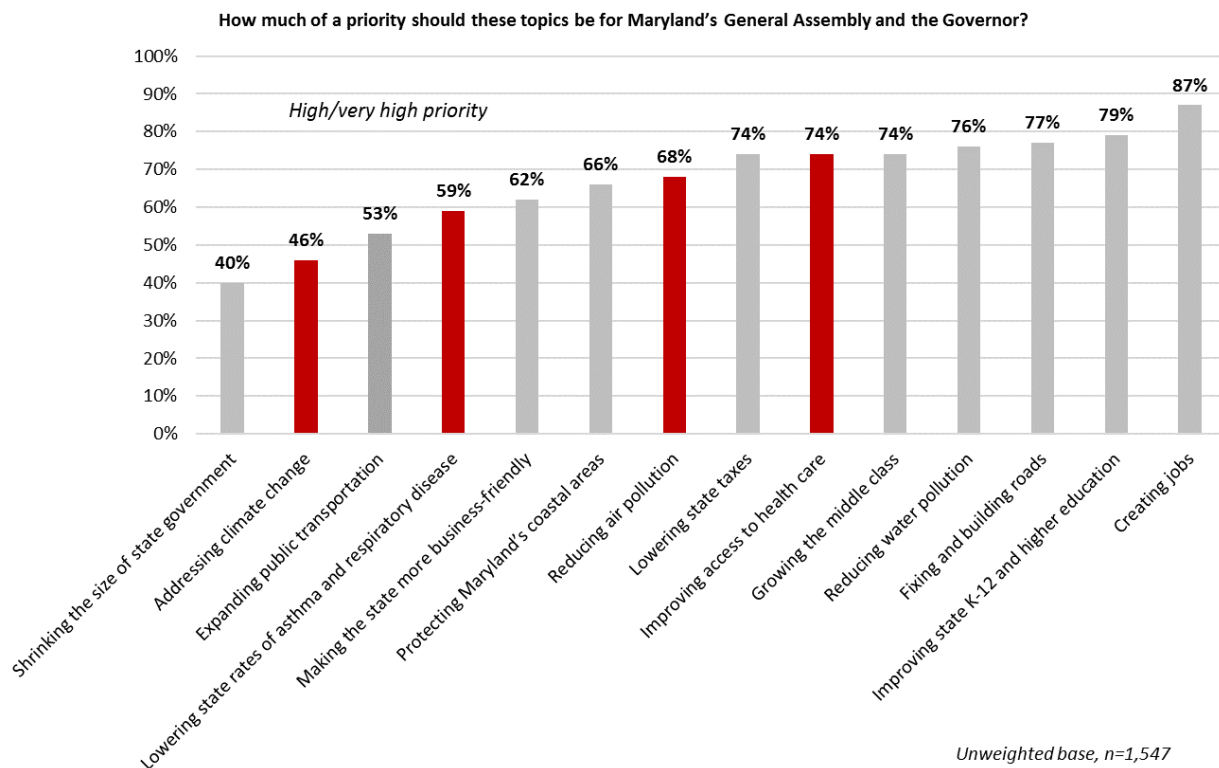


5. Majorities say reducing air pollution and decreasing rates of respiratory disease should be high priorities for the state

More than half of Marylanders say the General Assembly and Governor should make lowering the state’s rate of asthma and respiratory disease (59%) and reducing air pollution (68%) a high or very high priority (Figure 13). An even higher percentage – 74% – say improving access to health care should be a high or very high priority. Climate change ranks lower in priority than other health issues surveyed (46%), despite the likely resulting increasing rates of air pollution and respiratory disease.⁸

More than half of residents in each of the four regions of the state say respiratory diseases should be a top priority (Western, 51%; Central, 61%; Southern, 51%; Eastern, 58%) (Appendix, Table 16). Larger regional differences are evident on public support for reducing air pollution. Four-fifths of residents in the Southern counties say it should be a high priority item (80%), compared to 59% in the Western region, 66% in the Central region, and 65% in the Eastern region.

Figure 13 | Air pollution and respiratory disease are high priorities for the public



⁸ Luber, G.; Knowlton, K.; Balbus, J.; Frumkin, H.; Hayden, M.; Hess, J.; McGeehin, M.; Sheats, N.; Backer, L.; Beard, C. B.; Ebi, K. L.; Maibach, E.; Ostfeld, R. S.; Wiedinmyer, C.; Zielinski-Gutiérrez, E.; Ziska, L. (2014). Ch. 9: Human health. In *Climate change impacts in the United States: The third National Climate Assessment*; Melillo, J. M.; Richmond, T. C.; Yohe, G. W., Eds.; U.S. Global Change Research Program.

6. People believe that their health – and that of their communities – is vulnerable and harmed by climate change

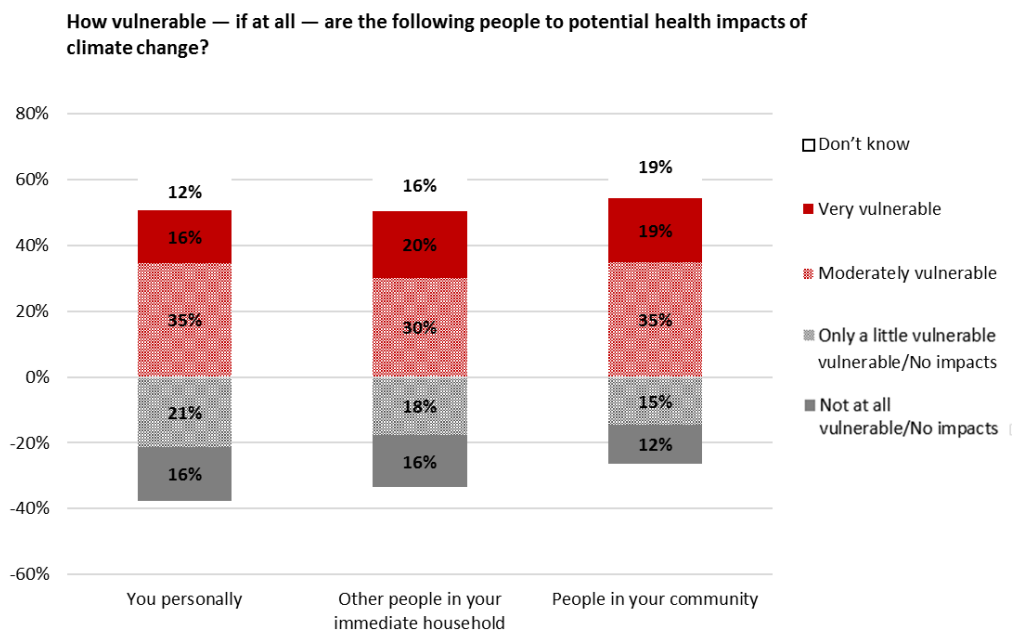
About 7 in 10 Marylanders say they (72%), people in their households (68%), and those in their communities (69%) are vulnerable to the potential health impacts of climate change (Figure 14). Half or more believe that they and others in the state are moderately or very vulnerable (personally, 51%; people in their households, 50%; people in their community, 54%). Moreover, they believe that climate change is already harming them, their communities and others in the state.

Regional differences on perceptions of vulnerability are greatest between the Southern and Eastern counties on measures of personal vulnerability (respectively, 62%/41%, moderately/very vulnerable) and that of immediate household members (53%/40%) (Appendix, Table 17). There are no differences between the regions on perceptions of the vulnerability of people in their communities.

Marylanders say climate change is already harming them and others in the state

More than two-thirds of Marylanders say that climate change is already harming them (67%), their community (67%), and people in Maryland (68%) (Figure 15). About half say that they are being harmed a moderate amount or a great deal (personally, 45%; people in their community, 46%; people in Maryland, 51%).

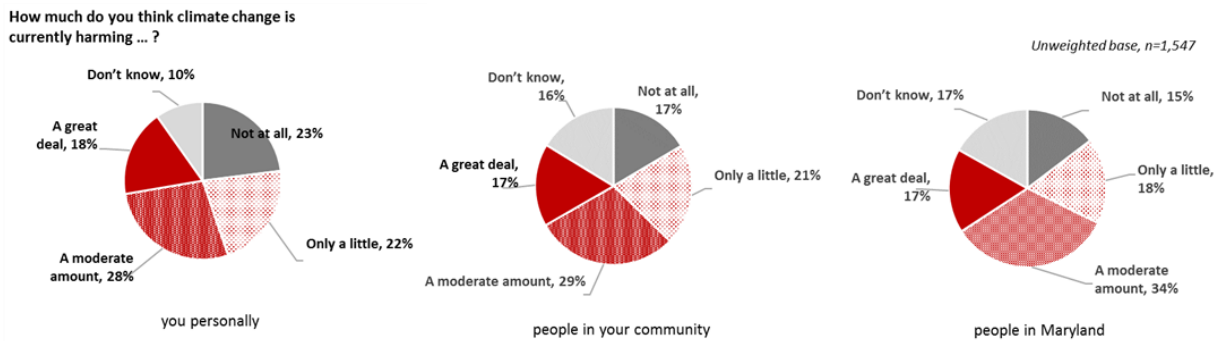
Figure 14 | Few say they are not at all vulnerable to the impacts of climate change



Unweighted base, n=1,547

More than half of the state’s Southern counties say they are currently being harmed personally by climate change a moderate or great deal (55%), compared to 38% on the Eastern Shore, 39% in the Western region, and 42% in the urban Central corridor (Appendix, Table 18). In comparing regional percentages for current harm to people in the community and Maryland, the Southern counties rank the highest at 47% and 56%, respectively.

Figure 15 | Marylanders are more likely to say they won’t be harmed than others in the state

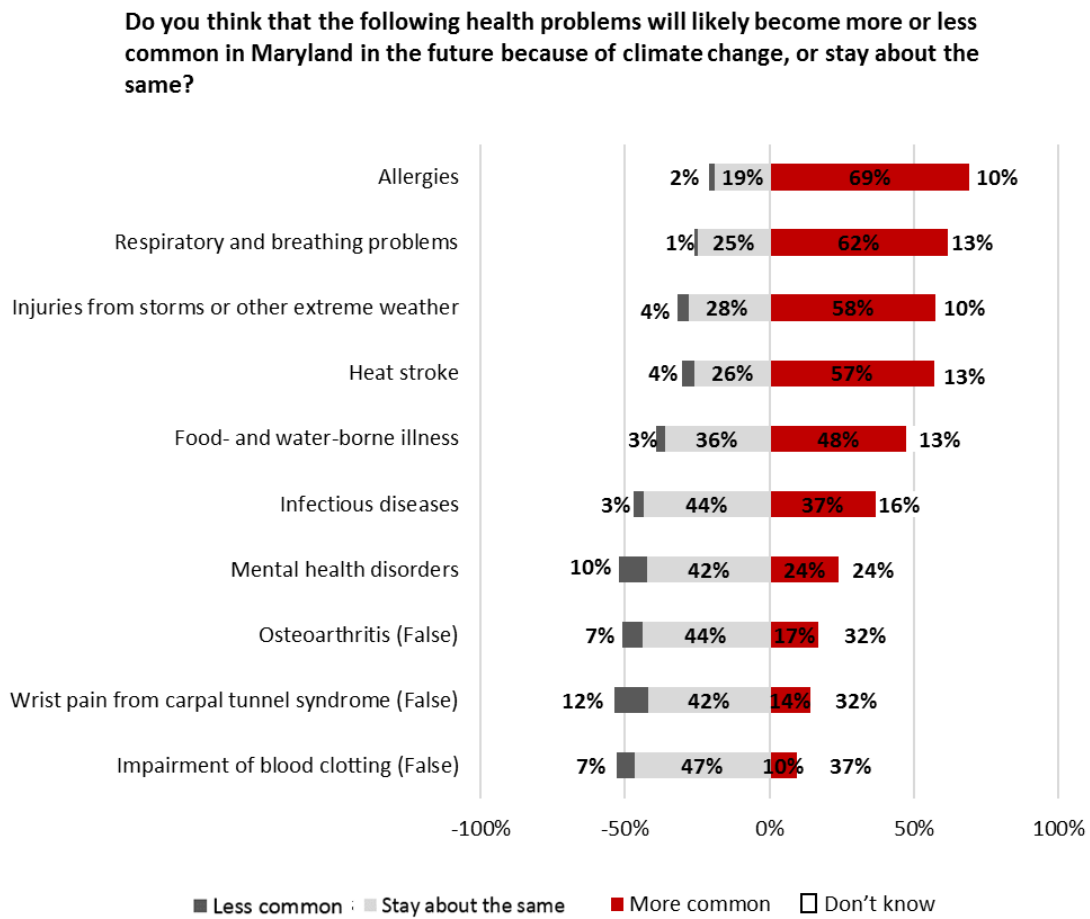


7. Allergies and respiratory problems top the list of ways residents think their health will worsen due to climate change

More than half of Marylanders say climate change will worsen allergies (69%), respiratory and breathing problems (62%), injuries from storms or other extreme weather (58%), and heat stroke (57%) (Figure 16). Food- and water-borne illness (48%), infectious diseases (37%), and mental health disorders (24%) are less commonly associated with climate change.

While people from all regions of the state placed allergies and respiratory problems as the top two most likely health effects from climate change, more than three-quarters (79%) of those in the Southern counties pointed to allergies as likely to become more common as opposed to 65% of those in the Western and Central regions, and 67% of those on the Eastern Shore (Appendix, Table 19).

Figure 16 | *Most correctly don't think that climate will impact arthritis, wrist pain or clotting*



Unweighted base, n=1,547

8. Study methodology

This study was conducted by George Mason University's Center for Climate Change Communication in partnership with the Johns Hopkins Bloomberg School of Public Health to explore Marylanders' views on public health, energy and the environment. The survey instrument was developed at George Mason University, partially based on questions used in the Climate Change in the American Mind national surveys run by the Yale Project on Climate Change Communication (<http://environment.yale.edu/climate-communication/>) and George Mason's Center for Climate Change Communication (<http://climatechangecommunication.org/>). The mail survey consisted of 48 questions, and took approximately 20 minutes to complete.

For reporting purposes, the data have been broken into three separate documents on Marylanders' attitudes, behaviors and policy preferences regarding public health and climate change, energy, and climate change generally.

The unweighted sample margin of error is +/- 2.5 percentage points at the 95% confidence interval for the state and less than +/- 5.7 percentage points for each region. (See Table 1)

Sampling design; fielding

The survey was mailed to 6,401 households in the state of Maryland, randomly selected from within each of four regions of the state from Survey Sampling International household address databases, based primarily on U.S. Postal Service delivery route information. We sampled at the regional level to ensure the final data were generalizable to these distinctly different geographic and cultural areas of the state, as well as the state as a whole. The sample size for the Central region of the state was higher relative to the other three regions because it accounts for more than half of the state's population. Households that responded to the survey in 2013 and 2014 were not re-contacted in 2015.

The survey was fielded from April 11 to June 24, 2015. Each household was sent up to four mailings: an announcement letter introducing the survey (April 11), a copy of the survey with a \$2 bill as a thank you (April 20), a reminder postcard (May 4), and a follow-up survey (May 18). (As a point of comparison, the previous surveys were fielded from March 28 to June 4, 2013, and March 17 to June 10, 2014, 2014. Methodology for the 2013 and 2014 surveys is available within those reports at climatemaryland.org.) In order to achieve randomization of respondents within each household, we requested that the person with the most recent birthday complete the survey. Households that completed and returned the survey were taken off of subsequent mailing lists.

Weighting

The data tables report percentages for the state and each region. State data were weighted for regional representation, gender, age, and education level based on 3-year American Community Survey data from the U.S. Census Bureau. Each region's data were also weighted for the same demographic variables. Base unweighted sample sizes for each question are reported in addition to the weighted percentages. Respondents who did not provide regional, gender, age or education level data were dropped from the data set. This lowered the number of respondents by 64 cases. (The overall response rate for the study before those cases were dropped was 28%.) Please see the demographics section of the appendix for more information on the characteristics of the survey sample pre- and post-weighting.

Institutional Review Board

The study was reviewed by Institutional Review Boards for both George Mason University (Protocol #8508) and Johns Hopkins Bloomberg School of Public Health (Protocol #00006315).

Table 1 | *Regional samples, response rates and margin of error*

Region	Counties	Mailing #	Refusals	Undeliverable	Respondents	Response rate	Margin of error
<i>Western</i>	Allegany, Frederick, Garrett, Washington	1,467	14	115	424	31%	4.76
<i>Central</i>	Baltimore, Carroll, Cecil, Harford, Howard, Montgomery, Baltimore City	2,000	15	135	484	26%	4.45
<i>Southern</i>	Anne Arundel, Calvert, Charles, Prince George's, St. Mary's	1,467	4	99	297	22%	5.69
<i>Eastern</i>	Caroline, Dorchester, Kent, Queen Anne's, Somerset, Talbot, Wicomico, Worcester	1,467	6	232	342	28%	5.3
<i>State</i>		6,401	39	581	1,547	27%	2.49

Appendices

- Data tables
- Sample demographics

The following tables provide data at the state and regional level for each of the questions included in this survey report. “Unweighted n” refers to the number of people who responded to each question. The samples were weighted to better approximate U.S. Census data on state population distributions. More information can be found in the study methodology section. The counties included in each region are listed below.

Region	Counties
Western	Allegany, Frederick, Garrett and Washington counties
Central	Baltimore, Carroll, Cecil, Harford, Howard, Montgomery counties and Baltimore City
Southern	Anne Arundel, Calvert, Charles, Prince George's and St. Mary's counties
Eastern	Caroline, Dorchester, Kent, Queen Anne's, Somerset, Talbot, Wicomico and Worcester counties
State	All counties

Data tables | Marylanders' perceptions of threats to their health

Table 1 | Personal health risks

Below is a list of potential risks to people's health and well-being. How much of a risk do you feel each of the following poses to your health and well-being?

		STATE	WESTERN	CENTRAL	SOUTHERN	EASTERN
a. Second-hand smoke from tobacco	No risk at all	12.0%	14.4%	11.9%	9.9%	10.5%
	Minor risk	21.2%	21.6%	24.2%	15.1%	18.4%
	Moderate risk	22.2%	26.0%	19.9%	31.9%	32.0%
	Major risk	42.2%	36.6%	40.5%	42.2%	37.0%
	Don't know	2.5%	1.4%	3.4%	.9%	2.1%
	Unweighted n	1540	423	482	296	339
b. Exposure to chemicals, including pesticides, in food and other products	No risk at all	2.6%	3.6%	2.3%	3.3%	2.5%
	Minor risk	13.5%	10.6%	14.9%	17.0%	10.1%
	Moderate risk	27.7%	39.2%	27.3%	21.7%	30.4%
	Major risk	52.3%	43.7%	51.6%	54.7%	52.7%
	Don't know	3.8%	2.9%	3.9%	3.3%	4.4%
	Unweighted n	1543	422	483	297	341
c. Air pollution	No risk at all	2.5%	7.3%	2.5%	.7%	2.7%
	Minor risk	13.3%	12.6%	13.3%	18.8%	12.8%
	Moderate risk	41.3%	49.0%	41.1%	35.7%	43.4%
	Major risk	40.9%	28.8%	41.0%	43.6%	39.2%
	Don't know	2.0%	2.4%	2.1%	1.1%	1.9%
	Unweighted n	1538	418	482	296	342
d. Heat waves	No risk at all	12.1%	10.6%	13.6%	9.5%	11.2%
	Minor risk	27.8%	33.7%	26.4%	32.0%	32.4%
	Moderate risk	35.9%	38.9%	35.5%	36.8%	33.1%
	Major risk	17.3%	10.4%	16.9%	18.1%	18.9%
	Don't know	6.8%	6.3%	7.6%	3.6%	4.3%
	Unweighted n	1538	422	482	295	339
e. Violent storms	No risk at all	7.0%	7.4%	7.3%	6.5%	3.3%
	Minor risk	29.6%	37.8%	29.5%	30.9%	32.5%
	Moderate risk	37.5%	39.3%	34.7%	44.1%	37.1%
	Major risk	20.8%	14.5%	22.6%	16.2%	23.2%
	Don't know	5.2%	1.0%	5.9%	2.3%	3.8%
	Unweighted n	1533	420	481	291	341
f. Obesity	No risk at all	21.4%	20.2%	25.5%	13.7%	16.8%
	Minor risk	14.2%	21.2%	12.5%	21.0%	13.7%
	Moderate risk	21.0%	18.1%	20.5%	22.1%	29.7%
	Major risk	40.2%	37.4%	38.1%	41.2%	37.2%
	Don't know	3.2%	3.0%	3.4%	2.1%	2.5%
	Unweighted n	1542	423	480	297	342
g. Polluted drinking water	No risk at all	6.4%	7.3%	7.4%	3.4%	8.5%
	Minor risk	19.2%	22.8%	19.0%	18.2%	18.5%
	Moderate risk	21.7%	23.8%	23.7%	17.9%	24.3%
	Major risk	49.1%	43.0%	46.7%	56.7%	45.3%
	Don't know	3.6%	3.1%	3.2%	3.9%	3.4%
	Unweighted n	1538	420	481	296	341
h. Flu epidemics	No risk at all	4.4%	4.9%	4.1%	3.5%	4.4%
	Minor risk	22.1%	21.9%	24.6%	17.5%	22.1%
	Moderate risk	36.2%	39.3%	36.9%	36.3%	38.8%
	Major risk	33.6%	33.2%	30.2%	42.0%	31.9%
	Don't know	3.6%	.8%	4.1%	.7%	2.7%
	Unweighted n	1537	421	480	294	342

Continued

How much of a risk do you feel each of the following poses to your health and well-being?

		STATE	WESTERN	CENTRAL	SOUTHERN	EASTERN
i. Climate change	No risk at all	15.7%	18.1%	15.3%	23.5%	15.1%
	Minor risk	18.7%	23.9%	19.1%	14.6%	22.0%
	Moderate risk	37.3%	31.7%	36.1%	37.3%	35.3%
	Major risk	25.7%	23.1%	27.0%	23.1%	25.5%
	Don't know	2.5%	3.1%	2.5%	1.5%	2.1%
	Unweighted n	1536	419	483	295	339
j. Infectious diseases	No risk at all	3.9%	6.1%	3.7%	5.1%	3.4%
	Minor risk	21.1%	17.9%	24.1%	10.5%	25.6%
	Moderate risk	30.6%	30.4%	30.2%	37.6%	28.3%
	Major risk	43.0%	44.1%	40.5%	46.1%	40.4%
	Don't know	1.4%	1.6%	1.6%	.7%	2.3%
	Unweighted n	1534	421	479	295	339
k. Flooding	No risk at all	16.4%	16.1%	17.9%	13.4%	6.5%
	Minor risk	33.3%	42.3%	33.5%	36.7%	36.6%
	Moderate risk	30.8%	30.1%	30.2%	31.5%	32.8%
	Major risk	17.6%	10.1%	15.9%	18.0%	22.4%
	Don't know	1.9%	1.6%	2.5%	.4%	1.7%
	Unweighted n	1541	422	481	296	342
l. Sea level rise	No risk at all	20.6%	39.1%	22.8%	10.5%	13.6%
	Minor risk	26.8%	24.9%	26.8%	33.9%	21.4%
	Moderate risk	24.6%	23.1%	23.4%	27.3%	37.5%
	Major risk	18.6%	8.4%	16.8%	22.3%	26.3%
	Don't know	9.3%	4.5%	10.2%	6.1%	1.2%
	Unweighted n	1539	421	481	296	341

How much of a risk do you feel each of the following poses to your health?

		2013	2014	2015	Δ 2014-2013	Δ 2015-2014	Δ 2015-2013
Second-hand smoke from tobacco	No risk at all	20.3%	10.1%	12.0%	-10.2%	1.9%	-8.3%
	Minor risk	27.1%	23.8%	21.2%	-3.3%	-2.6%	-5.9%
	Moderate risk	22.3%	23.3%	22.2%	1.0%	-1.1%	-0.1%
	Major risk	29.1%	40.6%	42.2%	11.5%	1.6%	13.1%
	Don't know	1.1%	2.2%	2.5%	1.1%	0.3%	1.4%
	Unweighted n	2092	2017	1540			
Exposure to chemicals, including pesticides, in food and other products	No risk at all	8.8%	3.2%	2.6%	-5.6%	-0.6%	-6.2%
	Minor risk	22.6%	11.6%	13.5%	-11.0%	1.9%	-9.1%
	Moderate risk	34.8%	28.1%	27.7%	-6.7%	-0.4%	-7.1%
	Major risk	32.0%	55.0%	52.3%	23.0%	-2.7%	20.3%
	Don't know	1.8%	2.1%	3.8%	0.3%	1.7%	2.0%
	Unweighted n	2090	2014	1543			
Air pollution	No risk at all	5.3%	2.6%	2.5%	-2.7%	-0.1%	-2.8%
	Minor risk	23.5%	12.8%	13.3%	-10.7%	0.5%	-10.2%
	Moderate risk	38.9%	35.9%	41.3%	-3.0%	5.4%	2.4%
	Major risk	30.8%	46.9%	40.9%	16.1%	-6.0%	10.1%
	Don't know	1.6%	1.8%	2.0%	0.2%	0.2%	0.4%
	Unweighted n	2091	2010	1538			
Heat waves	No risk at all	15.1%	9.0%	12.1%	-6.1%	3.1%	-3.0%
	Minor risk	30.1%	29.7%	27.8%	-0.4%	-1.9%	-2.3%
	Moderate risk	35.4%	39.5%	35.9%	4.1%	-3.6%	0.5%
	Major risk	16.3%	17.0%	17.3%	0.7%	0.3%	1.0%
	Don't know	3.0%	4.9%	6.8%	1.9%	1.9%	3.8%
	Unweighted n	2092	1997	1538			

Continued

How much of a risk do you feel each of the following poses to your health?

		2013	2014	2015	Δ 2014-2013	Δ 2015-2014	Δ 2015-2013
Violent storms	No risk at all	7.7%	5.8%	7.0%	-1.9%	1.2%	-0.7%
	Minor risk	36.4%	26.1%	29.6%	-10.3%	3.5%	-6.8%
	Moderate risk	34.4%	41.0%	37.5%	6.6%	-3.5%	3.1%
	Major risk	19.5%	22.6%	20.8%	3.1%	-1.8%	1.3%
	Don't know	2.0%	4.5%	5.2%	2.5%	0.7%	3.2%
	Unweighted n	2073	2001	1533			
Obesity	No risk at all	22.6%	18.2%	21.4%	-4.4%	3.2%	-1.2%
	Minor risk	19.8%	16.6%	14.2%	-3.2%	-2.4%	-5.6%
	Moderate risk	19.4%	24.0%	21.0%	4.6%	-3.0%	1.6%
	Major risk	37.0%	38.9%	40.2%	1.9%	1.3%	3.2%
	Don't know	1.2%	2.3%	3.2%	1.1%	0.9%	2.0%
	Unweighted n	2097	2009	1542			
Polluted drinking water	No risk at all	16.1%	6.4%	6.4%	-9.7%	0.0%	-9.7%
	Minor risk	28.5%	16.6%	19.2%	-11.9%	2.6%	-9.3%
	Moderate risk	20.5%	21.7%	21.7%	1.2%	0.0%	1.2%
	Major risk	32.7%	52.0%	49.1%	19.3%	-2.9%	16.4%
	Don't know	2.1%	3.3%	3.6%	1.2%	0.3%	1.5%
	Unweighted n	2086	2000	1538			
Flu epidemics	No risk at all	5.7%	5.0%	4.4%	-0.7%	-0.6%	-1.3%
	Minor risk	29.8%	24.0%	22.1%	-5.8%	-1.9%	-7.7%
	Moderate risk	33.3%	38.0%	36.2%	4.7%	-1.8%	2.9%
	Major risk	29.0%	30.3%	33.6%	1.3%	3.3%	4.6%
	Don't know	2.3%	2.7%	3.6%	0.4%	0.9%	1.3%
	Unweighted n	2092	2009	1537			
Climate change	No risk at all	17.0%	10.7%	15.7%	-6.3%	5.0%	-1.3%
	Minor risk	28.3%	22.8%	18.7%	-5.5%	-4.1%	-9.6%
	Moderate risk	31.8%	39.9%	37.3%	8.1%	-2.6%	5.5%
	Major risk	20.0%	22.6%	25.7%	2.6%	3.1%	5.7%
	Don't know	2.9%	4.1%	2.5%	1.2%	-1.6%	-0.4%
	Unweighted n	2072	2000	1536			
Flooding	No risk at all	25.1%	14.8%	16.4%	-10.3%	1.6%	-8.7%
	Minor risk	40.3%	31.4%	33.3%	-8.9%	1.9%	-7.0%
	Moderate risk	18.9%	33.3%	30.8%	14.4%	-2.5%	11.9%
	Major risk	13.3%	17.8%	17.6%	4.5%	-0.2%	4.3%
	Don't know	2.4%	2.7%	1.9%	0.3%	-0.8%	-0.5%
	Unweighted n	2054	1983	1541			

Data tables | Perceived health risks from energy sources

Table 2 | Health risks from sources of electrical energy

		Please rate each of the following sources of electrical energy in terms of how harmful they are to people's health.				
		STATE	WESTERN	CENTRAL	SOUTHERN	EASTERN
a. Coal	Not at all harmful	1.0%	.9%	.6%	1.4%	.6%
	Not very harmful	13.5%	17.1%	11.0%	16.0%	12.7%
	Somewhat harmful	30.6%	35.9%	33.3%	29.4%	24.8%
	Very harmful	38.2%	35.9%	36.6%	39.4%	48.3%
	Don't know	16.6%	10.1%	18.4%	13.8%	13.6%
	Unweighted n	1531	419	478	296	338
b. Petroleum (oil)	Not at all harmful	2.0%	1.6%	2.0%	2.4%	2.2%
	Not very harmful	16.6%	27.1%	15.5%	13.0%	24.3%
	Somewhat harmful	40.9%	39.0%	41.6%	36.7%	38.1%
	Very harmful	21.5%	18.3%	21.2%	23.7%	20.8%
	Don't know	19.0%	14.0%	19.7%	24.1%	14.6%
	Unweighted n	1523	417	477	290	339
c. Natural gas extracted by hydraulic fracturing ("fracking") in Maryland	Not at all harmful	4.3%	9.9%	3.5%	3.3%	9.2%
	Not very harmful	20.1%	16.6%	20.1%	24.1%	24.8%
	Somewhat harmful	23.1%	20.9%	24.2%	19.2%	22.8%
	Very harmful	20.8%	27.3%	20.3%	20.1%	21.7%
	Don't know	31.7%	25.2%	32.0%	33.3%	21.5%
	Unweighted n	1494	411	466	291	326
d. Other sources of natural gas	Not at all harmful	6.9%	7.5%	7.5%	4.9%	10.2%
	Not very harmful	37.6%	35.8%	37.6%	48.3%	32.6%
	Somewhat harmful	21.3%	26.4%	20.0%	16.7%	29.8%
	Very harmful	4.9%	3.8%	3.4%	8.1%	6.0%
	Don't know	29.4%	26.5%	31.5%	22.0%	21.3%
	Unweighted n	1512	413	472	294	333
e. Wind	Not at all harmful	68.7%	71.3%	70.3%	66.5%	70.2%
	Not very harmful	18.1%	19.8%	17.2%	21.2%	13.5%
	Somewhat harmful	2.5%	2.6%	2.2%	1.8%	5.6%
	Very harmful	.8%	1.1%	.1%	1.3%	3.5%
	Don't know	10.0%	5.2%	10.2%	9.1%	7.1%
	Unweighted n	1520	419	473	292	336
f. Nuclear	Not at all harmful	8.4%	5.2%	7.5%	11.6%	11.7%
	Not very harmful	13.8%	18.0%	14.4%	11.9%	15.4%
	Somewhat harmful	22.2%	20.3%	24.6%	16.6%	20.7%
	Very harmful	34.3%	37.1%	32.3%	34.7%	37.4%
	Don't know	21.2%	19.4%	21.2%	25.3%	14.8%
	Unweighted n	1510	407	478	290	335
g. Solar	Not at all harmful	70.4%	74.8%	72.0%	59.0%	72.8%
	Not very harmful	14.3%	16.3%	12.0%	24.3%	15.1%
	Somewhat harmful	3.7%	2.3%	2.8%	7.6%	2.0%
	Very harmful	.6%	.7%	.6%	.1%	2.7%
	Don't know	11.1%	5.9%	12.5%	9.0%	7.4%
	Unweighted n	1523	415	479	294	335
h. Hydroelectric (including dams)	Not at all harmful	43.6%	42.0%	43.0%	44.6%	44.2%
	Not very harmful	24.5%	27.9%	26.5%	17.4%	28.1%
	Somewhat harmful	10.9%	15.5%	9.3%	10.7%	6.1%
	Very harmful	1.6%	1.2%	1.1%	3.2%	5.6%
	Don't know	19.4%	13.5%	20.2%	24.0%	15.9%
	Unweighted n	1519	417	476	291	335

Continued

Please rate each of the following sources of electrical energy in terms of how harmful they are to people's health.

		STATE	WESTERN	CENTRAL	SOUTHERN	EASTERN
i. Wood fuel	Not at all harmful	9.2%	16.1%	9.5%	5.0%	8.7%
	Not very harmful	24.3%	25.3%	25.8%	16.5%	26.4%
	Somewhat harmful	34.5%	32.8%	31.9%	48.2%	40.8%
	Very harmful	11.9%	10.9%	11.3%	14.4%	11.6%
	Don't know	20.0%	14.9%	21.5%	15.9%	12.5%
	Unweighted n	1515	415	476	291	333
j. Geothermal	Not at all harmful	32.1%	38.6%	34.0%	25.9%	38.8%
	Not very harmful	17.1%	15.5%	14.3%	23.4%	26.9%
	Somewhat harmful	7.1%	8.0%	6.5%	5.1%	10.6%
	Very harmful	.8%	.6%	.3%	3.0%	.8%
	Don't know	42.9%	37.3%	45.0%	42.6%	22.8%
	Unweighted n	1526	417	477	295	337

Please rate each of the following sources of electrical energy in terms of how harmful they are to people's health.							
		2013	2014	2015	Δ 2014-2013	Δ 2015-2014	Δ 2015-2013
Coal	Not at all harmful	2.8%	2.5%	1.0%	-0.3%	-1.5%	-1.8%
	Not very harmful	9.6%	8.4%	13.5%	-1.2%	5.1%	3.9%
	Somewhat harmful	37.5%	31.6%	30.6%	-5.9%	-1.0%	-6.9%
	Very harmful	30.8%	40.6%	38.2%	9.8%	-2.4%	7.4%
	Don't know	19.3%	16.9%	16.6%	-2.4%	-0.3%	-2.7%
	Unweighted n	2098	2006	1531			
Petroleum (oil)	Not at all harmful	3.1%	1.9%	2.0%	-1.2%	0.1%	-1.1%
	Not very harmful	15.1%	15.0%	16.6%	-0.1%	1.6%	1.5%
	Somewhat harmful	38.8%	37.5%	40.9%	-1.3%	3.4%	2.1%
	Very harmful	20.2%	26.2%	21.5%	6.0%	-4.7%	1.3%
	Don't know	22.8%	19.4%	19.0%	-3.4%	-0.4%	-3.8%
	Unweighted n	2088	1994	1523			
Natural gas extracted by hydraulic fracturing ("fracking") in Maryland	Not at all harmful	5.5%	5.1%	4.3%	-0.4%	-0.8%	-1.2%
	Not very harmful	19.4%	20.9%	20.1%	1.5%	-0.8%	0.7%
	Somewhat harmful	27.9%	22.6%	23.1%	-5.3%	0.5%	-4.8%
	Very harmful	16.5%	22.9%	20.8%	6.4%	-2.1%	4.3%
	Don't know	30.7%	28.4%	31.7%	-2.3%	3.3%	1.0%
	Unweighted n	2086	2000	1494			
Other sources of natural gas	Not at all harmful	9.5%	7.9%	6.9%	-1.6%	-1.0%	-2.6%
	Not very harmful	27.4%	32.2%	37.6%	4.8%	5.4%	10.2%
	Somewhat harmful	24.0%	24.6%	21.3%	0.6%	-3.3%	-2.7%
	Very harmful	5.4%	4.0%	4.9%	-1.4%	0.9%	-0.5%
	Don't know	33.7%	31.3%	29.4%	-2.4%	-1.9%	-4.3%
	Unweighted n	2074	1992	1512			
Offshore wind (2013, 2014); wind (2015)	Not at all harmful	58.0%	57.0%	68.7%	-1.0%	11.7%	10.7%
	Not very harmful	17.1%	20.4%	18.1%	3.3%	-2.3%	1.0%
	Somewhat harmful	4.2%	3.6%	2.5%	-0.6%	-1.1%	-1.7%
	Very harmful	1.1%	0.7%	0.8%	-0.4%	0.1%	-0.3%
	Don't know	19.7%	18.3%	10.0%	-1.4%	-8.3%	-9.7%
	Unweighted n	2060	1998	1520			
Land-based wind	Not at all harmful	59.6%	57.8%	68.7%	-1.8%	10.9%	9.1%
	Not very harmful	17.8%	20.4%	18.1%	2.6%	-2.3%	0.3%
	Somewhat harmful	4.4%	3.8%	2.5%	-0.6%	-1.3%	-1.9%
	Very harmful	1.0%	1.1%	0.8%	0.1%	-0.3%	-0.2%
	Don't know	17.2%	17.0%	10.0%	-0.2%	-7.0%	-7.2%
	Unweighted n	2079	2003	1520			

Continued

Please rate each of the following sources of electrical energy in terms of how harmful they are to people's health.

		2013	2014	2015	Δ 2014-2013	Δ 2015-2014	Δ 2015-2013
Nuclear	Not at all harmful	6.6%	5.3%	8.4%	-1.3%	3.1%	1.8%
	Not very harmful	11.5%	13.9%	13.8%	2.4%	-0.1%	2.3%
	Somewhat harmful	23.1%	27.4%	22.2%	4.3%	-5.2%	-0.9%
	Very harmful	34.6%	30.9%	34.3%	-3.7%	3.4%	-0.3%
	Don't know	24.2%	22.5%	21.2%	-1.7%	-1.3%	-3.0%
	Unweighted n	2064	1981	1510			
Solar	Not at all harmful	60.3%	65.0%	70.4%	4.7%	5.4%	10.1%
	Not very harmful	17.8%	17.1%	14.3%	-0.7%	-2.8%	-3.5%
	Somewhat harmful	3.6%	3.2%	3.7%	-0.4%	0.5%	0.1%
	Very harmful	2.9%	1.0%	0.6%	-1.9%	-0.4%	-2.3%
	Don't know	15.4%	13.7%	11.1%	-1.7%	-2.6%	-4.3%
	Unweighted n	2077	2009	1523			
Hydroelectric (including dams)	Not at all harmful	38.5%	38.6%	43.6%	0.1%	5.0%	5.1%
	Not very harmful	24.4%	28.3%	24.5%	3.9%	-3.8%	0.1%
	Somewhat harmful	10.2%	8.9%	10.9%	-1.3%	2.0%	0.7%
	Very harmful	1.9%	1.4%	1.6%	-0.5%	0.2%	-0.3%
	Don't know	25.1%	22.8%	19.4%	-2.3%	-3.4%	-5.7%
	Unweighted n	2075	2003	1519			
Wood fuel or switchgrass (2013, 2014); wood fuel (2015)	Not at all harmful	8.1%	8.4%	9.2%	0.3%	0.8%	1.1%
	Not very harmful	18.6%	22.0%	24.3%	3.4%	2.3%	5.7%
	Somewhat harmful	24.1%	23.6%	34.5%	-0.5%	10.9%	10.4%
	Very harmful	10.2%	7.4%	11.9%	-2.8%	4.5%	1.7%
	Don't know	39.0%	38.6%	20.0%	-0.4%	-18.6%	-19.0%
	Unweighted n	2083	2006	1515			

Data tables | Perceptions of air pollution and air quality

Table 3 | Concern about the health effect of air quality

How concerned are you about the health effects of air pollution on the following?		STATE	WESTERN	CENTRAL	SOUTHERN	EASTERN
a. You personally	Not at all	4.9%	15.3%	4.5%	3.7%	4.1%
	A very little	11.6%	13.0%	12.1%	8.5%	14.7%
	A little	15.7%	17.9%	14.7%	22.6%	20.5%
	A moderate amount	25.9%	25.9%	28.1%	22.3%	20.3%
	Quite a lot	16.3%	11.1%	17.4%	14.5%	14.3%
	A great deal	11.9%	9.7%	12.1%	9.3%	13.9%
	A very great deal	13.7%	7.2%	11.1%	19.0%	12.2%
	Unweighted n	1527	420	475	296	336
b. Other people in your immediate household	Not at all	8.3%	19.2%	7.6%	5.9%	10.2%
	A very little	8.9%	11.8%	9.1%	6.6%	10.3%
	A little	18.4%	15.3%	17.6%	27.9%	19.3%
	A moderate amount	22.5%	20.9%	23.5%	20.8%	22.2%
	Quite a lot	16.9%	14.6%	19.7%	10.3%	13.6%
	A great deal	11.4%	8.7%	11.3%	12.4%	12.2%
	A very great deal	13.5%	9.5%	11.2%	16.1%	12.2%
	Unweighted n	1410	387	442	275	306
c. People in your community	Not at all	3.9%	11.0%	3.7%	2.5%	3.4%
	A very little	10.7%	11.6%	9.4%	12.2%	13.0%
	A little	17.1%	19.3%	16.3%	23.5%	22.7%
	A moderate amount	27.5%	31.3%	31.3%	21.1%	25.4%
	Quite a lot	17.4%	14.8%	17.9%	13.7%	11.9%
	A great deal	12.3%	5.6%	12.3%	16.3%	13.0%
	A very great deal	11.1%	6.3%	9.2%	10.7%	10.6%
	Unweighted n	1491	406	468	289	328

Table 4 | Ratings of indoor air quality

How would you rate the air quality in these places?		STATE	WESTERN	CENTRAL	SOUTHERN	EASTERN
a. Inside my home	Very good	20.9%	32.2%	21.0%	17.7%	27.1%
	Good	45.9%	44.8%	44.7%	52.0%	51.3%
	Neutral	26.4%	15.6%	28.4%	22.9%	16.2%
	Poor	3.6%	4.6%	2.0%	5.7%	1.7%
	Very poor	.4%	.7%	.4%	.3%	1.0%
	Don't know/Not applicable	2.9%	2.1%	3.5%	1.5%	2.8%
	Unweighted n	1536	422	480	296	338
	b. Outside my home	Very good	9.9%	24.6%	8.4%	10.1%
Good		39.8%	45.7%	38.4%	45.5%	37.1%
Neutral		32.5%	22.6%	34.4%	27.5%	35.0%
Poor		10.1%	4.1%	10.4%	11.7%	9.5%
Very poor		4.1%	.5%	3.7%	3.1%	1.0%
Don't know/Not applicable		3.6%	2.4%	4.7%	2.1%	4.2%
Unweighted n		1530	419	478	295	338
c. Where I spend most time when not at home (work, school, etc.)		Very good	5.8%	11.7%	5.8%	3.6%
	Good	33.3%	42.2%	30.2%	40.1%	40.7%
	Neutral	37.3%	28.8%	39.2%	29.8%	23.7%
	Poor	11.8%	7.1%	11.6%	17.5%	9.8%
	Very poor	4.2%	2.6%	4.1%	2.7%	8.9%
	Don't know/Not applicable	7.7%	7.5%	9.0%	6.2%	8.6%
	Unweighted n	1521	414	478	295	334

Table 5 | Chronic health conditions

Have you ever been told by a doctor or health care provider that you have one or more of these conditions? (Please check ALL THAT APPLY)					
	STATE	WESTERN	CENTRAL	SOUTHERN	EASTERN
a. Asthma	11.3%	10.3%	9.6%	13.9%	11.9%
b. COPD	4.5%	4.3%	4.4%	2.4%	5.1%
c. Hypertension	24.4%	30.9%	23.7%	27.5%	27.0%
d. Coronary heart disease	4.5%	4.6%	6.1%	1.8%	2.8%
e. Stroke	2.5%	2.1%	1.8%	2.6%	3.8%
f. Diabetes	12.3%	17.3%	12.2%	9.5%	14.1%
g. Cancer	8.0%	9.9%	8.6%	7.3%	6.6%
h. Weak or failing kidneys	2.4%	8.6%	1.6%	2.2%	1.5%
i. Arthritis	21.7%	28.6%	18.8%	29.1%	25.9%
j. Hepatitis	2.3%	1.3%	3.0%	.6%	1.1%
k. None of the above	48.0%	44.4%	49.9%	42.4%	46.6%
Unweighted n	1547	424	484	297	342

Table 6 | Chronic medical conditions diagnosed in other immediate household members

Has an immediate household member ever been told by a doctor or health care provider that they have one or more of these conditions? (Please check ALL THAT APPLY)					
	STATE	WESTERN	CENTRAL	SOUTHERN	EASTERN
a. Asthma	14.9%	17.9%	14.3%	13.7%	11.7%
b. COPD	4.6%	4.4%	5.3%	1.3%	6.0%
c. Hypertension	18.5%	20.0%	16.5%	18.3%	18.2%
d. Coronary heart disease	3.9%	9.3%	3.9%	2.5%	5.8%
e. Stroke	3.1%	7.0%	1.9%	3.3%	5.0%
f. Diabetes	14.1%	13.9%	13.2%	13.8%	13.7%
g. Cancer	8.6%	12.7%	7.2%	12.3%	10.2%
h. Weak or failing kidneys	3.1%	7.5%	3.0%	1.9%	1.1%
i. Arthritis	14.8%	18.6%	11.0%	31.2%	13.4%
j. Hepatitis	2.0%	.4%	2.7%	.2%	.3%
k. None of the above	48.3%	47.5%	50.5%	45.2%	45.5%
Unweighted n	1547	424	484	297	342

Table 7 | Asthma episodes

If you stated above that you currently have asthma, please answer the questions below.

Asthma attacks, sometimes called episodes, refer to periods of worsening asthma symptoms that make you limit your activity more than you usually do, or make you seek medical care.

During the past 3 months, how many asthma episodes or attacks have you had? (Please write #) asthma attacks/episodes					
	STATE	WESTERN	CENTRAL	SOUTHERN	EASTERN
0	58.8%	56.2%	44.5%	77.4%	44.9%
1-5	35.2%	34.7%	51.7%	12.4%	52.0%
6-10	1.9%	1.9%	0.0%	1.9%	3.1%
11-15	1.4%	2.2%	2.5%	0.0%	0.0%
>15	2.7%	5.0%	1.3%	8.4%	0.0%
Unweighted n	164	45	43	36	40

Table 8 | Inability to work or conduct usual activities due to asthma

During the past 12 months, how many days were you unable to work or carry out your usual activities because of your asthma? (Please write #) days					
	STATE	WESTERN	CENTRAL	SOUTHERN	EASTERN
0	75.5%	83.7%	66.2%	89.5%	68.4%
1-5	17.9%	7.5%	24.9%	9.3%	17.4%
6-10	3.2%	4.5%	3.5%	1.1%	9.9%
11-15	.5%	0.0%	1.4%	0.0%	0.0%
>15	2.9%	4.4%	4.0%	0.0%	4.3%
Unweighted n	162	44	42	36	40

Table 9 | Visits to the emergency room or urgent care due to asthma

During the past 12 months, how many times did you visit an emergency room or urgent care center because of your asthma? (Please write #) times

	STATE	WESTERN	CENTRAL	SOUTHERN	EASTERN
0	83.1%	88.2%	83.1%	84.2%	69.0%
1-5	16.1%	10.0%	16.9%	15.0%	31.0%
6-10	.8%	1.8%	0.0%	.8%	0.0%
Unweighted n	160	44	42	35	39

Table 10 | Number of other household members who experience asthma

If you stated above that a member of your immediate household currently has asthma, please answer the questions below.

How many people in your household, not including yourself, have asthma?

	STATE	WESTERN	CENTRAL	SOUTHERN	EASTERN
1	87.0%	87.0%	91.6%	76.6%	76.9%
2	7.8%	12.2%	5.4%	10.0%	16.6%
3	4.9%	.8%	3.0%	13.3%	1.4%
4	.3%	0.0%	0.0%	0.0%	5.1%
Total	175	56	55	37	27

Table 11 | Age of other household member with most severe asthma

What is the age of the person in your immediate household who has the most severe asthma, not including you?

	STATE	WESTERN	CENTRAL	SOUTHERN	EASTERN
< 6	27.2%	13.8%	17.1%	50.1%	16.9%
6 to 12	12.8%	23.2%	13.1%	4.5%	27.9%
12 to 17	9.7%	17.4%	13.2%	5.2%	13.5%
18 to 24	14.8%	15.3%	18.0%	8.9%	6.8%
25 to 34	8.4%	1.7%	10.7%	7.7%	6.2%
35 to 44	11.0%	2.2%	14.3%	7.6%	6.8%
45 to 54	6.5%	10.0%	4.9%	6.0%	13.0%
55 to 64	2.7%	7.2%	4.2%	0.0%	1.4%
65 to 74	2.2%	4.8%	.8%	2.5%	1.6%
75 to 84	3.3%	4.5%	0.0%	7.5%	5.9%
85 +	1.3%	0.0%	3.7%	0.0%	0.0%
Unweighted n	212	60	61	51	40

Table 12 | Number of asthma attacks of other household member

During the past 3 months, how many asthma episodes or attacks have they had?

	STATE	WESTERN	CENTRAL	SOUTHERN	EASTERN
0	62.7%	40.1%	65.4%	72.3%	37.3%
1-5	30.3%	50.9%	26.0%	21.2%	54.6%
6-10	6.4%	5.6%	8.6%	6.6%	1.0%
11-15	.3%	2.8%	0.0%	0.0%	0.0%
>15	.4%	.6%	0.0%	0.0%	7.1%
Unweighted n	172	54	49	39	30

Table 13 | Number of household member's visits to an emergency room or urgent care

During the past 12 months, how many times did they visit an emergency room or urgent care center because of their asthma?

	STATE	WESTERN	CENTRAL	SOUTHERN	EASTERN
0	81.4%	75.5%	86.1%	83.3%	53.5%
1-5	17.6%	22.7%	13.9%	13.6%	46.5%
6-10	.2%	1.2%	0.0%	0.0%	0.0%
11-15	.9%	.6%	0.0%	3.2%	0.0%
Unweighted n	171	54	49	38	30

Table 14 | Number of days that household member was unable to work or carry out usual activities

During the past 12 months, how many days were they unable to work, go to school, or carry out their usual activities because of their asthma?					
	STATE	WESTERN	CENTRAL	SOUTHERN	EASTERN
0	75.9%	71.7%	78.8%	80.1%	70.3%
1-5	17.5%	22.7%	18.0%	8.8%	16.2%
6-10	4.4%	2.0%	3.1%	7.1%	5.0%
11-15	.6%	.6%	0.0%	.8%	0.0%
>15	1.6%	2.9%	0.0%	3.2%	8.5%
Unweighted n	168	53	47	38	30

Data tables | Health status of respondents and their household members

Table 15 | Experience of stress

In the last 12 months, have you personally experienced one or more prolonged periods of stress of 1 month or longer in relation to circumstances in everyday life, such as work, health, or a family situation?					
	STATE	WESTERN	CENTRAL	SOUTHERN	EASTERN
I have not experienced a prolonged period of stress	36.1%	40.6%	36.4%	34.7%	31.1%
One period of prolonged stress	22.7%	21.6%	23.7%	23.7%	16.7%
More than one period of prolonged stress	26.1%	21.1%	25.3%	30.9%	34.0%
Constant stress	15.0%	16.7%	14.5%	10.7%	18.1%
Unweighted n	1530	420	478	294	338

Data tables | Marylanders' priorities for the Assembly and Governor

Table 16 | Top priority areas for the state

How much of a priority should these topics be for Maryland's General Assembly and the Governor?						
	STATE	WESTERN	CENTRAL	SOUTHERN	EASTERN	
a. Improving access to health care	Not a priority	2.2%	1.4%	2.2%	2.1%	2.0%
	Low	5.0%	5.0%	5.0%	3.7%	5.1%
	Medium	18.4%	19.2%	18.3%	21.9%	15.4%
	High	36.3%	28.4%	37.2%	39.5%	26.0%
	Very high	38.1%	46.1%	37.2%	32.9%	51.6%
	Unweighted n	1529	421	481	291	336
b. Lowering state rates of asthma and respiratory disease	Not a priority	4.1%	8.1%	5.0%	1.4%	4.9%
	Low	12.0%	13.6%	11.8%	13.7%	8.6%
	Medium	24.9%	27.5%	22.6%	33.8%	29.0%
	High	32.7%	22.7%	33.9%	29.6%	21.4%
	Very high	26.3%	28.2%	26.7%	21.4%	36.2%
	Unweighted n	1510	415	472	289	334
c. Lowering state taxes	Not a priority	2.3%	3.0%	3.0%	.8%	1.5%
	Low	5.3%	9.0%	6.0%	2.6%	5.5%
	Medium	18.9%	19.9%	18.1%	28.7%	17.3%
	High	27.2%	24.0%	27.3%	25.0%	30.8%
	Very high	46.3%	44.1%	45.7%	42.9%	45.0%
	Unweighted n	1532	419	481	293	339
d. Addressing climate change	Not a priority	13.9%	13.1%	14.6%	10.2%	12.8%
	Low	15.2%	18.0%	16.5%	15.2%	15.9%
	Medium	24.7%	23.9%	24.6%	27.3%	19.7%
	High	22.9%	21.8%	21.1%	26.4%	23.8%
	Very high	23.3%	23.1%	23.2%	20.9%	27.8%
	Unweighted n	1516	413	481	290	332
e. Making the state more business-friendly	Not a priority	2.8%	1.0%	2.5%	10.6%	2.2%
	Low	7.1%	5.9%	6.7%	9.1%	10.2%
	Medium	28.6%	21.6%	29.9%	22.8%	22.5%
	High	35.5%	35.6%	37.9%	32.8%	25.8%
	Very high	26.0%	35.9%	23.0%	24.6%	39.3%
	Unweighted n	1518	415	475	292	336

Continued

How much of a priority should these topics be for Maryland's General Assembly and the Governor?

		STATE	WESTERN	CENTRAL	SOUTHERN	EASTERN
f. Shrinking the size of state government	Not a priority	12.0%	7.3%	12.4%	9.4%	6.8%
	Low	16.4%	16.1%	15.9%	22.6%	13.8%
	Medium	32.0%	23.0%	31.5%	38.3%	30.8%
	High	17.6%	23.2%	18.9%	12.3%	20.0%
	Very high	21.9%	30.4%	21.3%	17.4%	28.5%
	Unweighted n	1529	420	478	295	336
g. Creating jobs	Not a priority	1.3%	.5%	1.4%	.5%	.5%
	Low	.9%	1.5%	.9%	.6%	1.2%
	Medium	11.3%	9.5%	10.6%	15.4%	7.2%
	High	27.7%	27.1%	29.0%	22.2%	24.2%
	Very high	58.9%	61.3%	58.1%	61.3%	66.8%
	Unweighted n	1525	419	477	292	337
h. Growing the middle class	Not a priority	3.0%	2.0%	4.2%	.9%	2.1%
	Low	3.5%	2.4%	4.6%	1.8%	3.8%
	Medium	19.1%	13.8%	21.2%	9.9%	20.6%
	High	34.8%	35.1%	30.6%	55.3%	28.4%
	Very high	39.6%	46.7%	39.4%	32.0%	45.1%
	Unweighted n	1521	414	477	294	336
i. Protecting Maryland's coastal areas from storms and flooding	Not a priority	2.0%	3.6%	2.3%	1.0%	.7%
	Low	7.8%	9.6%	9.7%	2.4%	7.1%
	Medium	24.3%	27.4%	24.9%	19.1%	19.2%
	High	37.0%	30.4%	37.9%	40.8%	29.9%
	Very high	29.0%	29.0%	25.2%	36.6%	43.1%
	Unweighted n	1536	423	481	294	338
j. Reducing water pollution	Not a priority	.4%	1.8%	.2%	.2%	.4%
	Low	2.7%	4.4%	3.4%	.8%	2.8%
	Medium	20.7%	27.9%	21.7%	11.4%	22.0%
	High	32.7%	29.9%	33.3%	39.9%	29.3%
	Very high	43.5%	35.9%	41.4%	47.7%	45.5%
	Unweighted n	1537	422	482	295	338
k. Fixing and building roads	Not a priority	.5%	.4%	.6%	.2%	.4%
	Low	2.4%	2.7%	1.5%	3.1%	5.2%
	Medium	19.9%	16.0%	19.6%	23.2%	20.0%
	High	39.0%	37.2%	43.5%	28.0%	33.7%
	Very high	38.1%	43.6%	34.8%	45.5%	40.8%
	Unweighted n	1533	421	479	294	339
l. Expanding public transportation	Not a priority	6.3%	5.0%	6.6%	4.9%	5.9%
	Low	11.2%	13.5%	12.3%	9.2%	13.2%
	Medium	29.6%	29.5%	27.7%	38.5%	25.0%
	High	27.4%	26.4%	28.4%	24.9%	33.4%
	Very high	25.5%	25.6%	25.0%	22.6%	22.5%
	Unweighted n	1530	419	479	295	337
m. Reducing air pollution	Not a priority	2.5%	6.6%	2.4%	1.3%	.8%
	Low	5.6%	9.4%	7.0%	1.3%	7.5%
	Medium	23.8%	25.3%	24.7%	17.4%	26.4%
	High	33.0%	25.8%	31.4%	44.8%	28.2%
	Very high	35.1%	32.9%	34.5%	35.2%	37.2%
	Unweighted n	1517	417	475	289	336
n. Improving state K-12 and higher education	Not a priority	1.6%	1.2%	1.7%	1.9%	2.1%
	Low	3.3%	5.2%	3.9%	2.1%	4.9%
	Medium	16.1%	18.3%	18.3%	11.4%	11.1%
	High	30.0%	28.6%	28.7%	34.8%	29.4%
	Very high	48.9%	46.7%	47.4%	49.8%	52.6%
	Unweighted n	1535	421	481	294	339

How much of a priority should these topics be for Maryland's General Assembly and the Governor?				
		2014	2015	Δ 2015-2014
Improving access to health care	Not a priority	3.2%	2.2%	-1.0%
	Low	6.3%	5.0%	-1.3%
	Medium	16.7%	18.4%	1.7%
	High	29.5%	36.3%	6.8%
	Very high	44.3%	38.1%	-6.2%
	Unweighted n	1997	1529	
Addressing climate change	Not a priority	8.6%	13.9%	5.3%
	Low	12.3%	15.2%	2.9%
	Medium	28.4%	24.7%	-3.7%
	High	29.6%	22.9%	-6.7%
	Very high	21.0%	23.3%	2.3%
	Unweighted n	1994	1516	
Creating jobs	Not a priority	0.9%	1.3%	0.4%
	Low	1.5%	0.9%	-0.6%
	Medium	8.2%	11.3%	3.1%
	High	26.2%	27.7%	1.5%
	Very high	63.1%	58.9%	-4.2%
	Unweighted n	2002	1525	
Growing the middle class	Not a priority	2.5%	3.0%	0.5%
	Low	4.9%	3.5%	-1.4%
	Medium	18.4%	19.1%	0.7%
	High	30.1%	34.8%	4.7%
	Very high	44.1%	39.6%	-4.5%
	Unweighted n	1982	1521	
Protecting Maryland's coastal areas from sea-level rise (2014)/ storms and flooding (2015)	Not a priority	4.5%	2.0%	-2.5%
	Low	11.0%	7.8%	-3.2%
	Medium	29.2%	24.3%	-4.9%
	High	31.2%	37.0%	5.8%
	Very high	24.1%	29.0%	4.9%
	Unweighted n	1998	1536	
Reducing water pollution	Not a priority	1.2%	0.4%	-0.8%
	Low	2.3%	2.7%	0.4%
	Medium	15.4%	20.7%	5.3%
	High	36.3%	32.7%	-3.6%
	Very high	44.8%	43.5%	-1.3%
	Unweighted n	1989	1537	
Reducing air pollution	Not a priority	2.0%	2.5%	0.5%
	Low	5.4%	5.6%	0.2%
	Medium	19.2%	23.8%	4.6%
	High	33.8%	33.0%	-0.8%
	Very high	39.5%	35.1%	-4.4%
	Unweighted n	1993	1517	

Data tables | Perceived health vulnerability of people to climate change

Table 17 | Personal, household and community vulnerability

How vulnerable — if at all — are the following people to potential health impacts of climate change?		STATE	WESTERN	CENTRAL	SOUTHERN	EASTERN
a. You personally	Not at all vulnerable	15.0%	18.4%	15.8%	11.3%	17.0%
	Only a little vulnerable	21.3%	25.4%	22.4%	16.0%	25.1%
	Moderately vulnerable	34.7%	32.1%	33.3%	40.2%	26.8%
	Very vulnerable	15.9%	16.8%	14.4%	22.2%	14.1%
	There are no health impacts	1.4%	1.6%	2.0%	.7%	1.6%
	Don't know	11.6%	5.7%	12.1%	9.7%	15.3%
	Unweighted n	1519	421	473	294	331
b. Other people in your immediate household	Not at all vulnerable	14.3%	20.9%	13.6%	10.6%	15.8%
	Only a little vulnerable	17.7%	24.6%	19.1%	13.0%	23.9%
	Moderately vulnerable	30.2%	25.5%	29.9%	32.8%	24.7%
	Very vulnerable	20.1%	21.6%	19.1%	20.5%	14.8%
	There are no health impacts	1.5%	1.2%	2.2%	.7%	1.7%
	Don't know	16.2%	6.2%	16.1%	22.5%	19.1%
	Unweighted n	1445	397	456	280	312
c. People in your community	Not at all vulnerable	10.7%	14.8%	10.7%	8.2%	8.9%
	Only a little vulnerable	14.6%	20.0%	16.6%	8.4%	17.2%
	Moderately vulnerable	35.0%	33.4%	35.0%	35.1%	28.5%
	Very vulnerable	19.4%	20.0%	18.4%	18.1%	25.7%
	There are no health impacts	1.1%	.9%	1.4%	.7%	1.6%
	Don't know	19.2%	10.9%	18.0%	29.5%	18.0%
	Unweighted n	1517	421	471	294	331

How vulnerable — if at all — are the following people to potential health impacts of climate change?		2014	2015	Δ 2015-2014
You personally	Not at all vulnerable	9.9%	15.0%	5.1%
	Only a little vulnerable	30.7%	21.3%	-9.4%
	Moderately vulnerable	34.0%	34.7%	0.7%
	Very vulnerable	11.4%	15.9%	4.5%
	Don't believe there are potential climate change health impacts	2.8%	1.4%	-1.4%
	Don't know	11.2%	11.6%	0.4%
	Unweighted n	1985	1519	
(Other) people in your immediate household	Not at all vulnerable	11.5%	14.3%	2.8%
	Only a little vulnerable	26.7%	17.7%	-9.0%
	Moderately vulnerable	34.0%	30.2%	-3.8%
	Very vulnerable	12.9%	20.1%	7.2%
	Don't believe there are potential climate change health impacts	2.5%	1.5%	-1.0%
	Don't know	12.4%	16.2%	3.8%
	Unweighted n	1936	1445	
People in your community	Not at all vulnerable	6.4%	10.7%	4.3%
	Only a little vulnerable	19.2%	14.6%	-4.6%
	Moderately vulnerable	42.1%	35.0%	-7.1%
	Very vulnerable	14.4%	19.4%	5.0%
	Don't believe there are potential climate change health impacts	2.3%	1.1%	-1.2%
	Don't know	15.7%	19.2%	3.5%
	Unweighted n	1985	1517	

Data tables | State resident beliefs about who is currently being harmed by climate change

Table 18 | Personal, community, and statewide harm from climate change

How much do you think climate change is currently harming ... ?		STATE	WESTERN	CENTRAL	SOUTHERN	EASTERN
a. You personally	Not at all	23.0%	24.5%	24.3%	25.9%	22.8%
	Only a little	21.8%	25.7%	24.8%	13.2%	25.6%
	A moderate amount	27.5%	26.3%	24.2%	36.0%	29.1%
	A great deal	17.9%	12.7%	17.3%	18.5%	8.4%
	Don't know	9.8%	10.8%	9.3%	6.3%	14.1%
	Unweighted n	1514	415	478	294	327
b. People in your community	Not at all	16.5%	22.4%	17.0%	14.1%	16.1%
	Only a little	20.8%	23.4%	22.4%	16.7%	24.9%
	A moderate amount	29.4%	28.4%	27.0%	32.9%	32.5%
	A great deal	17.0%	10.9%	17.8%	14.5%	10.3%
	Don't know	16.3%	14.9%	15.8%	21.8%	16.2%
	Unweighted n	1514	415	476	294	329
c. People in Maryland	Not at all	14.7%	16.9%	16.0%	9.8%	15.1%
	Only a little	17.6%	22.5%	20.3%	8.4%	17.3%
	A moderate amount	33.6%	29.8%	32.3%	35.1%	35.9%
	A great deal	17.3%	14.8%	16.4%	20.7%	11.7%
	Don't know	16.9%	16.0%	15.1%	25.9%	20.0%
	Unweighted n	1505	414	475	291	325

Data tables | Marylanders' perceptions of climate change effects on health

Table 19 | Health problems that will become more or less common due to climate change

Do you think that the following health problems will likely become more or less common in Maryland in the future because of climate change, or stay about the same?		STATE	WESTERN	CENTRAL	SOUTHERN	EASTERN
a. Respiratory and breathing problems	Less common	1.1%	1.4%	.8%	1.3%	2.8%
	Stay about the same	24.8%	29.7%	28.6%	16.7%	25.2%
	More common	61.6%	63.2%	59.3%	65.5%	60.9%
	Don't know	12.5%	5.8%	11.3%	16.6%	11.2%
	Total	1517	420	472	294	331
b. Infectious diseases	Less common	3.4%	2.3%	4.4%	2.1%	2.0%
	Stay about the same	43.6%	45.2%	46.8%	38.3%	39.3%
	More common	36.8%	40.3%	31.8%	43.9%	41.4%
	Don't know	16.2%	12.3%	17.0%	15.7%	17.2%
	Total	1509	416	470	292	331
c. Osteoarthritis	Less common	6.7%	3.7%	5.8%	10.1%	2.6%
	Stay about the same	44.1%	49.2%	45.6%	39.7%	46.2%
	More common	17.0%	16.2%	15.6%	18.9%	22.0%
	Don't know	32.1%	30.9%	33.1%	31.3%	29.2%
	Total	1497	415	465	290	327
d. Heat stroke	Less common	4.3%	5.5%	4.8%	3.0%	4.8%
	Stay about the same	26.0%	31.3%	22.7%	30.4%	25.8%
	More common	57.0%	55.1%	58.2%	57.0%	48.0%
	Don't know	12.7%	8.2%	14.3%	9.5%	21.5%
	Total	1511	416	470	295	330
e. Injuries from storms or other extreme weather	Less common	4.0%	3.0%	4.7%	3.0%	3.7%
	Stay about the same	28.0%	32.3%	26.3%	30.4%	25.7%
	More common	57.6%	56.5%	57.6%	58.5%	53.3%
	Don't know	10.4%	8.2%	11.4%	8.0%	17.2%
	Total	1513	416	472	295	330
f. Food- and water-borne illness	Less common	2.9%	3.8%	2.9%	2.7%	2.6%
	Stay about the same	36.2%	39.2%	39.1%	29.6%	40.0%
	More common	47.5%	45.0%	43.3%	57.5%	37.5%
	Don't know	13.3%	12.0%	14.7%	10.1%	20.0%
	Total	1505	417	467	292	329
g. Wrist pain from carpal tunnel syndrome	Less common	12.0%	7.7%	13.7%	11.3%	5.6%
	Stay about the same	41.8%	48.1%	41.4%	39.0%	50.4%
	More common	14.0%	12.5%	14.6%	12.6%	18.8%
	Don't know	32.2%	31.7%	30.3%	37.1%	25.2%
	Total	1494	411	467	289	327
h. Mental health disorders	Less common	9.9%	4.2%	8.4%	15.5%	2.9%
	Stay about the same	42.4%	45.2%	39.9%	45.4%	45.8%
	More common	24.1%	26.0%	27.5%	16.7%	29.6%
	Don't know	23.6%	24.6%	24.3%	22.4%	21.7%
	Total	1502	415	469	291	327
i. Allergies	Less common	2.3%	1.5%	3.0%	1.7%	1.2%
	Stay about the same	18.8%	25.8%	21.1%	12.2%	21.1%
	More common	69.2%	65.1%	64.9%	78.5%	67.3%
	Don't know	9.6%	7.6%	11.0%	7.7%	10.3%
	Total	1510	418	469	293	330
j. Impairment of blood clotting	Less common	6.5%	5.7%	6.5%	7.5%	3.5%
	Stay about the same	46.5%	47.9%	44.9%	48.5%	48.7%
	More common	9.6%	16.5%	9.3%	7.6%	12.4%
	Don't know	37.4%	29.8%	39.3%	36.4%	35.4%
	Total	1501	416	467	290	328

Data tables | Sample demographics

Region		
	STATE unweighted sample n	STATE weighted %
Western Region	424	8.4%
Central Region	484	55.3%
Southern Region	297	30.3%
Eastern Region	342	6.0%
Total	1547	

Gender							
		STATE unweighted sample n	STATE weighted n	WESTERN weighted n	CENTRAL weighted n	SOUTHERN weighted n	EASTERN weighted n
Are you: (Check ONE)	Male	589	48.0%	50.3%	48.0%	48.7%	48.6%
	Female	958	52.0%	49.7%	52.0%	51.3%	51.4%
	Unweighted n	1547	1547	424	484	297	342

Age							
		STATE unweighted sample n	STATE weighted n	WESTERN weighted n	CENTRAL weighted n	SOUTHERN weighted n	EASTERN weighted n
	18-24	30	12.5%	12.2%	11.9%	13.4%	14.1%
	25-34	145	17.6%	15.7%	18.0%	18.3%	13.8%
	35-44	201	17.1%	16.9%	17.0%	17.8%	14.1%
	45-54	297	19.7%	19.8%	19.5%	20.2%	18.2%
	55-64	380	16.2%	16.3%	16.4%	15.7%	17.3%
	65-74	295	9.5%	10.4%	9.3%	8.9%	12.7%
	75-84	136	5.1%	6.1%	5.2%	4.0%	6.9%
	85+	63	2.3%	2.6%	2.6%	1.6%	2.9%
	Unweighted n	1547	1547	424	484	297	342

Education							
		STATE unweighted sample n	STATE weighted n	WESTERN weighted n	CENTRAL weighted n	SOUTHERN weighted n	EASTERN weighted n
What is the highest degree or level of school that you have completed?	Less than high school	45	11.0%	10.5%	10.6%	11.5%	13.1%
	High school or GED	272	25.8%	32.7%	23.2%	27.1%	34.2%
	Some college, no degree	290	19.8%	20.6%	18.2%	22.6%	20.1%
	Associate's degree	124	6.3%	7.6%	5.9%	6.6%	6.2%
	Bachelor's degree	406	20.3%	17.0%	21.9%	19.0%	15.7%
	Advanced degree beyond a bachelor's degree	410	16.8%	11.5%	20.3%	13.2%	10.7%
	Unweighted n	1547	1547	424	484	297	342

Number of Children in Household

		STATE unweighted sample n	STATE weighted n	WESTERN weighted n	CENTRAL weighted n	SOUTHERN weighted n	EASTERN weighted n
How many people under 18 years of age are currently living in your household? (Please write #)	0	986	59.5%	53.9%	62.3%	52.0%	65.6%
	1	208	20.0%	23.5%	15.4%	35.9%	18.2%
	2	167	13.4%	15.2%	16.0%	8.4%	7.3%
	3	53	5.1%	4.1%	5.0%	2.8%	5.3%
	4	11	1.2%	2.0%	1.3%	0.1%	0.6%
	5	3	0.3%	1.1%	0.0%	0.0%	2.5%
	6	1	0.1%	0.0%	0.0%	0.2%	0.0%
	7	1	0.0%	0.2%	0.0%	0.0%	0.0%
	8	1	0.1%	0.0%	0.0%	0.0%	0.6%
	9	1	0.4%	0.0%	0.0%	0.6%	0.0%
	Unweighted n	1432	1432	392	450	280	310

Personal Annual Household Income

		STATE unweighted sample n	STATE weighted n	WESTERN weighted n	CENTRAL weighted n	SOUTHERN weighted n	EASTERN weighted n	
Which of the following broad categories describes your own current approximate annual income before taxes?	Less than \$10,000	132	13.1%	22.6%	13.1%	16.4%	12.5%	
	\$10,000 — \$14,999	62	5.0%	4.1%	4.0%	5.7%	14.9%	
	\$15,000 — \$24,999	130	10.7%	11.1%	10.0%	8.6%	11.7%	
	\$25,000 — \$34,999	144	9.2%	11.7%	7.3%	10.4%	13.2%	
	\$35,000 — \$49,999	222	14.3%	17.3%	14.3%	13.2%	14.7%	
	\$50,000 — \$74,999	286	19.0%	15.4%	19.7%	19.4%	14.7%	
	\$75,000 — \$99,999	194	13.0%	7.1%	15.0%	11.7%	8.8%	
	\$100,000 — \$149,999	174	10.1%	6.9%	9.7%	10.9%	5.7%	
	\$150,000 or more	118	5.6%	4.0%	6.9%	3.9%	3.9%	
		Unweighted n	1462	1462	405	453	278	326

Household Annual Household Income

		STATE unweighted sample n	STATE weighted n	WESTERN weighted n	CENTRAL weighted n	SOUTHERN weighted n	EASTERN weighted n
Which of the following broad categories describes your household's total approximate annual income before taxes?	Less than \$10,000	49	4.5%	5.0%	5.6%	1.0%	10.5%
	\$10,000 — \$14,999	52	4.1%	6.9%	4.3%	0.6%	13.7%
	\$15,000 — \$24,999	84	4.8%	6.0%	3.7%	4.3%	12.9%
	\$25,000 — \$34,999	107	7.8%	10.7%	8.3%	7.2%	5.2%
	\$35,000 — \$49,999	148	11.4%	20.2%	10.1%	18.4%	7.6%
	\$50,000 — \$74,999	238	19.3%	13.4%	17.3%	20.4%	16.3%
	\$75,000 — \$99,999	225	14.8%	11.4%	16.8%	15.5%	14.9%
	\$100,000 — \$149,999	277	17.2%	16.5%	16.6%	19.0%	12.6%
	\$150,000 or more	268	16.0%	9.9%	17.2%	13.6%	6.2%
		Unweighted n	1448	1448	402	448	279

Urban and Rural		STATE unweighted sample n	STATE weighted n	WESTERN weighted n	CENTRAL weighted n	SOUTHERN weighted n	EASTERN weighted n
How would you describe the area in which you live?	Very rural	185	7.7%	18.4%	5.0%	7.8%	20.6%
	Somewhat rural	503	22.1%	45.4%	15.3%	23.8%	49.2%
	Suburban	593	47.3%	23.3%	48.8%	56.3%	21.7%
	Somewhat urban	171	16.0%	11.8%	20.0%	10.3%	6.1%
	Very urban	78	6.8%	1.0%	10.8%	1.7%	2.4%
	Unweighted n	1530	1530	418	481	293	338

Ethnicity		STATE unweighted sample n	STATE weighted n	WESTERN weighted n	CENTRAL weighted n	SOUTHERN weighted n	EASTERN weighted n
What ethnicity do you consider yourself?	Hispanic or Latino	39	4.1%	3.6%	4.3%	2.5%	5.4%
	Not Hispanic or Latino	1457	95.9%	96.4%	95.7%	97.5%	94.6%
	Unweighted n	1496	1496	414	467	286	329

Race		STATE unweighted sample n	STATE weighted n	WESTERN weighted n	CENTRAL weighted n	SOUTHERN weighted n	EASTERN weighted n
What is your race? (Please check ALL THAT APPLY)	White	1204	65.3%	93.4%	63.2%	59.4%	74.9%
	African American or Black	196	19.1%	3.0%	19.3%	23.5%	17.1%
	Asian	55	8.8%	1.0%	12.3%	6.1%	.8%
	American Indian or Alaska Native	4	.3%	.4%	0.0%	.4%	2.5%
	Native Hawaiian or other Pacific Islander	1	.1%	0.0%	.1%	0.0%	0.0%
	Other	35	4.2%	1.8%	2.9%	7.5%	2.9%
	Two or more races	25	2.3%	.5%	2.3%	3.1%	1.9%
	Unweighted n	1520	1520	420	479	289	332

Religious Affiliation		STATE unweighted sample n	STATE weighted n	WESTERN weighted n	CENTRAL weighted n	SOUTHERN weighted n	EASTERN weighted n
What is your present religion, if any? Are you ...	Protestant	490	25.2%	32.4%	23.1%	21.7%	26.4%
	Roman Catholic	346	22.6%	20.8%	24.9%	23.1%	13.2%
	Mormon	5	0.2%	0.5%	0.3%	0.0%	0.1%
	Orthodox, such as Greek or Russian Orthodox	17	0.9%	0.3%	1.2%	0.6%	0.8%
	Jewish	47	3.1%	0.4%	4.5%	1.2%	0.5%
	Muslim	13	2.2%	0.5%	2.8%	1.2%	0.7%
	Buddhist	8	0.3%	0.1%	0.6%	0.1%	0.1%
	Hindu	5	0.4%	0.3%	0.6%	0.0%	0.0%
	Atheist	58	3.5%	3.7%	4.3%	1.2%	4.9%
Agnostic	92	6.0%	5.2%	6.9%	3.7%	6.5%	

Other	411	35.5%	35.8%	30.8%	47.2%	46.7%
Unweighted n	1492	1492	414	467	280	331

Political Ideology

		STATE unweighted sample n	STATE weighted n	WESTERN weighted n	CENTRAL weighted n	SOUTHERN weighted n	EASTERN weighted n
Generally speaking, do you think of yourself as politically ...	Very conservative	172	10.8%	12.8%	9.7%	10.8%	14.6%
	Somewhat conservative	318	15.8%	21.7%	15.6%	12.3%	19.6%
	Moderate, middle of the road	613	48.8%	48.7%	44.3%	63.2%	43.8%
	Somewhat liberal	298	18.2%	11.0%	22.4%	9.6%	18.9%
	Very liberal	120	6.3%	5.9%	8.0%	4.1%	3.1%
	Unweighted n	1521	1521	417	477	290	337

