

# Report on a Survey of Adults regarding Climate and Health Issues in the Kearsarge Region of New Hampshire

# Climate and Health Initiative for Children of Kearsarge & Sunapee (CHICKS) and the NH Healthcare Workers for Climate Action

Publication Date: January 2, 2023

**Authors:** Matthew Cahillane (Ecological Solutions Consulting), Emily Thompson (NH Healthcare Workers for Climate Action), Sanjay Sagar (Dartmouth Health, Center for Advancing Rural Health Equity)

#### **Table of Contents**

Executive Summary:	2
Background:	3
Survey Findings:	5
Conclusions and Recommendations:	16
Appendix A. Data Collection Tool.	19
Appendix B. Introduction and Written Consent for Survey Interview	25

**Acknowledgments:** The authors thank CHICKS/NH Healthcare Workers for Climate Action (NH HWCA) for supporting and administering this stakeholder assessment project, the Center for Advancing Rural Health Equity (CARHE) at Dartmouth Health for providing funding and technical support to design, implement and analyze the survey results, and the Boys & Girls Club of Central NH staff for distributing the survey to parents/caregivers and encouraging them to complete it.

**Citation:** Report on a Survey of Adults regarding Climate and Health Issues in the Kearsarge Region of New Hampshire. A project of Climate and Health Initiative for Children in Kearsarge and Sunapee (CHICKS), NH Healthcare Workers for Climate Action. December 2023

## **Executive Summary:**

This report provides our stakeholders and the project team at Dartmouth Health's Center for Advancing Rural Health Equity (CARHE) with findings from a fall 2023 survey of parents and caregivers for youth in the Kearsarge Region of Central New Hampshire. The results will inform future community engagement, program development and project evaluation.

The purpose of the survey is to enhance the stakeholder engagement process that also includes individual interviews and focus groups. The survey gathers information from parents/caregivers to assess their awareness of climate, weather and indoor air quality. The findings will inform both the development of K-5 climate and health after school programming and the family resource guide as described in the original work plan.

The target population for the survey is parents/caregivers of 65 students who participated in after school programs during the fall of 2023. A total of 24 people completed the survey for a response rate of about 24%. In terms of demographics, the majority of survey respondents are from the towns of Sutton and Warner, in the 35-49 year age range and women, as these are common characteristics of parents/caregivers of children 5-10 years old.

The survey results indicated that the top priority action is to 'Provide a better life for their children'. Less predictably, this parent/caregiver cohort also considers renewable energy sources and reducing climate change to be high priorities. While climate change is not the top priority of respondents, it is still an important issue for them. Comparisons are made to findings from similar national and state climate surveys. Most respondents believe that extreme weather events have become more frequent and intense, with some differences between local and state level findings. The overwhelming majority of respondents believe that climate change is currently happening and is caused mainly by human activities at both the local and state levels. The respondents also believe to varying degrees that climate and healthy home issues should be taught by schools. The results are expected to be useful for program improvement, with the recognition that the number of respondents (N) is small, and thus may not be fully representative of the larger community.

The authors recommend that the project team meet to discuss the findings and lessons learned to improve stakeholder engagement activities. The survey results should be distributed to key stakeholders in the Kearsarge, NH HWCA, CHICKS and Dartmouth communities to take into consideration as future climate and health programming is developed.

CHICKS/CARHE Page 2 of 26

## **Background:**

In the fall of 2023, the CHICKS/CARHE project team designed and completed a survey of adults with young children who attend after school programs at four Boys and Girls Club sites in the Kearsarge region. This report reviews the methods, findings, relevance and makes recommendations for next steps to best utilize the results.

The purpose of this survey is to gather information and engage with the parents/caregivers of these 5-10 year old children from rural and primarily low-income families. The results provide an assessment of parent/caregiver awareness on the topics of weather, climate, healthy homes, and education of children. The results of the survey will inform improvements to the after school program and the family healthy home and energy resource guide as described in the original work plan. The intent of this project is to improve our understanding of community needs, and not to gather information for a research effort or publication in peer-reviewed literature.

## **Survey Population and Health Equity:**

The target audience for the survey is parents/caregivers of K-5 children who attend Boys & Girls Club after school programs at four sites in the Kearsarge region of central New Hampshire. The size of the target population is approximately 115 children between the ages of five - ten years old. Sixty-five children ultimately participated in the program, with the expectation that approximately 100 of their parents/caregivers would receive and be asked to complete the survey, with a 10-30% response rate. A total of twenty-four (24) surveys were completed, for a response rate of about 24%.

Families with children who attend Boys & Girls Club sites in the Kearsarge region are rural and predominantly low-income. They are more likely to live in rental homes and may have more limited ability to control their energy costs, comfort, and indoor air quality.

Health equity issues for this demographic group may include the following:

- A greater proportion may live in rental housing, with the potential for increased exposures that impact allergies and asthma (e.g. smoking, allergens, moisture, etc.) and less control over their home environment and energy use.
- Parents may have multiple jobs and lower income.
- Families may have Increased healthcare and utility costs as a proportion of income.
- Families may have transportation issues that impact access to healthcare, including preventive care.

These equity challenges may also decrease the survey response rate due to lack of time or motivation to share personal information and opinions. **Table 1** displays the four locations involved with the survey, including the number of staff and students at each site.

CHICKS/CARHE Page 3 of 26

**Table 1:** Survey Sites by Location. Kearsarge-Sunapee region, 2023.

Location of the Boys and Girls Club	# Staff	# Students / week
New London (at First Baptist Church)	6	30
Andover Elementary School	4	25
Warner Early Learning Center	4	30
Sutton Central Elementary School (Bradford)	6	30
Totals	20	115

#### **Marketing and Recruitment:**

The project team developed several approaches to encourage parent/caregiver participation in the survey. The site directors at each site, leveraging their 'trusted messenger' status, emailed the survey to parents/caregivers with brief talking points emphasizing the importance and relevance of their answers to our program development and implementation. A financial incentive strategy provided twenty-five dollars (\$25) to each individual submitting a completed survey. The site directors also sent two reminder emails to the target audience (at 7 and 14 days post launch) describing the benefits of participation. After a very low initial response rate (~3%) despite the incentives, Dr. Bob Friedlander, founder of NH Healthcare Workers for Climate Action and CHICKS, personally met with as many parents/caregivers as possible at pickup time, introducing himself as a Boys & Girls Club volunteer committed to improving programming. This simple human connection quickly increased the response rate from 3% to 24%. A cover letter and consent form for the survey is available in the Appendix.

#### **Design and Format of the Questionnaire:**

The survey design is based on previous state and national surveys of adult audiences on the topics of weather, climate and health - plus two additional questions developed by the project team. The survey uses a Qualtrics platform provided by Dartmouth Health/CARHE staff; the online format is intended to provide a more flexible option for busy parents/caregivers, with a hard copy available on request. The survey consists of 10 questions that require 4-6 minutes to complete. The survey process is anonymous to encourage honest responses and to protect against the risk of identifying individuals.

CHICKS/CARHE Page 4 of 26

## **Selection and Type of the Survey Questions:**

Three categories of questions provide different perspectives on the target audience composition and nature of their responses:

- 'Demographic' questions ask about information on who is taking the survey. Prior NH surveys have shown that population characteristics such as party affiliation, news sources, and age have a significant influence on climate opinions and beliefs.
- 'Opinion' questions ask for information on how a person views or prioritizes a particular topic based on personal experience and values. Prior NH surveys have shown that the term 'climate change' is often in the top five priority areas for respondents in NH, and most respondents think that 'climate change' is important to them personally.
- 'Belief' questions ask for information about what facts a person believes based on either accepted knowledge (i.e. information) or inaccurate facts (i.e. misinformation). Prior NH surveys have shown that belief in the facts of climate change is strongly influenced by party affiliation, news sources and age.

The questions and responses were selected from several existing survey sources that provide a comparison or at least perspective on how the Kearsarge responses might relate to baseline findings from the larger population. The survey sources include a <u>UNH Granite Poll survey</u> from August 2022 and <u>Yale Climate Opinion Map surveys</u> from 2018 and 2021. See references at the end of this document. In addition, <u>Appendix A</u> contains the final version of the online questionnaire with survey questions and responses. And <u>Appendix B</u> contains the survey Introduction and Written Consent for Survey Interview.

#### **Survey Findings:**

The survey was implemented from September 18th to October 31st, 2023 and a data set was created for analysis by CARHE staff. The data set was cleaned and analyzed to determine the demographics and response to the opinion and belief questions.

Questions 1-4: Demographics for Survey Respondents by age, place, youth age, and gender

The first four questions ask about the demographics of the respondents, primarily rural and low-income families who need affordable child-care and a safe place for their children to play and learn after school. The intent of these questions is to shed light on the respondents and their children. Table 2 provides a summary of the survey respondent characteristics.

**Table 2:** Survey Respondent Demographics, Kearsarge Region, 2023. Note: Figures are reported with no decimal place for ease of viewing, although all columns may not total exactly.

CHICKS/CARHE Page 5 of 26

Characteristics	CHICKS #	CHICKS %
Age Respondent		
18-34	4	17%
35- 49	16	67%
50-64	3	13%
65+	1	4%
Prefer Not to say	0	0%
	24	100%
Club Site		
Andover	4	17%
New London	3	13%
Sutton	10	42%
Warner	7	29%
Don't know/not sure	0	0%
	24	100%
Age Child		
Age 5-7	8	33%
Age 8-10	12	50%
Both	4	17%
Prefer Not to say	0	0%
	24	100%
Gender		
Female	16	67%
Male	8	33%
Other	0	0%
Prefer Not to say	0	0%
	24	100%

## **Preliminary Findings and Observations**

- 1. With regard to the age of respondents, the largest proportion are in the 35-49 range (66%), which reflects the likely age of parents of 5-10 year olds.
- 2. With regard to the club site, the largest proportion of respondents are from the Sutton site (42%), likely due to the greater connection of project staff to that site.
- 3. With regard to the age of the child, the greatest proportion are from the 8-10 year old group (50.0%), who were the age group most likely to be involved with the after-school curriculum component of this project.
- 4. Regarding gender of the parent/caregiver, the largest proportion are female (66.7%). Among all the sites, the gender split of caretakers is about 50/50, so the opinions and beliefs of female parents/caregivers may be overrepresented.

CHICKS/CARHE Page 6 of 26

## **Question 5:** Priorities for Personal or Community Action

The intent of this question is to provide insight into a few topic areas relevant to the project team and parents/caregivers (i.e. these are not research hypotheses) and include:

- What are the various reasons why people believe society should take action?
- How do these responses compare to other/similar survey findings at the state or national level?
- Does the survey narrative define the term 'action' well enough for respondents to understand the intent of the question?

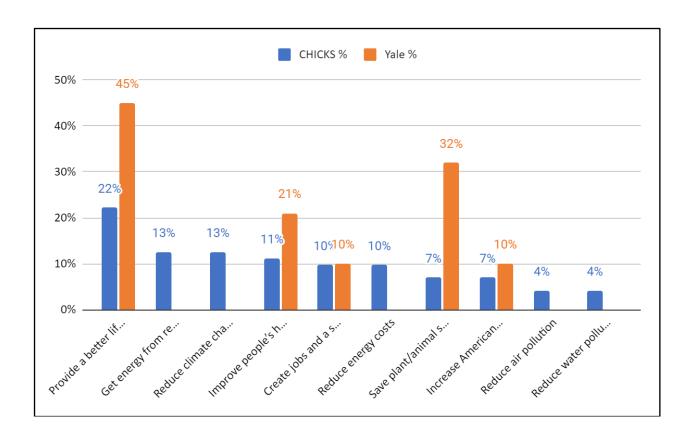
Question 5 asks "Which three actions are most important to you? The respondents check up to three responses. The question is similar to one posed in a <u>national climate survey</u> by the Yale Program on Climate Change Communication. Comparisons are made in the table below which may help generate insights for any observed differences, yet a direct comparison isn't valid due to the differences in the wording of the two questions.

The Yale survey asked a slightly different question worded as "Which of the following reasons to reduce global warming, if any, are most important to you?" The figures in the table below represent the percentage of Yale survey respondents that indicate each action as one of their top three most important reasons to reduce global warming, thus the percentages don't add up to 100%.

Table 3: Priority Actions for Caretakers and Parents, Kearsarge-Sunapee region, 2023.

	CHICKS		Yale	%
Three Most Important Actions	#	CHICKS %	%	Difference
Provide a better life for our children	16	22%	45%	22.8%
Get energy from renewable sources	9	13%		
Reduce climate change	9	13%		
Improve people's health	8	11%	21%	9.9%
Create jobs and a stronger economy	7	10%	10%	0.3%
Reduce energy costs	7	10%		
Save plant/animal species from extinction	5	7%	32%	25.1%
Increase American energy independence	5	7%	10%	3.1%
Reduce air pollution	3	4%		
Reduce water pollution	3	4%		
	72	100%		

CHICKS/CARHE Page **7** of **26** 



## **Preliminary Findings and Observations:**

- 1. The top three responses (or priorities) for the CHICKS survey respondents are 'Provide a better life for children', 'Get energy from renewable sources', and 'Reduce climate change'. As the survey respondents are known to be caregivers to kids 5-10 years old, it makes sense that they would prioritize the needs of children.
- 2. The top response by percentage for both surveys is 'Provide a better life for our children' (22% of CHICKS vs 45% of Yale respondents). This may indicate that respondents of all ages, with or without children, prioritize the needs of future generations in similar ways.
- 3. In the Yale survey, "Improve peoples' health" is the 5th most important action listed, while the CHICKS survey indicates it is the 4th most important action listed (CHICKS 11% vs Yale 14%). Although health was not ranked higher by respondents, recent studies indicate that health is still viewed as being important.
- 4. A similar proportion of the two survey respondents believe that creating jobs and a stronger economy is a top priority (9.7% of CHICKS vs 10% of Yale respondents). Note, the Yale response is worded as, "Create green jobs and a stronger economy".
- 5. A smaller proportion of the CHICKS cohort believe that 'Saving plant and animal species from extinction' is a top action to take (7% of CHICKS vs 32% of Yale respondents).
- 6. Regarding whether the survey narrative defines the term 'action' well enough for respondents to understand the intent of the question, this is a topic that should be explored in any future survey iteration. The Yale survey used the more specific

CHICKS/CARHE Page 8 of 26

terminology of "Which of the following <u>reasons</u> to reduce <u>global warming</u>, if any, are most important to you?" and that wording may elicit more specific responses. When the project team discussed this survey question, there was a sense that a more general question wording might reduce any bias from respondents who might not like the terminology of 'global warming'.

#### **Question 6:** Perception of Changing Weather Patterns

The intent of this question is to provide insight into the respondents' perceptions of weather events over time and to start the survey off on a general note without a reference to climate change. The topics of interest include:

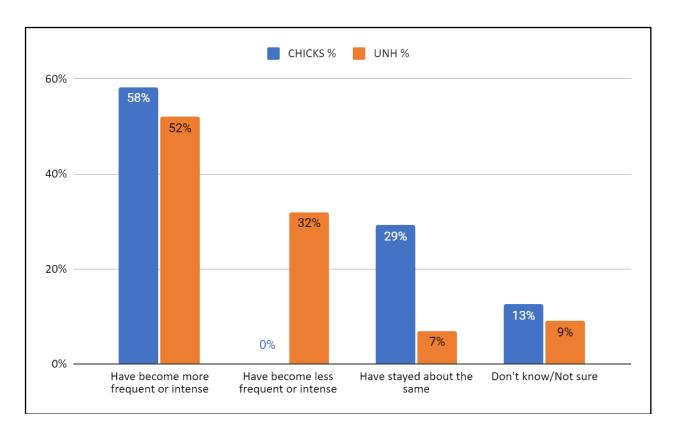
- What are the respondents' beliefs about the perceived change in extreme weather events in NH over the past 20 years?
- How do their beliefs compare to findings of similar surveys in NH residents?
- Do the respondents' beliefs match the available information in the popular media and scientific evidence base?

Question 6 asks "Over the past 20 years in New Hampshire, extreme weather events such as severe storms, flooding, or droughts? (CHECK ONE that best reflects your opinion). The intent of this question is to determine how respondents perceive the change in weather events. The question is worded similarly to one posed in a 2022 state-wide climate survey implemented by the UNH Survey Center, and comparisons are made in the table below.

**Table 4:** Weather Perceptions of Parents/Caregivers Kearsarge Region, 2023.

					%
Responses	CHICKS #	CHICKS %	UNH#	UNH %	Difference
Have become more frequent or					
intense	14	58%	512	52%	6%
Have become less frequent or					
intense	0	0%	315	32%	-32%
Have stayed about the same	7	29%	69	7%	22%
Don't know/Not sure	3	13%	89	9%	4%
	24	100%	985	100%	

CHICKS/CARHE Page 9 of 26



## **Preliminary Findings**

- 1. A similar proportion of the respondents in each survey (CHICKS 58% vs UNH 52%) believe that extreme weather events have become more frequent or intense. This result may indicate that the two groups share the same personal experience or view similar media sources that report on weather events.
- 2. The largest difference in opinion between the local and state surveys was that a smaller proportion of the CHICKS cohort (0%) believe that extreme weather events have become less frequent, as compared to the statewide UNH survey responses (32%). This finding may be due to differences in demographics and media sources used between the two survey cohorts.
- 3. A greater proportion of the CHICKS cohort (29%) believe that extreme weather events have stayed about the same, as compared to the UNH statewide results (7%).
- 4. Regarding the question of how respondents' beliefs match the available information in the popular media and scientific evidence base, there are two interpretations. At the statewide level, there has been a statistically significant increase in some extreme weather events such as <u>severe storms</u>, <u>flooding or droughts</u>, although regional differences by county are not available at this time. In addition, there has also been increased media attention to the link between extreme weather events and climate change. Either of these factors could influence respondents' perceptions of change.

#### Question 7: Opinions on the Importance of Climate Change

The intent of this question is to provide insight into the respondents' opinions about climate change in relation to other issues in two main areas.

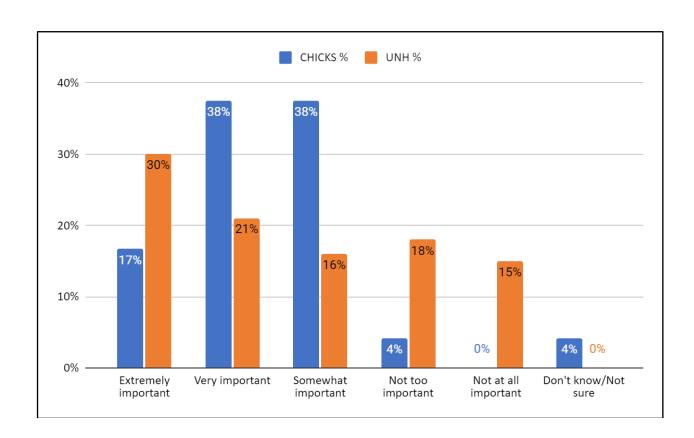
CHICKS/CARHE Page 10 of 26

- What are the respondents' opinions when they rank the importance of climate change to them personally?
- How do their opinions compare to findings of similar surveys of NH residents?

Question 7 asks How important is the issue of climate change to you personally compared to other social or environmental issues? (CHECK ONE)." The question is worded the same as one from the statewide survey by the UNH Survey Center. See the comparisons below.

**Table 5:** Priority of Climate Change among Parents/Caregivers, Kearsarge and State, 2023.

Responses	CHICKS#	CHICKS %	UNH#	UNH %	% Diff
Extremely important	4	17%	297	30%	-14%
Very important	9	38%	208	21%	17%
Somewhat important	9	38%	297	16%	22%
Not too important	1	4%	179	18%	-14%
Not at all important	0	0%	149	15%	-15%
Don't know/Not sure	1	4%	0	0%	4%
	24	100%	992	100%	



CHICKS/CARHE Page 11 of 26

#### **Preliminary Findings**

- 1. If we combine the first two response categories, a similar proportion of respondents from each survey believe that the issue of climate change is 'Extremely Important' or 'Very Important' to them (CHICKS 55% vs. UNH 51%). This result may indicate that the two groups share the same values on environment and climate change or view similar media sources. The 2022 UNH survey of climate opinions demonstrated that respondents with similar political affiliations and media viewing are more likely to share the same views on the importance of climate change.
- 2. There were a small number of CHICKS respondents (one person) who answered the question of climate importance as 'Not too Important' or 'Not at all Important'. This small number of responses may make the comparisons of these two survey results less significant.
- 3. The difference in opinion was greatest for the response category 'Somewhat important' with a 22% difference in respondents (CHICKS 38% vs UNH 16%).

## Question 8: Beliefs Related to the Causes of Climate Change

The intent of this survey question is to provide insight into the respondents' beliefs about the causes of climate change:

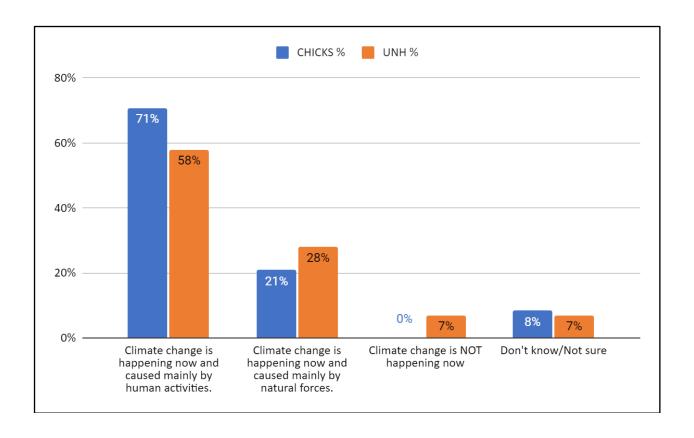
- What are the beliefs about climate change trends and its cause?
- How do they compare to findings of similar surveys of NH residents?
- How do the beliefs compare to the available information in the popular media and/or scientific evidence base?

Question 8 asks "Which of the following three statements do you think is more accurate?" The question has the same wording as one from a statewide survey implemented by the UNH Survey Center. See the comparisons in the table below.

**Table 6:** Belief in Causes of Climate Change. Kearsarge and State, October 2023.

Responses	CHICKS #	CHICKS %	UNH#	UNH %	% Diff
Climate change is happening now and					
caused mainly by human activities.	17	71%	570	58%	13%
Climate change is happening now and					
caused mainly by natural forces.	5	21%	275	28%	7%
Climate change is NOT happening now	0	0%	69	7%	7%
Don't know/Not sure	2	8%	69	7%	1%
	24	100%	982	100%	

CHICKS/CARHE Page 12 of 26



# **Preliminary Findings**

- A larger proportion of the CHICKS cohort believe that 'Climate Change is happening now and caused by human activities' compared to the UNH statewide response (CHICKS 71% vs UNH 58%). In regard to what influences beliefs towards the cause of climate change, the UNH climate survey documented that political affiliation and preferred media sources are two factors most strongly associated with a respondent's beliefs one way or the other.
- 2. None of the CHICKS respondents believe that climate change is NOT happening now, compared to 7% of the statewide population.
- Regarding how the beliefs compare to the available information in the popular media and/or scientific evidence base, the majority of respondents in both groups reflect the broad scientific consensus that climate change is happening now due to human influences.
- 4. The difference in opinion was greatest for the response category "Climate change is happening now and caused mainly by human activities." with a 13% difference in respondents (CHICKS 71% vs UNH 58%).

## **Question 9:** Opinions about Teaching of Climate Change in Schools

The intent of this question is to provide insight into the teaching of climate change in schools, and attempt to answer a few specific questions, including:

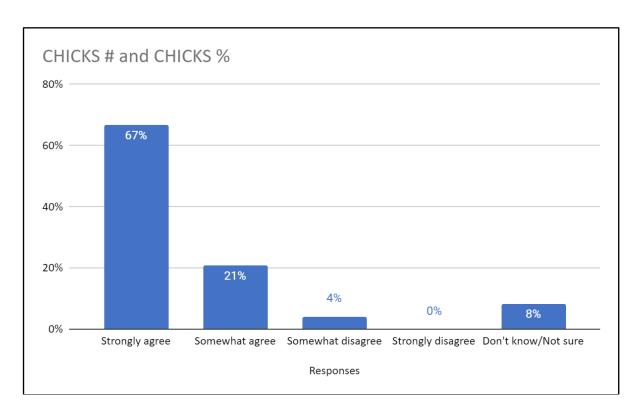
CHICKS/CARHE Page 13 of 26

- Do the respondents agree with a statement on the value of teaching climate change causes, consequences, and solutions?
- How well do the respondents understand the question? Or is the question stated in a way that allows for easy interpretation?
- How do we interpret the findings in relation to the larger population, as we can't compare the results to the findings of similar surveys?

Question 9 asks "Q9: Schools should teach our children about the causes, consequences, and solutions to climate change. (CHECK ONE) [Agree/Disagree Statement]"

**Table 7:** Agreement with Teaching Aspects of Climate Change in Schools, October 2023.

Responses	CHICKS #	CHICKS %
Strongly agree	16	67%
Somewhat agree	5	21%
Somewhat disagree	1	4%
Strongly disagree	0	0%
Don't know/Not sure	2	8%
	24	100%



# **Preliminary Findings**

CHICKS/CARHE Page 14 of 26

- 1. The largest proportion of respondents 'Strongly agree' with the statement that schools should teach children about multiple aspects of climate change.
- 2. A smaller proportion of respondents 'Somewhat agree'. Combined, about 88% of people agree that some teaching should occur.
- 3. A smaller proportion 'Somewhat disagree', or 'Don't know' for a total of 12% who are less supportive of teaching about climate change in schools. In future iterations of the survey, the project team may want to ask why the respondents disagree or this might be a good topic for future site interviews or focus groups.
- 4. In regard to how well the respondents understand the question, there is some concern that there are three parts to this question, and it may be difficult to interpret which part the respondent was answering. For example, do they agree or disagree with teaching 1) or the causes, or 2) the consequences or 3) the solutions? In future survey iterations, the team may want to reduce the number of options to make the response more specific to one topic area.
- 5. Regarding interpretation of these findings, it was noted that we can't compare the results to findings of similar regional or state surveys. Now that this team has a baseline, they could ask the same question in future survey projects and compare the results.

#### **Question 10:** Opinions about Teaching of Healthy Home Issues in Schools

The intent of this survey question is to provide insight into the teaching of healthy home issues in schools.

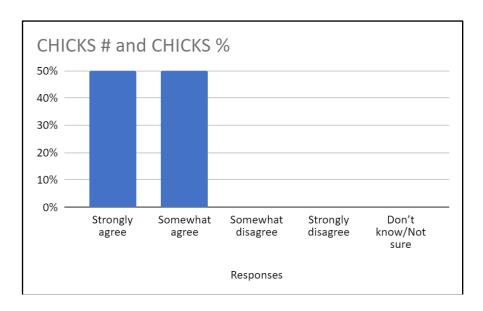
- Do the respondents agree with a statement on the value of teaching about home health/energy/IAQ?
- How well do the respondents understand the question?
- How do we interpret the findings in relation to the larger population, as we can't compare the results to the findings of similar surveys?

Question 10 states "Schools should teach our children about healthy homes, energy efficiency, weatherization and indoor air quality. (CHECK ONE) [Agree/Disagree Statement]"

**Table 8:** Agreement with Teaching Aspects of Healthy Homes in Schools, October 2023.

Responses	CHICKS #	CHICKS %
Strongly agree	12	50%
Somewhat agree	12	50%
Somewhat disagree	0	0%
Strongly disagree	0	0%
Don't know/Not sure	0	0%
	24	100%

CHICKS/CARHE Page 15 of 26



#### **Preliminary Findings**

- 1. Equal proportions of respondents 'Strongly agree' or 'Somewhat agree' with the statement that schools should teach children about multiple aspects of healthy homes. Combined, 100% of respondents believe schools should teach this topic area.
- 2. No respondents disagree with the statement that schools should teach children about multiple aspects of healthy homes, including energy, weatherization, or indoor air quality.
- 3. Regarding how well the respondents understand the question, there is some concern that there are multiple parts to this question, and it may be difficult to interpret which part the respondent is answering. For example, do they agree or disagree with teaching some or all the four topics of 1) healthy homes, 2) energy efficiency, 3) weatherization and 4) indoor air quality? In future surveys, the team may want to reduce the number of options to make the response more specific to one topic area.
- 4. Regarding interpretation of these findings, it was noted that we can't compare the results to findings of similar regional or state surveys. Now that this team has a baseline, they could ask the same question in future survey projects and compare the results.

#### **Conclusions and Recommendations:**

This survey is intended to achieve several important project goals:

- Measure community awareness, and obtain baseline measures of demographics, opinions, and beliefs in relation to weather, climate, health and housing issues.
- Encourage community engagement and demonstrate that the project team and partners value the stakeholders' opinions.
- Use the findings to guide the development of the project plan and evaluation activities, including how the team can improve upon and achieve the project inputs, outputs and outcomes.

CHICKS/CARHE Page **16** of **26** 

#### The results indicate that:

- For Questions 1-4, the respondents are fairly representative of the demographics of the larger Boys and Girls Club community, with the exception of more females responding to the survey.
- For Question 5, the respondents indicate that actions most important to them include 'Provide a better life for children', 'Get energy from renewable sources', and 'Reduce climate change', likely reflecting how parents and caregivers support children and are concerned about their future.
- For Question 6, a similar proportion of the respondents in each survey (CHICKS 58% vs UNH 52%) believe that extreme weather events have become more frequent or intense, likely reflecting that the two groups share the same personal experience or view similar media sources.
- For Question 7, a similar proportion of respondents from each survey believe that the issue of climate change is 'Extremely', 'Very' or 'Somewhat' Important (CHICKS 91% vs. UNH 81%).
- For Question 8, a larger proportion of the CHICKS cohort believe that 'Climate Change is happening now and caused by human activities' compared to the UNH statewide response (CHICKS 71% vs UNH 58%). This may reflect the differences in demographics between the two groups, with more people of childbearing age in the CHICKS cohort.
- For Question 9, the largest proportion of respondents 'Strongly agree' with the statement that schools should teach children about multiple aspects of climate change. A smaller proportion 'Somewhat agree'. All combined, about 88% agree that some teaching should occur.
- For Question 10, all respondents (100%) 'Strongly agree' or 'Somewhat agree'
  with the statement that schools should teach children about multiple aspects of
  healthy homes.
- We recommend that the project team and stakeholders:
  - Meet to discuss the findings, their relevance to the program goals, and lessons learned from the survey process to improve future stakeholder engagement activities.
  - Distribute the findings of this report via multiple channels, including posts to partner websites and/or a brief presentation to key stakeholders. This would include the B&G Club staff, the CHICKS project team, the NH HWCA Advisory Board, and other groups with an interest in a more detailed picture of this population or project.
  - If appropriate, create a 1-2 page summary for parents/caregivers to promote community engaged/driven programming to confirm that their opinions and time completing the survey are valued.
  - Future stakeholder assessments could use existing information from prior surveys completed at a state level that queried the topics of climate opinions and beliefs. For example, the state-level data from the UNH Survey Center could

CHICKS/CARHE Page 17 of 26

- be broken down by region and provide similar results without the time or cost of implementing a community survey.
- As the field of climate opinion surveying evolves, other state or national surveys may provide helpful insights for the design of future interventions. For example, a recent survey of climate opinions in New Jersey revealed that parents expressed concerns about teachers' preparedness to introduce climate change topics appropriately and their own readiness to support this instruction at home. Furthermore, several respondents voiced concerns about how to approach climate change discussions in a way that is mindful of children's developmental and mental health needs.

#### References:

- Quick Tips for Quick Survey Procedures. University of Wisconsin. Last updated November 6, 2002.
  - https://fyi.extension.wisc.edu/programdevelopment/files/2017/07/Tipsheet7.pdf
- Questionnaire Design | Methods, Question Types & Examples. Published on July 15, 2021 by Pritha Bhandari. Revised on January 9, 2023. https://www.scribbr.com/methodology/questionnaire/
- CDC Data Collection Methods for Program Evaluation: Questionnaires. No. 14 | updated August 2018 https://www.cdc.gov/healthyyouth/evaluation/pdf/brief14.pdf
- UNH Survey Center. Granite Staters Split on Parental Bill of Rights; Housing Most Important Problem Facing State 3/21/2023 https://scholars.unh.edu/survey center polls/732/
- UNH Survey Center, <u>Granite State Poll Report on Climate Change</u>, implemented by the Community Health Institute (CHI) and funded by NH DHHS and CDC in August 2022.
- Leiserowitz, A., Maibach, E., Roser-Renouf, C., Rosenthal, S., Cutler, M., & Kotcher, J. (2018). Climate change in the American mind: March 2018. Yale University and George Mason University. New Haven, CT: Yale Program on Climate Change Communication. See page 44 for the specific questions on the top three reasons to reduce global warming. <a href="https://climatecommunication.yale.edu/wp-content/uploads/2018/04/Climate-Change-American-Mind-March-2018-1.pdf">https://climatecommunication.yale.edu/wp-content/uploads/2018/04/Climate-Change-American-Mind-March-2018-1.pdf</a>
- Lemcke-Stampone, Mary D.; Wake, Cameron P.; and Burakowski, Elizabeth, "New Hampshire Climate Assessment 2021" (2022). The Sustainability Institute. 71. https://scholars.unh.edu/sustainability/71

CHICKS/CARHE Page 18 of 26

# **Appendix A. Data Collection Tool.**

# Parent/Caregiver Survey

We invite you to participate in a brief survey of families in the Kearsarge-Sunapee region. The survey was designed by a team from the CHICKS (Climate and Health Initiative for Children in Kearsarge & Sunapee) project and the Dartmouth Center for Advancing Rural Health Equity (CARHE). This survey is part of an ongoing education project at four Boys & Girls Club sites in the Kearsarge region to increase awareness of the connections among warming temperatures, indoor air quality and children's health. We are particularly interested in your thoughts about climate change. The survey will take approximately 5-10 minutes to complete.

#### Risks and Benefits:

There are no known risks associated with participating in this survey. The information you provide may contribute to advancing knowledge about home weatherization, energy efficiency, and indoor air quality testing. At the end of the survey, you will be offered an opportunity to provide your contact information to receive a \$25 e-gift card in appreciation of your time.

## Confidentiality:

All information you provide will be kept confidential. No personal identifying information will be collected. Responses will be analyzed for the group as a whole, not for any individual participant. Data will be stored on a password-protected computer and will only be accessible to the Program Administrator of CHICKS at New Hampshire Healthcare Workers for Climate Action (NH HWCA) and other trained project team members.

#### Voluntary Participation:

Your participation in this survey is voluntary. You can choose to stop the survey at any time. Your decision to participate or not will not affect your current or future relationship with NH HWCA, CARHE, the Boys & Girls Club of Central NH, or any associated organizations.

#### Contact Information:

Please contact Dr. Bob Friedlander of CHICKS/NH HWCA at rfriedlander.jr@gmail.com for additional information or questions. You can also contact the CARHE project manager, Sanjay G Sagar, at sanjay.g.sagar@hitchcock.org

Consent: I have read and understand the information provided above. I voluntarily agree to participate in this survey.

CHICKS/CARHE Page 19 of 26

0	YES, I would like to participate (and receive a \$25 e-gift card)
0	NO, I do not want to participate (and will not receive an e-gift card)
DE	MOGRAPHIC QUESTIONS
Fir	st, we'd like to ask you a few questions about yourself and your place in the community.
1.	What is your age?
	O 18 to 34
	O 35 to 49
	O 50 to 64
	O 65 and older
	O Prefer not to answer
2.	What is your gender?
	O Female
	O Male
	Other Other
	O Prefer not to answer

CHICKS/CARHE Page 20 of 26

3.	which Boys & Girls Club does your child attend?
	O New London
	O Warner
	O Andover
	O Sutton
	Other
	O Don't know/Not sure
4.	What is the age of your child (or children) who attends the Boys & Girls Club?
	O Age 5-7
	O Age 8-10
	O I have children in both age groups at B&G Clubs
	O Prefer not to answer
OP	INION & BELIEF QUESTIONS
5.	Which three actions are most important to you? (CHECK 3 ONLY)
	Reduce water pollution
	Reduce air pollution
	Provide a better life for our children

CHICKS/CARHE Page **21** of **26** 

	Get energy from renewable sources
	Reduce energy costs
	Improve people's health
	Save plant/animal species from extinction
	Create jobs and a stronger economy
	Increase America's energy independence
	Reduce climate change
	Other (please specify)
	Don't know/Not sure
	ne past 20 years in New Hampshire, extreme weather events such as severe storms, droughts (CHECK ONE that best reflects your opinion)
O Hav	ve become more frequent or intense
O Hav	ve become less frequent or intense
O Hav	ve stayed about the same
O Doi	n't know/Not sure

CHICKS/CARHE Page 22 of 26

7. How important is the issue of climate change to you personally compared to other social

or environmental issues? (CHECK ONE)

	Extremely important			
	O Very important			
	O Somewhat important			
	O Not too important			
	O Not at all important			
	O Don't know/Not sure			
8.	Which of the following three statements do you think is more accurate? (CHECK ONE)			
	Climate change is happening now and caused mainly by human activities			
	O Climate change is happening now and caused mainly by natural forces			
	Climate change is NOT happening now			
	O Don't know/Not sure			
9.	Please indicate how much you agree with the following statement:			
Schools should teach our children about the causes, consequences, and solutions to climate change. (CHECK ONE)				
	O Strongly agree			
	O Somewhat agree			
	O Somewhat disagree			
	O Strongly disagree			

CHICKS/CARHE Page 23 of 26

	O Don't know/Not sure			
10.	Please indicate how much you agree with the following statement:			
Schools should teach our children about healthy homes, energy efficiency, weatherization and indoor air quality. (CHECK ONE)				
	O Strongly agree			
	O Somewhat agree			
	O Somewhat disagree			
	O Strongly disagree			
	O Don't know/Not sure			
Thank you for completing this survey!				
To thank you for your time, we'd like to offer you a \$25 e-gift card. Please provide your information to receive a \$25 e-gift card. This information will be separate from the survey so that your responses will remain anonymous.				
Please confirm your name:				
email address:				

CHICKS/CARHE Page 24 of 26

# Appendix B. Introduction and Written Consent for Survey Interview

"You have been invited to participate in a survey sponsored by the Boys & Girls Club of Central NH, in collaboration with CHICKS (Climate and Health Initiative for Children in Kearsarge & Sunapee). The purpose of this survey is to gather community feedback on opinions and beliefs regarding your environment, health and youth education.

- You will receive \$25.00 if you complete all the questions
- The survey will take about 5-10 minutes to complete.
- Participation is completely voluntary and choosing not to participate will not affect you in any way. You may refuse to answer any questions or stop at any time.
- Your answers will help us to better understand local community opinions
- Data will be kept in secured files, available only to the project leaders, and we will maintain the confidentiality of your responses.
- Surveys completed via the internet present minimal risk of a breach of confidentiality.
- The responses you provide will be combined with the answers of residents across the region and used to guide community education only.

By clicking the "Yes, I would like to participate" button below, you are indicating that you consent to participate in this survey. If you prefer not to participate, please simply close this window in your browser.

(add button) "YES, I would like to participate in	the survey."	
If you have any questions about the survey, ple	at the	
, via email	or phone.	
Thank you for your participation!		

#### **Consent Form**

## **Supporting Community Collaboration to Address the Impact of Climate Change**

You are being invited to participate in an anonymous, one-time survey conducted by New Hampshire Healthcare Workers for Climate Action and the Center for Advancing Rural Health Equity at Dartmouth Health. The purpose of this study is to assess and improve knowledge about home weatherization, energy efficiency, and home air quality testing resources among caregivers of children with allergies or asthma

Your participation is voluntary. If you agree to participate, you will be asked to complete a one-time survey to assess your current knowledge and awareness of home weatherization, energy efficiency, and indoor air quality testing options. The survey will take approximately 10-15 minutes to complete.

#### **Risks and Benefits:**

CHICKS/CARHE Page 25 of 26

There are no known risks associated with participating in this survey. The information you provide may contribute to advancing knowledge about home weatherization, energy efficiency, and indoor air quality testing. At the end of the survey, you will be offered an opportunity to provide your contact information to receive a \$40 gift card in appreciation of your time.

#### **Confidentiality:**

All information you provide will be kept confidential. During this study, personal identifying information collected, such as your name and age will be collected and your responses will be linked for pre-post surveys. Data will be stored on a password-protected computer and will only be accessible to the project manager at New Hampshire Healthcare Workers for Climate Action and other trained project team members.

#### **Voluntary Participation:**

Your participation in this survey is voluntary. If you choose to participate, you can choose to stop the survey at any time. Your decision to participate or not will not affect your current or future relationship with New Hampshire Healthcare Workers for Climate Action, Center for Advancing Rural Health Equity at Dartmouth Health or any associated organizations.

#### **Contact Information:**

If you have any questions about this survey or your participation, please contact the project leader with New Hampshire Healthcare Workers for Climate Action, Bob Friedlander Jr, at rfriedlander.jr@gmail.com. You can also contact the project manager at the Dartmouth Health Center for Advancing Rural Health Equity, Sanjay Sagar, at sanjay.g.sagar@hitchcock.org

**Consent:** I have read and understood the information provided above. I voluntarily agree to participate in this survey.

- Yes (I want the \$25 incentive)
- No (I don't want the incentive and wish to exit the survey)

CHICKS/CARHE Page **26** of **26**