

Public Response to Community Mitigation Measures for Pandemic Influenza

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We report the results of a national survey conducted to help public health officials understand the public's response to community mitigation interventions for a severe outbreak of pandemic influenza. Survey results suggest that if community mitigation measures are instituted, most respondents would comply with recommendations but would be challenged to do so if their income or job were severely compromised. The results also indicate that community mitigation measures could cause problems for persons with lower incomes and for racial and ethnic minorities. Twenty-four percent of respondents said that they would not have anyone available to take care of them if they became sick with pandemic influenza. Given these results, planning and public engagement will be needed to encourage the public to be prepared.

Scientists and policymakers are concerned about the emergence of an influenza pandemic for which we will have neither a strain-specific vaccine nor sufficient antiviral medications at the onset of the outbreak. In February 2007, the Community Strategy for Pandemic Influenza Mitigation was issued; it describes the early, targeted, and layered use of nonpharmaceutical interventions, coupled with specific uses of antiviral influenza medications, to reduce transmission of pandemic influenza and mitigate the disease (1).

Researchers differ over the potential effectiveness of such community mitigation measures. Evidence to determine the best strategies for protecting persons during a pandemic is limited. Several studies based on findings from mathematical models and historical analyses suggest that early implementation of multiple measures, such as social

distancing, school closures, and isolation of sick persons, may be effective in reducing the transmission of the virus (2–6). Other researchers cite uncertainty (7) or believe such measures may not be effective (8,9).

Community mitigation interventions include 1) isolation and treatment with influenza antiviral medications of all persons with confirmed or probable pandemic influenza; 2) voluntary home quarantine of and provision of antiviral medications as prophylaxis to members of households with persons with confirmed or probable influenza (if sufficient quantities of antiviral medications exist and a feasible means of distribution is in place); 3) dismissal of students from schools and closure of childcare facilities along with preventing the recongregation of children and teenagers in community settings; and 4) social distancing of adults in the community and workplace, which may include cancellation of large public gatherings and possible alteration of workplace environments and schedules to decrease social density. A great deal of cooperation from the public would be required to successfully implement community mitigation measures during a pandemic. Public reaction to an unfamiliar crisis is obviously difficult to predict. However, by using surveys that describe hypothetical scenarios, we can elicit potential responses of persons in these situations. Public opinion and input can help inform policy decisions and provide information about realistic expectations for mitigation measures before a public health emergency arises (10). This survey was conducted to gauge public reaction to social distancing and other nonpharmaceutical interventions that may be used during a severe pandemic.

Methods

Data reported here are derived from a survey by the Harvard School of Public Health Project on the Public and Biological Security. The survey was ≈20 minutes long and

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consisted of 85 questions. International Communications Research conducted the survey from September 28 through October 5, 2006.

The survey was conducted in English and Spanish with a representative national sample of 1,697 adults ≥ 18 years of age, including an over-sample of adults who had children < 18 years of age in their households. Altogether, 821 such adults with children were interviewed. In the overall results, this group was weighted to its actual proportion of the total US adult population (cooperation rate was 75%; response rate was 36% [11]). Common methods for media and preelection surveys were used, and relied on weighting of the data to ensure representativeness. More information about the survey methods and complete question wordings is available in the online Technical Appendix, available from www.cdc.gov/EID/content/14/5/778-Techapp.pdf.

Surveys like this one, and others that would be conducted as part of a series in the event of a pandemic influenza, can provide technical assistance to public health officials by monitoring the response of the public to the evolving health threat posed by such an outbreak. In a public health emergency, surveys would have to be conducted with short field periods to enable rapid measurement of how the public reacts to a particular set of circumstances. These rapid cycle surveys would make it possible to provide timely information to public health officials and to ensure a quick response.

Getting survey results to public health officials in real time creates a situation similar to that of preelection polling (i.e., specific events can change the behavior and beliefs of many persons in a relatively short timeframe). National polling organizations that engage in preelection surveys use shorter field periods, which provide more up-to-date information but yield lower response rates than surveys conducted over longer time periods (12). Forecasts of voters' choices in preelection polls have shown that outdated information may introduce more errors into predictions of results than low response rates do (13).

Independent studies have shown that the results of statistically weighted data from shorter duration surveys are similar to those based on the higher response rate in surveys of long duration and can be used without an unacceptable risk for bias (14–18). Nonresponse in telephone surveys produces some known biases in survey-derived estimates because participation tends to vary for different subgroups of the population. To compensate for these known biases, sample data are weighted to the most recent Census data available from the Current Population Survey for sex, age, race, region, and education (19). Other techniques, including random-digit dialing, replicate subsamples, callbacks staggered over times of day and days of the week, and systematic respondent selection within households, are used to ensure that the sample is representative.

Possible sources of nonsampling errors for this survey include nonresponse bias, as well as specific wording of questions and the order in which questions are asked. The margin of error for the total sample was $\pm 2.4\%$. To examine differences among subgroups, we compared responses by testing for differences in proportions, taking into account the effect of the study's design (20).

Because many of the respondents may not have been familiar with pandemic influenza, they were first presented with a descriptive hypothetical scenario: "Now I want to ask you some questions about a possible outbreak in the United States of pandemic flu, a new type of flu that spreads rapidly among humans and causes severe illness. Currently there have not been any cases of pandemic flu in the United States. However, imagine that there was a severe outbreak in the United States, possibly in your community. A lot of persons were getting sick from the flu and the flu was spreading rapidly from person to person." This scenario was intentionally designed to describe a severe situation without being overly alarming. Respondents were then asked how they would respond to and be affected by the circumstances that would arise from such an outbreak. The small proportion of the respondents who said they would be unable to cooperate with public health authorities could be translated into millions of persons who would have difficulty.

Results

Familiarity with Pandemic Influenza

To determine whether respondents understood what was meant by pandemic influenza, the survey asked how familiar the respondents were with the term (it is unfamiliar to most Americans). Forty-one percent said they knew what the term meant. Thirty-three percent reported that they had heard of the term but did not know what it meant, and 25% had never heard of pandemic flu (online Technical Appendix).

Ability to Stay Home

Respondents were asked about their ability to comply with public health recommendations during an influenza pandemic; 94% said they would stay at home, away from others, for 7–10 days if they had pandemic flu. In addition, 85% said all members of their household would stay at home for the same period if a member of their household were sick (Table 1; online Technical Appendix).

Eighty-five percent said they would be able to take care of sick household members at home for 7–10 days. However, 76% of respondents worried about getting sick if they cared for a sick household member.

Seventy-three percent said that they would have someone available to take care of them at home if they became

Table 1. Responses to questions about ability to stay home during an influenza pandemic*

Question	Possible responses		
	Yes	No	Don't know/refused to answer
Would stay at home for 7–10 d if public health officials recommended because you had flu	94	4	2
You and all members of household would stay at home for 7–10 d if public health officials recommended because a member of household had flu	85	12	4
If public health officials recommended, would be able to take care of sick household member for 7–10 d at home	85	13	2
If stayed at home with sick household member, would be worried about getting sick yourself	76	22	2
Have someone who could care for you at home if you were sick	73	24	4
	Likely	Unlikely	Don't know/refused to answer/NA
You or a member of your household might lose pay and have money problems	48	50	1
You or a member of your household might have a hard time being stuck at home for so long	46	54	1
You might not be able to get baby formula, diapers, or other important things for a baby in your household†	45	53	1
You or a member of your household might be unable to get the health care or prescription drugs that you need	43	55	2
You might not be able to get care for a disabled person in your household‡	36	48	15
You might not be able to get care for an older person in your household§	35	51	15
You might have difficulty taking care of the (child/children) <5 y in your household¶	32	67	1
You or a member of your household might lose your job or business as a result of having to stay home#	27	71	2

*From the Harvard School of Public Health, Pandemic Influenza Survey, 2006. Numbers represent percentage of responses to each question. NA, not applicable.

†Among respondents with major responsibility for children ≤ 2 y (n = 174).

‡Among respondents in households with disabled person (n = 470).

§Among respondents in households with persons ≥ 65 y (n = 408).

¶Among respondents who have major responsibility for children <5 y (n = 262).

#Among employed respondents (n = 1,101).

sick with pandemic flu and had to remain at home for 7–10 days. However, 24% said they would not have someone available to take care of them. Persons living in households with only 1 adult are far more likely not to have someone available to take care of them (45%) compared with persons from households with >1 adult (17%). Approximately one third of low-income (36%), African-American (34%), disabled (33%), and chronically ill (32%) adults said that they would not have anyone who could take care of them. A substantial proportion of the respondents (from 48% to 71%, depending on the measure) believed that they or a household member would likely experience problems if they had to stay at home for 7–10 days and avoid contact with anyone outside their household (Table 1).

School Closings

Thirty-nine percent of respondents reported having children <18 years of age living in their household (21), including 16% with children 13–17 years of age in the household, 22% with children 5–12 years of age, and 14% with children <5 years of age. Of adults in households that had children <18 years of age, 91% said that they have major responsibility for the children in their household (online Technical Appendix).

Respondents were told that to keep pandemic influenza from spreading and to protect the safety of children, some communities might close schools and daycare facilities for some period of time. Although the Community Strategy for Pandemic Influenza Mitigation used the term dismissal from school, the survey used the term school closure. Respondents were also told that the length of time schools and daycares would remain closed would probably be tied to the severity of the pandemic influenza outbreak.

If schools and daycare were closed for 1 month, 93% of adults who have major responsibility for children <5 years of age in daycare or children 5–17 years of age and have at least 1 employed adult in the household thought they could arrange care so that at least 1 employed adult in the household could go to work. Eighty-six percent thought they would be able to do so for 3 months (Table 2). Of those who said they could arrange care for 1 month so that at least 1 adult would be able to work, 87% said they or another family member would be the primary caretakers for children if schools and daycares had to be closed. Of these adults, 64% said they would need little or no help even if children had to be kept at home for a long time. Of those who said they would need a lot or some help, 50% said they would rely most on help from family, 11% on friends or

neighbors, and 34% on outside agencies (including government agencies, church and community groups, or voluntary agencies).

However, 60% of adults who have major responsibility for children <18 years of age said that at least 1 employed person in the household would have to stay home from work. Of employed persons, 25% who have major responsibility for children <18 years of age in their household said that if schools and daycares closed for 1 month, they would be able to work from home and take care of the children.

If schools were closed for 3 months, 95% of adults with major responsibility for children 5–17 years of age said they would be willing to give school lessons at home. Of those who were willing to do so, 47% thought they would need a lot or some help, although 53% said they would need little or no help.

Among adults with major responsibility for children 5–17 years of age, 85% thought that if schools were closed for 3 months, they would be able to keep their children and teenagers from taking public transportation, going to public events, and gathering outside home while schools were closed. Of adults who have major responsibility for children <5 years of age in daycare or children 5–17 years of age in their household, 25% reported that a child in their household gets free breakfast or lunch at school or daycare. Asked specifically about an outbreak of pandemic influenza,

34% of those whose children get free meals at school (8% of the total who have responsibility for children in this age group) said that if schools and daycare were closed for 3 months, not getting the free meals would be a problem.

Ability to Stay Home from Work

Sixty-three percent of the US adult population was employed at the time of the survey (22). Employed respondents were asked about the problems they might face being out of work for various lengths of time. Most employed persons (74%) believed they could miss 7–10 days of work without having serious financial problems; 25% said they would face such problems. Fifty-seven percent thought they would have serious financial problems if they stayed home for 1 month. Of those surveyed, 76% believed they would have such problems if they stayed home from work for 3 months (Table 3; online Technical Appendix).

Of employed respondents, 29% said that they would be able to work from home if they were asked to stay home for 1 month because of a serious outbreak of pandemic flu. Of the low-income workers (<\$25,000/y), 13% believe that they would be able to work from home for that long, compared with 44% of high-income workers (≥\$75,000/y).

Employed respondents were also asked about their employers' plans and policies for dealing with an outbreak of pandemic flu. Few working persons (19%) were aware

Table 2. Responses to questions about school closings during an influenza pandemic*

Question	Possible responses		
	Yes	No	Don't know/ refused to answer
If schools/daycare closed for 1 mo, could arrange care so that at least 1 employed adult in household could go to work†	93	5	2
If schools/daycare closed for 3 mo, could arrange care so that at least 1 employed adult in household could go to work†	86	11	3
If schools/daycare closed for 1 mo, at least 1 employed person would have to stay home from work‡	60	37	3
Among those who could arrange care so that at least 1 adult in household could go to work if schools closed for 1 mo:			
If schools were closed for 3 mo, would be willing to give school lessons at home‡	95	5	<0.5
Would need help giving school lessons at home	47	53	<0.5
If schools and daycare closed for 1 mo would be able to work from home and take care of children§	25	72	3
If public health officials recommended, could keep children from taking public transportation, going to public events and gathering outside home while schools closed for 3 mo‡	85	13	2
	A lot/some	Little/none	Don't know/ refused to answer
Would need outside help with problems of having to keep children at home‡	35	64	1
Children in household get free breakfast or lunch at school or daycare¶	25	74	1
If school/daycare closed for 3 mo, would be problem that children could not get free meals¶	8	91	1

*From the Harvard School of Public Health, Pandemic Influenza Survey, 2006. Numbers represent percentage of responses to each question.

†Among respondents who have major responsibility for children <5 y in daycare or children 5–17 y in household and have at least 1 working adult in household (n = 634).

‡Among respondents with major responsibility for children 5–17 y in household (n = 610).

§Among employed respondents who have major responsibility for children <5 y in daycare or children 5–17 y in household (n = 537)

¶Among respondents who have major responsibility for children <5 y in daycare or children 5–17 y in household (n = 664).

Table 3. Responses to questions about staying home from work during an influenza pandemic*†

Question	Possible responses		
	Yes	No	Don't know/ refused to answer
Ever work from home†	27	73	<0.5
Would be a serious financial problem if had to stay home for work for 7–10 d†	25	74	1
Would be a serious financial problem if had to stay home for work for 1 mo†	57	41	2
Would be a serious financial problem if had to stay home for work for 3 mo†	76	22	2
If had to stay home for 1 mo, would be able to work from home for that long†	29	69	2
If had to stay home for 3 mo, would be able to work from home for that long†	19	78	3
Workplace has plan for outbreak of pandemic flu†	19	63	18
Includes encouraging sick to stay home	16		
Provides information about flu	14		
Provides information on what supplies to have at home	12		
Includes expanding options to work from home	6		
Would stay home if public health official said you should, even if employer told you to come to work†	57	35	9
Are you worried employer would make you go to work if sick during an outbreak†	22	77	2
Worried employer would make you go to work if sick during outbreak†	43	50	7
Would stay home if public health official said you should, even if employer told you to come to work†	57	35	9
If had to stay home from work, would still get paid†	35	42	22

*From the Harvard School of Public Health, Pandemic Influenza Survey, 2006. Numbers represent percentage of responses to each question.

†Among employed respondents (n = 1,101).

of any workplace plan to respond to a serious outbreak of pandemic flu.

Of employed adults, 57% said they would stay home from work if public officials said they should; 35% said they would go to work if their employers told them to report to their jobs. Of employed adults, 22% were worried that, in the event of a serious outbreak of pandemic flu in their community, their employer would make them go to work even if they were sick.

Of employed respondents, 50% believed that their workplace would stay open if there was a serious outbreak of pandemic flu, even if public health officials recommended that some businesses in the community should shut down. Forty-three percent thought that their workplace would shut down.

Of employed respondents, 35% thought that if they stayed home from work, they would still get paid; 42% thought that they would not get paid, and 22% did not know whether they would get paid. Low-income respondents (from households <\$25,000/y) were significantly less likely than high-income respondents (from households ≥\$50,000/y) to believe they would still get paid (Table 4).

Ability to Cooperate with Other Recommendations

Respondents were given a scenario about an outbreak of pandemic influenza and asked if they would cooperate if public health officials recommended that for 1 month they curtail various activities of their daily lives. The initial response between 79% and 93% (depending on the measure) was that they would cooperate (Table 5; online Technical Appendix).

Problems Responding to Recommendations

On several measures, more low-income Americans (those who come from households with an annual income <\$25,000/y) than high-income Americans believed they would experience problems responding to public health recommendations. Similarly, on many of these measures a higher proportion of African Americans and Hispanic Americans than whites believed they would experience problems (Table 4). The same holds true for persons who described their own health status as fair or poor (Table 6; online Technical Appendix).

Conclusions

If community mitigation measures were instituted for a severe influenza pandemic, most respondents would comply with recommendations but would be challenged to do so if their income or job was severely compromised. Results from this survey were useful in shaping the Community Mitigation Guidance because important information was obtained about public acceptability and key public concerns and challenges.

During a severe pandemic, public health authorities are likely to recommend that all but the sickest persons remain home while ill. Strategic planning by home-health, faith-based, and community organizations; medical providers; and public health agencies about how to coordinate care for those who would have to stay home ill during a pandemic will be essential, particularly for those who live alone.

The resiliency of those who would need to stay home during a pandemic will depend on their level of preparedness. Previous studies on personal preparedness at home

have shown that respondents have concerns about having sufficient supplies if asked to stay quarantined at home for a prolonged period of time (23). Two recent surveys indicate that many Americans have made no preparations for a public health emergency and most have prepared less than they think they should (24,25). Careful community planning, including public education and engagement, will be

needed to encourage the public to be prepared for an emergency like a pandemic.

Survey results also indicated that most persons were concerned about getting sick themselves if they had to stay at home to care for a household member who was ill with pandemic flu. The public must be given accurate information before and during a pandemic about how to provide

Table 4. Responses to questions about potential problems adhering to public health recommendations, by household income, and race/ethnicity*

Question	Household income					Race/ethnicity		
	Total	<\$25K	\$25–49.9K	\$50–74.9K	≥\$75K	White (non-Hispanic)	Black (non-Hispanic)	Hispanic
	n = 1,697	n = 226	n = 366	n = 300	n = 501	n = 1,345	n = 133	n = 114
	All respondents							
If public health officials recommended, would not be able to take care of sick household member for 7–10 d at home	13	19†	16†	6	6	12	19	15
Do not have someone who could care for you at home if you were sick	24	36‡	25§	22	15	23	34¶	20
If asked to stay home 7–10 d, likely that:								
You or a member of your household might lose pay and have money problems	48	57§	58§	49§	35	43	68#	66#
You or a member of your household might be unable to get the health care or prescription drugs that you need	43	57‡	43§	38	35	41	52#	49
You or a member of your household might lose your job or business as a result of having to stay home	27	41‡	30§	24§	14	20	41#	53#
	Employed respondents							
	n = 1,101	n = 91	n = 224	n = 224	n = 406	n = 855	n = 87	n = 79
Would be a serious financial problem if had to stay home from work for 7–10 d	25	56‡	29†	15	15	23	20	37#
Would be a serious financial problem if had to stay home from work for 1 mo	57	84‡	69†	50§	37	53	65#	68#
Would be a serious financial problem if had to stay home from work for 3 mo	76	93‡	84†	71	64	74	76	88#
If had to stay home for 1 mo, would not be able to work from home for that long	69	85†	79§	71§	55	67	77	77
If you had to stay away from work, you:								
Would still get paid	35	14	25	47**	51**	39††	29	22
Would not get paid	42	64†	57†	30	18	41	48	55
Don't know	22	22	18	22	23	20	22	23

*From the Harvard School of Public Health, Pandemic Influenza Survey, 2006. Numbers represent percentage responding "yes" to each question.

†Statistically higher proportion than \$50–74.9K and ≥\$75K.

‡Statistically higher proportion than \$25–49.9K, \$50–74.9K, and ≥\$75K.

§Statistically higher proportion than ≥\$75K.

¶Statistically higher proportion than whites and Hispanics.

#Statistically higher proportion than whites.

**Statistically higher proportion than <\$25K and \$25–49.9K.

††Statistically higher proportion than Hispanics.

Table 5. Responses to questions about other community mitigation strategies*

Question	Possible responses		
	Yes	No	Don't know/refused/ not applicable
Would follow recommendation if public health officials said for 1 mo you should:			
Avoid air travel	93	5	1
Avoid public events like movies, sporting events, or concerts	92	7	<0.5
Avoid going to malls and department stores	91	9	1
Limit your use of public transportation, buses and trains	89	7	4
Cancel doctor or hospital appointments that are not critical at the time	89	10	1
Reduce contact with people outside your own household as much as possible	88	11	1
Avoid going to church or religious services	82	16	1
Postpone family or personal events such as parties, weddings, or funerals	79	18	3
	Likely	Not likely	Don't know/refused
Would stay in town or city during serious outbreak if public health officials recommended you do so	90	9	<0.5

*From the Harvard School of Public Health, Pandemic Influenza Survey, 2006. Numbers represent percentage of responses to each question.

at-home care along with precautions that caretakers should follow to protect their own health.

Employers can enable employees to comply with public health recommendations during a pandemic (26,27). Sick leave and other policies (such as telecommuting, staggered shifts, and other strategies) should promote and create incentives for workers to stay home if they or a household member becomes sick during a severe pandemic or if well, to report to work. Well employees should report to work (especially those in health care and other critical infrastructure jobs) to ensure business continuity and the ability to provide care as needed (28). Workers should be aware of their employer's pandemic preparedness plans

and other strategies that will promote social distancing at the workplace during a pandemic. Implementing these measures will help to ensure a safer workplace during a pandemic and will mitigate transmission of disease.

Among the key interventions for potentially reducing transmission of the influenza virus during a pandemic will be to dismiss students from schools, close childcare facilities, and keep children from re-congregating in the community. Depending on the severity of the pandemic, the duration of school dismissal could range from a few weeks up to 3 months. How families would cope with the cascading effects from prolonged cancellation of school classes is a concern. Families could face the problem of serious income loss.

Table 6. Responses to questions about potential problems adhering to public health recommendations by health, chronic illness, and disability status*

Question	Health status						
	Total (n = 1,697)	Excellent/very good/good		Chronic illness		Disabled	
		Fair/poor (n = 196)	(n = 1,481)	Yes (n = 355)	No (n = 1,317)	Yes (n = 323)	No (n = 1,354)
If public health officials recommended, would not be able to take care of sick household member for 7–10 d at home	13	25†	11	16	12	21‡	10
Do not have someone who could care for you at home if you were sick	24	34†	23	32§	22	33‡	22
If asked to stay home 7–10 days, likely that:							
You or a member of your household might lose pay and have money problems	48	55	48	47	49	49	48
You or a member of your household might be unable to get the health care or prescription drugs that you need	43	55†	40	50§	40	48	41
You or a member of your household might lose your job or business as a result of having to stay home	27	38†	25	24	28	31	26

*From the Harvard School of Public Health, Pandemic Influenza Survey, 2006. Numbers represent percentage of responses to each question.

†Statistically higher proportion than Excellent/very good/good health status.

‡Statistically higher proportion than those who are not disabled.

§Statistically higher proportion than those who do not have a chronic illness.

Most respondents said that at least 1 employed person would have to stay home from work during a pandemic to care for children. Therefore, employers can identify employees who may need to stay home to care for children and determine in advance if those employees could work from home, work staggered shifts, or be trained to take on other responsibilities, or if other employees can be cross-trained to take on some of those job functions. Employers must be prepared for increased absenteeism related to childcare responsibilities.

Community mitigation measures could cause particular problems for persons from low-income families and for racial and ethnic minorities. With these problems in mind, communities should plan for the needs of vulnerable populations who may be adversely affected during a pandemic. Workers who do not have sick or other leave time available will need support if they have to stay home during a pandemic. Communities should explore alternative ways of replacing school-based services, such as free meals, if schools are unable to provide those services.

These findings can inform planners about what the public may do if a pandemic occurs. However, the public might react differently when the event actually occurs. These results should be interpreted with caution in advance of a severe pandemic that could cause prolonged disruption of daily life and widespread illness in a community. Adherence rates to recommendations might be high during the early stages of a pandemic but results may not be as predictive over the course of several months. We have more confidence in the predictive ability of the survey in areas in which the public has a greater amount of personal experience, e.g., workplace issues, income, and the need for assistance at home.

Willingness to adhere to community mitigation measures may be influenced by the severity of illness persons observe in the community relative to their need for income and the level of community, individual, and family disruption. In addition, public response is likely to be affected by the perceived effectiveness of government and voluntary agencies in dealing with crisis situations. Planning for implementation of community mitigation measures, as well as actions to reduce secondary consequences, are important steps in enhancing adherence to public health recommendations.

The communication resources of government can be scarce during a crisis. Such resources can be used most effectively if there are recent data about what the public needs to learn. This was seen in the cases of severe acute respiratory syndrome and anthrax (29). During a pandemic, short-duration rapid-turnaround public surveys can provide timely information to public health officials about the acceptability of recommendations and needed communication to the public if problems are found (15). Although the challenge is formidable, our best chances of protecting health and maintaining functioning communities during a pandemic rely on

optimal adherence to public health measures and a coordinated response within and between communities.

The Harvard School of Public Health Project on Public and Biological Security is funded by a grant from the Association of State and Territorial Health Officials (ASTHO), which receives support from the Centers for Disease Control and Prevention (CDC). Harvard School of Public Health provides ASTHO and CDC with technical assistance for public health communication by monitoring the response of the general public to public health threats.

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Technical Appendix

PUBLIC RESPONSE TO COMMUNITY MITIGATION MEASURES FOR PANDEMIC INFLUENZA

The data are derived from the *Pandemic Influenza Survey* by the Harvard School of Public Health Project on the Public and Biological Security. Scientists from the Centers for Disease Control and Prevention (CDC) provided technical assistance. Fieldwork was conducted via telephone for the Project by ICR/International Communications Research of Media (PA) between September 28 and October 5, 2006.

The survey was conducted in English and Spanish with a representative national sample of 1,697 adults age 18 and over, including an over-sample of adults who had children under age 18 in their households. Altogether 821 such adults with children were interviewed. In the overall results, this group was weighted to its actual proportion of the total adult population. The cooperation rate was 75%, and the response rate was 36%.

The survey whose results are reported here did not include interviews with cellphone-only adults, which might be a possible source of non-coverage bias. Estimates from the 2006 National Health Interview Survey suggest that about one in eight American homes have only wireless (mainly cellphone) telephone service. The incidence of cellphone-only households is higher for low-income and young adults.¹ A recent study has shown that when data are weighted demographically, including a cell-only sample with a landline RDD sample produces population estimates that are nearly identical to those from the landline sample alone.² However, another

study has shown that even after weighting, landline telephone surveys will underestimate the prevalence of certain health behaviors.³

The study used in this paper shows that low-income people are likely to encounter more problems than people from higher-income households. It is likely that these problems would be somewhat larger if cellphone-only households were included. However, even without these households, the results suggest that the problems of low-income people are large enough to warrant attention from public health officials.

The dataset is available by emailing Kathleen Weldon at kweldon@hsph.harvard.edu.

Definition of response and cooperation rates⁴

Response rate - The number of complete interviews with reporting units divided by the number of eligible reporting units in the sample. Response Rate 3 (RR3), the method used in this article, estimates what proportion of cases of unknown eligibility is actually eligible. This estimate is guided by the best available scientific information on what share eligible cases make up among the unknown cases. Examples of unknown eligibility include numbers where the telephone was always busy or there was no answer throughout the interview period, numbers that had an answering machine or technical barrier such as call-blocking (and where it was not possible to tell whether or not the number was at a housing unit), and numbers in the sample that were never called.

Cooperation rate - The proportion of all cases interviewed of all eligible units ever contacted.

Weighting of survey data

The following quotation explains the basic concept of weighting data from a survey. More details about weighting are in the methods section of the article itself.

To get an estimate from our sample of the population's opinion, we do not give each response equal influence. We need to "weight" the responses of undersampled groups more heavily than those of oversampled groups, thereby estimating the poll responses that would have resulted if the survey respondents had matched the population in their demographic characteristics. Consider a simple case, weighting by sex. In a 1,000-person sample that is going to be adjusted by sex, the weight for women would be the number of women out of 1,000 people in the population divided by the number of women in the sample. Each female response would be weighted by (i.e., multiplied by) this ratio. If, for example, the sample had fewer women than the general population, female responses would be given more weight when estimating the population's characteristics on each question (p. 114).⁵

After weighting, the sample for the survey whose results are reported in this article was 48% male, 52% female, 69% non-Hispanic white, 11% non-Hispanic African American, 13% Hispanic American, 2% Asian American, 60% adults aged 18-49, and 39% adults aged 50+.

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Survey Questionnaire and Results (appended starting on the next page)

PANDEMIC INFLUENZA SURVEY
Harvard School of Public Health
Project on the Public and Biological Security

Topline Results

The study was conducted for the Harvard School of Public Health Project on the Public and Biological Security via telephone by ICR/International Communications Research, an independent research company. Interviews were conducted September 28-October 5, 2006, among a nationally representative sample of 1,697 respondents age 18 and older, including an oversample of adults who had children under age 18 in their households. Altogether 821 such adults with children were interviewed. In the overall results, this group was weighted to its actual proportion of the total adult population. The margin of error for the total sample is +/- 2.4 percentage points at the 95% confidence level.

E. RECORD GENDER OF RESPONDENT

	Male	Female
Total	48	52

A. WORRIES AND PRECAUTIONS

1. How likely do you think it is that there will be cases of bird flu among **birds** in the U.S. during the next 12 MONTHS? Do you think it is very likely, somewhat likely, not too likely, or not at all likely?

	LIKELY			NOT LIKELY			Don't know	Refused
	NET	Very	Somewhat	NET	Not too	Not at all		
Total	53	14	39	42	29	13	5	*

2. How likely do you think it is that there will be cases of bird flu among **humans** in the U.S. during the next 12 MONTHS? Do you think it is very likely, somewhat likely, not too likely, or not at all likely?

	LIKELY			NOT LIKELY			Don't know	Refused
	NET	Very	Somewhat	NET	Not too	Not at all		
Total	44	10	34	53	34	19	3	*

3. How familiar are you with the term “pandemic flu”? Do you know what this term means, have you heard of it, but are not sure what it means, or have you never heard of the term “pandemic flu” before?

	Know what the term means	Have heard of it but not sure what it means	Have never heard of the term	Don't know	Refused
Total	41	33	25	1	*

4. Do you take prescription drugs or over the counter medications on a regular or ongoing basis, or not?

	Yes	No	Don't know	Refused
Total	57	43	*	*

5. I am going to read a list of health items some people have in their homes. For each one, please say if this is something you currently have or do not have. Do you have (INSERT ITEM)?

- a. Medicine for fever, such as acetaminophen or ibuprofen

	Yes, currently have	No, do not have	Don't know
Total	84	16	*

- b. A thermometer to measure fever

	Yes, currently have	No, do not have	Don't know
Total	83	17	*

- c. Anti-viral medicines such as Tamiflu

	Yes, currently have	No, do not have	Don't know
Total	12	88	1

6. Including yourself, how many adults, 18 or older, are there living in your household?

	Total
1	26
2	53
3	13
4	6
5+	2
Refused	*

9. Currently, are you yourself employed full-time, part-time, or not at all?

	Total
EMPLOYED (Net)	63
Employed full time	50
Employed part time	13
Not at all	36
Refused	*

(Asked of total respondents employed full-time or part-time; n= 1,101)

10. Are you self-employed, or do you work for someone else?

	Total
Self employed	16
Work for someone else	84
Don't know	*
Refused	*

9/10 Combination Table

	Total
EMPLOYED (Net)	63
Self employed	10
Work for someone else	53
Not at all	36
Refused	*

(Asked of total respondents employed full-time or part-time; n= 1,101)

11. Do you ever work from home?

	Yes	No
Total	27	73

(Asked of total employed respondents who ever work from home; n= 371)

12. How often do you work from home: all the time, at least once a week, a few days a month, or only occasionally?

	All the time	At least once a week	A few days a month	Occasionally	Don't know	Refused
Total	31	22	9	36	1	*

11/12 Combination Table (Asked of total respondents employed full-time or part-time; n=1,101)

	Total
Work from home (Net)	27
All the time	9
At least once a week	6
A few days per month	3
Occasionally	10
Do not work from home	73

9/11/12 Combination Table

	Total
Employed	63
Work from home (Net)	17
All the time	5
At least once a week	4
A few days per month	2
Occasionally	6
Do not work from home	46
Not employed	36
Refused	*

(Asked of total respondents who have 2 or more adults 18+ in household; n= 1,296)

13. How many (other) adults in your household are employed full-time?

	1	2	3+	None	Refused
Total	57	11	3	30	*

(Asked of total respondents who have 2 or more adults 18+ in household that are not employed full-time or 3 or more adults 18+ live in the household; n=651)

14. How many (other) adults in your household are employed part-time?

	1	2	3+	None
Total	26	4	1	70

9/13/14 Combination Table

	Total
Someone in household is employed	79
Someone in household is employed full-time	73
Someone in household is employed part-time	22
No one in household is employed	21
Don't know if any one in household is employed	*

19. Are there any children under the age of 18 living in your household?

	Yes	No	Refused
Total	38	61	*

(Asked of total respondents with children under 18 in household; n= 821)

20. Are you one of the adults in the household who has a major responsibility for these children?

	Yes	No	Don't know
Total	91	9	*

(Asked of total respondents with children under 18 in household; n= 821)

21. How many children under the age of 18 are living in your household?

	1	2	3	4	5-8	Refused
Total	40	35	16	6	2	1

(Asked of total respondents with 1 or more children under 18 in household; n= 810)

22. How many are children 13 to 17?

	1	2	3	4	None
Total	32	8	2	*	57

(Asked of total respondents with 1 or more children under 18 in household; n= 810)

23. How many are children 5 to 12?

	1	2	3	4	None
Total	34	19	4	1	43

(Asked of total respondents with 1 or more children under 18 in household; n= 810)

24. How many are children under 5?

	1	2	3	None	Refused
Total	23	12	2	63	*

19/21/22/23/24 Combination Table

	Total
Have children (Net)	38
Children 13 to 17 years old	16
Children 5 to 12 years old	22
Children under 5	14
No children	61
Refused	*

(Asked of total respondents who have 1 or more children under 5 years old in the household; n= 274)

28. During the day, who principally takes care of the (child/children) in your household under age five?

	Total
Respondent	33
Spouse	24
Another adult family member	12
Teenage family member who lives in household	--
A friend	*
Babysitter or “nanny”	7
A childcare facility	16
Childcare in someone else’s home	2
Childcare at work	1
Combination	4
Don’t know	*
Refused	--

(Asked of total respondents who have 1 or more children 5 to 12 years old in the household; n= 461)

29. After school, who principally takes care of the (child/children) in your household age five to twelve?

	Total
Respondent	54
Spouse	19
Another adult family member	12
Teenage family member who lives in household	3
A friend	1
Babysitter or “nanny”	2
A childcare facility	5
Childcare in someone else’s home	1
Childcare at work	--
Combination	4
Child does not go to school	--
Child is home schooled	*
Don’t know	1
Refused	*

Now I want to ask you some questions about a possible outbreak in the U.S. of pandemic flu, a new type of flu that spreads rapidly among humans and causes severe illness. Currently there have not been any cases of pandemic flu in the U.S. However, imagine that there was a severe outbreak in the U.S. and possibly in your community and a lot of people were getting very sick from the flu and the flu was spreading rapidly from person to person.

B. SCENARIO: HOME

Public health officials think many people will get sick if there is a severe outbreak of pandemic flu. Those less severely sick would need to be taken care of at home rather than at hospitals. Only the sickest people would be hospitalized. I'm going to ask you some questions about two situations: if you yourself were sick, or if you were taking care of someone in your household who was sick from pandemic flu.

32. If public health officials said you should be prepared to take care of members of your household at home for 7 to 10 days if they become sick, would you be able to do that, or not?

	Yes	No	Don't know	Refused
Total	85	13	1	1

(Asked of total respondents who would be able to care for household members at home for 7 to 10 days; n= 1,491)

33. What if taking care of that person involved keeping him or her isolated from others in a separate room and having only one person take care of the sick person for 7 to 10 days? Would you be able to do that?

32/33 Combination Table

	Total
Able to care for sick household members for 7 to 10 days (Net)	85
Able to keep sick household member isolated	78
Unable to keep sick household member isolated	6
Unable to care for sick household members for 7 to t10 days	13
Don't know	1
Refused	1

(Asked of total respondents employed full-time or part-time; n= 1,101)

34. If someone in your household other than you got sick and had to be cared for at home, would you be able to miss work to care for them, or not?

	Yes	No	Don't know	Refused
Total	84	13	3	1

(Asked of total respondents employed full-time or part-time; n= 1,101)

35. Would you be able to work from home AND be able to take care of them, or not?

	Yes	No	Don't know	Refused
Total	37	60	2	1

36. If you were sick with pandemic flu and you had to remain at home for 7 to 10 days, is there someone who could care for you at home, or not?

	Yes	No	Don't know	Refused
Total	73	24	3	1

37. Suppose you had pandemic flu and health officials recommended that you stay at home, away from other people for 7 to 10 days. Is this something you would do, or not?

	Yes	No	Don't know	Refused
Total	94	4	1	1

38. What if another member of your household was sick from pandemic flu and health officials recommended that YOU and ALL members of your household should stay at home, away from other people for 7 to 10 days? Is this something you and other members of your household would do voluntarily, or not?

	Yes	No	Some will, Some won't	Don't know	Refused
Total	85	9	3	3	1

39. If you stayed at home with a household member who was sick from pandemic flu, how worried would you be that you would get sick from the disease yourself? Would you be very worried, somewhat worried, not too worried, or not at all worried?

	Worried			Not worried				
	NET	Very	Somewhat	NET	Not too	Not at all	Don't know	Refused
Total	76	40	36	22	11	11	2	*

(Asked of total respondents who feel all household members would NOT stay home voluntarily; n = 114)

40. If you had a household member who was sick with pandemic flu and were offered a medicine that would help keep you from getting sick, then would you stay at home for 7 to 10 days as recommended, or not?

	Yes	No	Don't know
Total	75	23	1

38/40 Combination Table

	Total
All household members would voluntarily stay at home for 7-10 days	85
All household members would NOT voluntarily stay at home for 7-10 days (Net)	9
Would stay home with meds	7
Would NOT stay home with meds	2
Some will, some will not	3
Don't know	3
Refused	1

41. If public health officials thought you might have been exposed to pandemic flu and recommended that you stay at home for 7 to 10 days so that you would not expose other people to the disease, is this something you would do, or not?

	Yes	No	Don't know	Refused
Total	86	10	4	*

42. If public health officials recommended that you stay at home for 7 to 10 days to help protect yourself and other household members from being exposed to the disease outside your home, is this something you would do, or not?

	Yes	No	Don't know
Total	87	10	3

43. Here is a list of problems people might have while staying at home in the event of an outbreak of pandemic flu. If you were asked to stay at home for 7 to 10 days and avoid contact with anyone outside your household, how likely do you think it is that each of the following would happen to you or a member of your household? How about (READ ITEM) Do you think that is very likely, somewhat likely, not too likely, or not at all likely?

- a. You or a member of your household might be unable to get the health care or prescription drugs that you need

	LIKELY			NOT LIKELY			Don't know	Refused
	NET	Very	Somewhat	NET	Not too	Not at all		
Total	43	20	23	55	23	32	2	*

- b. You or a member of your household might have a hard time being stuck at home for so long

	LIKELY			NOT LIKELY			Don't know	Refused
	NET	Very	Somewhat	NET	Not too	Not at all		
Total	46	22	24	54	20	34	1	*

- c. You or a member of your household might lose pay and have money problems

	LIKELY			NOT LIKELY			Don't know	Refused
	NET	Very	Somewhat	NET	Not too	Not at all		
Total	48	27	21	50	17	33	1	*

- d. You or a member of your household might lose your job or business as a result of having to stay home

	LIKELY			NOT LIKELY			Don't know	Refused
	NET	Very	Somewhat	NET	Not too	Not at all		
Total	27	13	14	71	20	51	2	*

- e. You might not be able to get baby formula, diapers, or other important things for a baby in your household (**Among those who have major responsibility for children aged 0 to 2 years old; n= 174**)

	LIKELY			NOT LIKELY			Don't know	Refused
	NET	Very	Somewhat	NET	Not too	Not at all		
Total	45	19	26	53	27	26	1	--

- f. You might have difficulty taking care of the (child/children) under age 5 in your household (**Among those who have major responsibility for children under 5 years old; n= 262**)

	LIKELY			NOT LIKELY			Don't know	Refused
	NET	Very	Somewhat	NET	Not too	Not at all		
Total	32	14	18	67	20	47	1	*

- g. You might not be able to get care for a disabled person in your household (**Among in households with disabled person; n=470**)

	LIKELY			NOT LIKELY			Not applicable	Don't know	Refused
	NET	Very	Somewhat	NET	Not too	Not at all			
Total	36	16	20	48	16	32	14	1	*

- h. You might not be able to get care for an older person in your household (**Among in households with person age 65+; n=408**)

	LIKELY			NOT LIKELY			Not applicable	Don't know	Refused
	NET	Very	Somewhat	NET	Not too	Not at all			
Total	35	14	21	51	18	33	12	3	--

C. SCENARIO: FOLLOWING RECOMMENDATIONS

44. Now I'm going to read you a list of steps that public health officials might advise. This would be to prevent the spread of severe flu and help protect you and your family from catching it. As I read each one, please tell me if you would follow such a recommendation, or not. What if they said that for ONE MONTH you should (INSERT ITEM)? Do you think you would do that, or not?

- a. Avoid public events like movies, sporting events, or concerts

	Yes	No	Don't know	Refused
Total	92	7	*	*

- b. Avoid going to malls and department stores

	Yes	No	Don't know	Refused
Total	91	9	1	--

c. Postpone family or personal events such as parties, weddings, or funerals

	Yes	No	Don't know	Refused
Total	79	18	3	*

d. Avoid air travel

	Yes	No	Not applicable	Don't know	Refused
Total	93	5	1	*	--

e. Limit your use of public transportation, buses and trains

	Yes	No	Not applicable	Don't know	Refused
Total	89	7	4	*	--

f. Cancel doctor or hospital appointments that are not critical at the time

	Yes	No	Don't know	Refused
Total	89	10	1	--

g. Reduce contact with people outside your own household as much as possible

	Yes	No	Don't know	Refused
Total	88	11	1	--

h. Avoid going to church or religious services

	Yes	No	Don't know	Refused
Total	82	16	1	*

45. Suppose there was a serious outbreak of pandemic flu in your town or city and health officials recommended that you and members of your household stay in your town or city. How likely is it that you would stay in your town or city—very likely, somewhat likely, not too likely, or not at all likely?

	NET	LIKELY		NOT LIKELY			Don't know
		Very	Somewhat	NET	Not too	Not at all	
Total	90	75	15	9	3	6	*

D. SCENARIO: SCHOOL

In order to keep pandemic flu from spreading and to protect the safety of children, some communities may close schools and daycare facilities for some period of time. The length of school and daycare closures would probably be tied to how serious the pandemic flu outbreak is. For instance, if there was a severe epidemic, schools and daycare might be closed for a long period of time.

(Asked of total unemployed respondents who have no other employed adult household members and have major responsibility for household children under 5 years old in daycare or 5 to 17 years old; n= 12)

46. If schools and daycare facilities were closed for ONE MONTH to protect children because of a serious outbreak of the disease, how much of a problem would it be for you to take care of the children in your household for that long? Would it be a major problem, a minor problem, or not a problem?

Insufficient data for analysis.

(Asked of total respondents who have at least one employed adult in household and have major responsibility for household children under 5 years old in daycare or 5 to 17 years old; n=634)

47. If schools and daycare facilities were closed for ONE MONTH to protect children because of a serious outbreak of the disease, would you be able to arrange care for the children so that at least one adult in your family could go to work, or not?

	Yes	No	Depends	Don't know
Total	93	5	1	1

(Asked of total employed respondents or respondents who have another employed adult household member and have major responsibility for household children under 5 years old in daycare or 5 to 17 years old and would be able to arrange care for ONE MONTH allowing one adult to work; n= 600)

48. Who would mainly take care of the children who live in your household if schools and daycare were closed?

	Total
Respondent	51
Another family member who lives in home	29
Teenage family member	2
Babysitter or “nanny”	1
A family member who lives outside home	5
Friends	*
Neighbors	--
Someone else	*
Children would take care of themselves	6
Combination	5
Don’t know	*
Refused	*

(Asked of total employed respondents or respondents who have another employed adult household member and have major responsibility for household children under 5 years old in daycare or a 5 to 17 years old; n= 634)

49. If schools and daycare were closed for ONE MONTH, how many of the employed people in your household if any do you think would have to stay home from work?

	1	2	3	None	Don’t know	Refused
Total	52	8	*	37	2	1

(Asked of total employed respondents or respondents who have another employed adult household member and have major responsibility for children under 5 years old in daycare or 5 to 17 years old and for one month would be able to or are unsure if they could arrange for childcare allowing one adult to go to work; n= 611)

50. What if schools and daycare were closed for THREE MONTHS because there was a severe outbreak of pandemic flu in your community? Would you be able to arrange care for the children who live in your household so that at least one adult in your family could go to work, or not?

(Total employed respondents or respondents who have another employed adult household member and have major responsibility for children under 5 years old in daycare or 5 to 17 years old; n= 634)

47/50 Combination Table

	Total
Could arrange care for three months	86
Could arrange care for one month but not three months	6
Could arrange care for one month but for three months it depends	1
Could not arrange care for one month	5
Don't know/Depends when asked about care	2

(Asked of total employed respondents or respondents who have another employed adult household member and have major responsibility for children under 5 years old in daycare or 5 to 17 years old; n= 634)

51. What if schools and daycare were closed for THREE MONTHS? How many of the employed people in your household if any do you think would have to stay home from work?

	1	2	3	None	Don't know	Refused
Total	50	7	*	40	2	*

(Asked of total employed respondents or respondents who have another employed adult household member and have major responsibility for children aged 5 to 17; n= 610)

52. If schools were closed for THREE MONTHS because there was a severe outbreak of pandemic flu, would you be willing to give school lessons at home to the children in your household while their schools were closed or not?

	Yes	No	Depends
Total	95	5	*

(Asked of total employed respondents or respondents who have another employed adult household member and have a major responsibility for children aged 5 to 17 who are willing to give school lessons at home; n= 580)

53. How much help do you think you would need in order to do this: a lot, some, only a little, or none at all?

	A lot/Some			Only a little/None at all			Depends	Don't know
	NET	A lot	Some	NET	Only a little	None at all		
Total	47	15	32	53	25	28	*	*

(Total employed respondents or respondents who have another employed adult household member and have major responsibility for children aged 5 to 17;n=610)

52/53 Combination Table

	Total
Willing to give school lessons at home	95
Need a lot of help	14
Need some help	30
Need only a little help	24
Need no help	27
Depends	*
Unwilling to give school lessons at home	5
Depends	*

(Asked of total respondents who have major responsibility for children aged 5 to 17; n= 640)

54. Suppose schools were closed for THREE MONTHS, and to protect the health of children, public health officials recommended that you do not let the children or teenagers in your household take public transportation, go to public events, malls, or parties with large numbers of people, or gather with other people outside the home. Do you think it would be possible to keep the children and teenagers in your household from doing these things for THREE MONTHS?

	Yes	No	Don't know
Total	85	13	2

(Asked of total respondents who have major responsibility for children aged 5 to 17; n = 640)

55. How much outside help do you think you would need in order to deal with the problems of having to stay at home and keep the children at home for a long period of time during a severe outbreak of Pandemic flu? Would you need a lot, some, only a little, or none at all?

	A lot/Some			Only a little/None at all			Don't know
	NET	A lot	Some	NET	Only a little	None at all	
Total	35	10	25	64	28	36	1

(Among those who have major responsibility for children aged 5 to 17 and would need a lot or some outside help to deal with keeping children at home; n=225)

56. Which ONE of the following sources do you think you would rely on most for help? Would you rely on (INSERT ITEM)?

	Total
Government agencies	15
Voluntary agencies	6
Community groups	6
Church groups	7
Family	50
Friends	8
Neighbors	3
Someone else	*
Don't know	4

(Asked of total respondents who have major responsibility for household children under 5 years old in daycare or aged 5 to 17; n= 664)

57. Do any of the children in your household get free breakfast or lunch at school or daycare?

	Yes	No	Don't know	Refused
Total	25	74	1	*

(Asked of total respondents who have major responsibility for household children under 5 years old in daycare or 5 to 17 years old who get free meals at school or daycare; n= 119)

58. If schools and daycare were closed for THREE MONTHS, how much of a problem would it be that these children could not get these free meals at school or daycare? Would it be a major problem, a minor problem, or not a problem?

	PROBLEM			Not a problem
	NET	Major	Minor	
Total	34	13	21	66

(Total respondents who have major responsibility for household children under 5 years old in daycare or 5 to 17 years old; n= 664)

57/58 Combination Table

	Total
Yes, child gets free breakfast or lunch (Net)	25
Major problem if school/daycare closed for three months	3
Minor problem if school/daycare closed for three months	5
Not a problem if school/daycare closed for three months	17
No, child does not get free breakfast or lunch	74
Don't know	1
Refused	*

E. SCENARIO: WORK

(Asked of total respondents employed full-time or part-time; n= 1,101)

59. If public health officials said you should stay home from work, but your employer told you to come to work, would you stay at home or go to work?

	I would stay home	I would go to work	Don't know	Refused
Total	57	35	8	1

(Asked of total respondents employed full-time or part-time; n= 1,101)

60. If the Pandemic flu was very serious and public health officials recommended that some businesses in your community should shut down, do you think your workplace would shut down, or would it stay open?

	Shut down	Stay open	Don't know	Refused
Total	43	50	7	*

(Asked of total respondents employed full-time or part-time; n= 1,101)

61. If you had to stay home for ONE MONTH because of a serious outbreak of Pandemic flu, would you be able to work from home for that long, or not?

	Yes	No	Don't know	Refused
Total	29	69	2	*

(Asked of total respondents able to work from home for ONE MONTH; n= 388)

62. Would you be able to work from home for THREE MONTHS or not?

(Total respondents employed full-time or part-time; n= 1,101)

61/62 Combination Table

	Total
Able to work from home for three months	19
Would be able to work from home for one month but not three	9
Would not be able to work from home for one month	69
Would be able to work for one month but don't know about three month	1
Don't know	2
Refused	*

(Asked of total employed respondents who have major responsibility for household children under 5 years old in daycare or 5 to 17 years old and are able to work from home for one month; n= 192)

63. If schools and daycare were closed for ONE MONTH because of a serious outbreak of Pandemic flu, would you be able to work from home that long while ALSO taking care of the children in your household, or not?

	Yes	No	Don't know	Refused
Total	87	12	1	*

(Asked of total employed respondents who have major responsibility for household children under 5 years old in daycare or 5 to 17 years old and are able to work from home for ONE MONTH while also caring for children)

64. Would you be able to do that for THREE MONTHS?

(Total employed respondents who have major responsibility for household children under 5 years old in daycare or 5 to 17 years old; n= 537)

61/63/64 Combination Table

	Total
Would be able to work from home and take care of children for three months	20
Would be able to work from home to take care of children for one month but not three	5
Would NOT be able to work from home for ONE MONTH	72
Don't know/Refused	3

(Asked of total respondents employed full-time or part-time; n= 1,101)

65. If there were a severe outbreak of Pandemic flu in your community and you had to stay away from work, would you still get paid or not, or don't you know?

	Would get paid	Would NOT get paid	Don't know	Refused
Total	35	42	22	*

(Asked of total respondents employed full-time or part-time; n= 1,101)

66. If cases of pandemic flu remained in your community for some time, public health officials might recommend that people stay home from work so they do not catch or spread the disease. How long do you think you could stay home from work before it became a serious financial problem? Would it become a serious financial problem if you stayed out of work for 7-10 days?

(Asked of total employed respondents who could stay out of work or are unsure for 7 to 10 days without it becoming a financial problem; n= 905)

67. How about ONE MONTH? Would that become a serious financial problem?

(Asked of total employed respondents who could stay out of work or are unsure for ONE MONTH without it becoming a financial problem; n= 564)

68. How about THREE months? Would that become a serious financial problem?

(Asked of total respondents employed full-time or part-time; n= 1,101)

66/67/68 Combination table

	Total
Staying out of work for three months would NOT be a serious financial problem	22
Staying out of work for one month would NOT be a serious financial problem but three months would	19
Staying out of work for 7-10 days would NOT be a serious financial problem but one month would	32
Staying out of work for 7-10 days would be a serious financial problem	25
Don't know	2
Refused	*

(Asked of total respondents employed full-time or part-time; n= 1,101)

69. If there were a severe outbreak of Pandemic flu in your community, how worried are you that your employer would make you go to work even if you were sick? Are you very worried, somewhat worried, not too worried, or not at all worried?

	Worried			Not worried			Don't know	Refused
	NET	Very	Somewhat	NET	Not too	Not at all		
Total	22	9	13	77	20	57	1	1

(Asked of total respondents employed full-time or part-time; n= 1,101)

70. Has your workplace developed a plan to respond to a possible outbreak of pandemic flu?

	Yes	No	Don't know	Refused
Total	19	63	18	*

(Asked of total employed respondents whose workplace has developed a workplace flu plan; n= 232)

71. Does that plan include (INSERT ITEM), or not?

- a. Encouraging sick employees to stay at home
- b. Expanding options to work from home.
- c. Providing information regarding what supplies to have in your home.
- d. Providing information about pandemic flu

(Total respondents employed full time or part time; n = 1,101)

70/71 Combination Table

	Total
Work place has plan (Net)	19
Includes encouraging sick to stay home	16
Includes expanding options to work from home	6
Provides information on what supplies to have at home	12
Provides information about flu	14
Work place has NO plan to respond	63
Don't know	18
Refused	*

F. SOURCES OF INFORMATION

72. If there were an outbreak of Pandemic flu in your community, how much would you trust the following sources to give you useful and correct information about the outbreak? How about (INSERT ITEM)? Would you trust them a lot, some, only a little, or not at all?

a. State public health officials

	A lot	Some	Only a little	Not at all	Don't know	Refused
Total	45	37	12	6	*	*

b. Reporters at newspapers or magazines

	A lot	Some	Only a little	Not at all	Don't know	Refused
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					Don't know	
Total	10	37	27	26	1	*

c. Commentators on TV and radio

	A lot	Some	Only a little	Not at all	Don't know	Refused
Total	12	41	26	21	1	*

d. Local, town, city, or county public health officials

	A lot	Some	Only a little	Not at all	Don't know	Refused
Total	39	39	15	6	1	*

e. Your doctor or other health care professional

	A lot	Some	Only a little	Not at all	Don't know	Refused
Total	72	20	4	2	1	*

f. Religious leaders in your community

	A lot	Some	Only a little	Not at all	Don't know	Refused
Total	28	34	17	19	2	*

g. The governor of your state

	A lot	Some	Only a little	Not at all	Don't know	Refused
Total	28	38	17	15	2	*

h. The CDC, or Centers for Disease Control and Prevention

	A lot	Some	Only a little	Not at all	Don't know	Refused
Total	60	28	6	4	1	*

30. If there was such a severe outbreak of pandemic flu in your community, health officials might have to recommend that the community take actions to slow the spread of the disease. Which of the following do you think should be the MOST important priority for public health officials? That these actions (READ FIRST ITEMS)? That these actions (READ NEXT ITEMS), which ONE of these do you think should be the MOST important priority for public health officials?

	Total
Treat everyone as equally as possible	31
Protect the health of the greatest number of people	26
Give priority to sick and frail people in getting assistance	25
Aim to preserve essential community services like electricity and law enforcement	11
Do not interfere with the civil liberties or freedoms of people in your community	4
Don't know	2
Refused	*

DEMOGRAPHICS

7. What is your age?

	Total
18-29	22
30-49	38
50-64	23
65+	16
Refused	1

(Asked of total respondents with 2 or more adult household members; n= 1,296)

8. Is anyone (else) in your household age 65 or older?

	Yes	No	Refused
Total	16	83	*

7/8 Combination Table

	Total
Someone in household is 65+	22
No one in household is 65+	77
Don't know/Refused	1

D1. In general, would you say your health is excellent, very good, good, fair, or poor?

	Excellent/Very Good/Good				Fair/Poor			Don't know	Refused
	NET	Excellent	Very Good	Good	NET	Fair	Poor		
Total	85	26	36	23	14	11	3	*	*

15. Are you limited in any way in any activities because of physical, mental, or emotional problems?

	Yes	No	Don't know	Refused

Total	19	80	*	*
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16. Is anyone (ELSE) in your household limited in any way in any activities because of physical, mental, or emotional problems? (IF NECESSARY: THIS INCLUDES CHILDREN IN THE HH)

	Yes	No	Don't know	Refused
Total	14	85	*	1

17. Do you now have any health problem that requires you to use special equipment, such as a cane, a wheelchair, a special bed, or a special telephone? (IF NECESSARY: Include occasional use or use in certain circumstances.)

	Yes	No	Refused
Total	8	91	*

15/17 Combination Table

	Total
Respondent has disability	21
Respondent does not have disability	78
Don't know/Refused	*

18. Does anyone (ELSE) in your household now have any health problem that requires them to use special equipment, such as a cane, a wheelchair, a special bed, or a special telephone? (IF NECESSARY: Include occasional use or use in certain circumstances.)

	Yes	No	Don't know	Refused
Total	7	93	*	1

15/16/17/18 Combination Table

	Total
Respondent or other household member has disability	30
No one in household has disability	69
Don't know/Refused	*

- D1a. Have you been told by a doctor or health professional that you have any of the following medical conditions: heart or lung disease, asthma, kidney disease, diabetes, or a disease that causes decreased immunity such as cancer or HIV/AIDS?

	Yes	No	Don't know	Refused
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Total	22	78	*	1
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D1b. Does anyone (else) who lives in your household have any of these conditions?

	Yes	No	Don't know	Refused
Total	16	83	*	1

D1a/D1b Combination Table

	Total
Respondent or other household member has chronic illness	31
No one in household has chronic illness	68
Don't know/Refused	1

D2. Is anyone in your household pregnant?

	Yes	No	Don't know	Refused
Total	3	96	*	1

(Asked of total respondents employed full-time or part-time; n= 1,101)

D3. Do you work in a health-care related job?

	Yes	No	Refused
Total	19	81	1

(Asked of total respondents employed in a health care related job; n= 210)

D4. Does your work involve direct contact in the care of patients, or not?

	Yes	No	Don't know
Total	56	44	*

(Total respondents employed full-time or part-time; n= 1,101)

D3/D4 Combination Table

	Total
Work in healthcare related job	19
Involves direct contact with patients	10
Does not involve direct contact with patients	8
Does not work in healthcare related job	81
Refused	1

D5. Do you provide childcare in your home for any children who are not part of your own household?

	Yes	No	Refused
Total	7	92	1

D6. Are you, yourself, of Hispanic or Latino background, such as Mexican, Puerto Rican, Cuban, or other Latin American background?

	Yes	No	Refused
Total	13	87	1

(Asked of total respondents who have a Hispanic, Latino or other Latin American background; n= 114)

D6a. Are you White Hispanic or Black Hispanic?

	White	Black	Don't know	Refused
Total	65	9	21	5

D6/D7 Race Summary Table

	Total
White	69
Black or African American	11
Asian American	2
Native American	2
Hispanic (Net)	13
White Hispanic	8
Black Hispanic	1
Hispanic unspecified	3
Some other race	2
Don't know	*
Refused	1

Education Summary Table

	Total
High school graduate or less (Net)	49
Less than high school graduate (subnet)	15
None or grade 1-8	2
High school incomplete	14
High school graduate +(subnet)	34
High school graduate	31
Business, tech/vocational school	3
Some college or more (Net)	50
Some college, no 4 year degree	25
College graduate + (subnet)	25
College graduate	16
Post-graduate training	9
Don't know	*
Refused	1

Income Summary Table

	Total
Less than \$40K (Net)	35
Less than \$15K	6
\$15K but less than \$20K	8
\$20K but less than \$25K	6
\$25K but less than \$30K	5
\$30K but less than \$40K	8
Less than \$40K unspecified	3
\$40K+ (Net)	52
\$40K but less than \$50K	10
\$50K but less than \$75K	16
\$75K but less than \$100K	10
\$100K	13
\$40K+ unspecified	3
Don't know	5
Refused	7

D10. RECORD REGION FROM SAMPLE FILE

	Total
Northeast	19
North Central	22
South	36
West	23

D11. RECORD METRO STATUS FROM SAMPLE

	Total
In the Center City of an MSA	29
Outside the Center City of an MSA, but inside that county	20
Inside a Suburban County of the MSA	19
In an MSA that has NO center City	4
Not in an MSA	29