Science Advances

AAAS

Supplementary Materials for

The effects of corrective information about disease epidemics and outbreaks: Evidence from Zika and yellow fever in Brazil

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This PDF file includes:

References (*41–43*)

Survey instruments

Nationally representative survey (2017)[1]

Please indicate whether you believe the following statements are accurate or not.

[Order of the following 3 questions was randomized:]

Big events like wars, the current recession, and the outcomes of elections are controlled by small groups of people who are working in secret against the rest of us.

Some people have Extra Sensory Perception (ESP) and can read other people's minds or see events before they happen.

Ghosts can communicate with the living and take action in the physical world.

-Very accurate
-Somewhat accurate
-Not very accurate
-Not at all accurate

How much risk do you believe the Zika virus poses to human health in Brazil?
-No risk at all
-Very low risk
-Low risk
-Moderate risk
-High risk
-Very high risk

A person can be infected with Zika by the bite of a mosquito carrying the virus.
-Very accurate
-Somewhat accurate
-Not very accurate
-Not at all accurate

Please indicate if the following statements about Zika are accurate or not.

[Order of the following 3 questions was randomized:]

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[1]We reproduce our section of the instrument here in English. The full questionnaire as fielded in Portuguese is available at `http://archive.is/851ic`.

A person can be infected with Zika by having sex with someone who is infected.
-Very accurate
-Somewhat accurate
-Not very accurate
-Not at all accurate

A person can be infected with Zika by casual contact, like shaking hands, with someone who is infected.
-Very accurate
-Somewhat accurate
-Not very accurate
-Not at all accurate

Genetically modified mosquitoes – NOT wild mosquitoes – caused the Zika outbreak in Latin America.
-Very accurate
-Somewhat accurate
-Not very accurate
-Not at all accurate

The next two statements are about microcephaly, a birth defect in which babies are born with abnormally small heads. Please indicate whether you believe each statement is accurate or not.

[Order of the following 2 questions was randomized:]

The prevalence of microcephaly in Brazil has increased as a result of larvicides added to water to kill mosquitoes.

The prevalence of microcephaly in Brazil has increased as a result of the government mandating the increased use of vaccines among pregnant women.

-Very accurate
-Somewhat accurate
-Not very accurate
-Not at all accurate

Now, let's move on to another card. This is a scale that ranges from 1 to 10, where 1 indicates that you strongly disapprove and 10 indicates that you strongly approve. Now we're going to ask your opinion about different public policies. Please indicate if you approve or disapprove of the following policies.

The DPTaP vaccine, also known as a triple vaccine, protects against tetanus, diphtheria and pertussis, also known as pertussis or chronic cough. There is a government recommendation for pregnant women to take the DTaP vaccine. To what extent do you approve or disapprove of this recommendation for pregnant women?
-1 [Strongly disapprove]
-2
-3
-4
-5
-6
-7
-8
-9
-10 [Strongly approve]

The use of larvicides in water to prevent mosquito breeding in areas where Zika is believed to be present. To what extent do you approve or disapprove?
-1 [Strongly disapprove]
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-4
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-6
-7
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-9
-10 [Strongly approve]

The release of genetically modified mosquitoes to the environment to combat the spread of Zika. To what extent do you approve or disapprove of this measure?
-1 [Strongly disapprove]
-2
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-5
-6
-7
-8
-9
-10 [Strongly approve]

To combat the Zika virus, government health workers have the right to enter private homes

to look for mosquito breeding points / outbreaks when the resident or owner is not present. To what extent do you approve or disapprove of this policy?
-1 [Strongly disapprove]
-2
-3
-4
-5
-6
-7
-8
-9
-10 [Strongly approve]

How often do you do the following to protect yourself against Zika and other mosquito-born diseases...

Wear long-sleeved shirts and long pants?

Use mosquito repellent or spray on your body?

Use screens or close windows to keep mosquitoes outside?

-All of the time
-Most of the time
-Some of the time
-Not very often
-Not at all

Has a doctor or health worker ever told you that you contracted the Zika virus?
-No
-Yes

To the best of your knowledge, has a doctor or health worker ever told one of your close friends or family members that they contracted the Zika virus?
-No
-Yes

At the end of the interview, you would like me to give you a pamphlet from the Pan American Health Organization on how to prevent Zika?
-Yes
-No

2017 Zika experiment: Wave 1

This first set of questions asks for some information about you.

— Page break —

Are you at least 18 years old?
-Yes
-No [screened out]

— Page break —

How old are you in years? [free response]

What is your gender?
-Male
-Female
-Other

What was the last year of school that your mother completed?[2]
-None
-Primary
-Secondary
-Post-secondary, not university
-University

Do you consider yourself white, mestizo, indigenous, black, mulatto, or of another race?
-White
-Mestizo
-Indigenous
-Black
-Mulatto
-Other

In which of the following categories is your family's monthly household income, including remittances from abroad and the income of all working adults and children?
-No income
-Less than R$700

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[2]Due to a researcher error during the translation process, this question inadvertently asked respondents about their mother's level of education. As described above, an alternate measure of respondent education provided by Survey Sampling International was used in our analyses instead (response options: completed some high school, high school graduate, completed some college, college degree, completed some postgraduate, master's degree, or doctorate, law or professional degree).

-R$700 – R$950
-R$951 – R$1050
-R$1051 – R$1200
-R$1201 – R$1350
-R$1351 – R$1500
-R$1501 – R$1750
-R$1751 – R$1950
-R$1951 – R$2150
-R$2151 – R$2350
-R$2351 – R$2550
-R$2551 – R$3150
-R$3151 – R$3800
-R$3801 – R$4950
-R$4951 – R$6700
-More than R$6700

— Page break —

In what state do you live?
-Acre
-Alagoas
-Amapá
-Amazonas
-Bahia
-Ceará
-Distrito Federal
-Espírito Santo
-Goiás
-Maranhão
-Mato Grosso
-Mato Grosso do Sul
-Minas Gerais
-Pará
-Paraíba
-Paraná
-Pernambuco
-Piaui
-Rio de Janeiro
-Rio Grande do Norte
-Rio Grande do Sul
-Rondônia
-Roraima

-Santa Catarina
-São Paulo
-Sergipe
-Tocantins

What is your postal code? [free response]

What is your religion, if any?
-Catholic
-Protestant, Mainline Protestant or Protestant non-Evangelical (Christian; Calvinist; Lutheran; Methodist; Presbyterian; Disciple of Christ; Anglican; Episcopalian; Moravian)
-Non-Christian Eastern Religions (Islam; Buddhist; Hinduism; Taoist; Confucianism; Baha'i)
-Evangelical and Pentecostal (Evangelical; Pentecostals; Church of God; Assemblies of God; Universal Church of the Kingdom of God; International Church of the Foursquare Gospel; Christ Pentecostal Church; Christian Congregation; Mennonite; Brethren; Christian Reformed Church; Charismatic non-Catholic; Light of World; Baptist; Nazarene; Salvation Army; Adventist; Seventh-Day Adventist; Sara Nossa Terra)
-LDS (Mormon)
-Traditional Religions or Native Religions (Santería, Candomblé, Voodoo, Rastafarian, Mayan Traditional Religion; Umbanda; Maria Lonza; Inti; Kardecista, Santo Daime, Esoterica).
-Jewish (Orthodox; Conservative; Reform)
-Jehovah's Witness
-None (believe in a Supreme Entity but do not belong to any religion)
-Agnostic, atheist (do not believe in God)

How do you mainly spend your time? Are you currently...
-working?
-not working, but have a job?
-actively looking for a job?
-a student?
-taking care of the home?
-retired, a pensioner or permanently disabled to work?
-not working and not looking for a job?

— Page break —

How much interest do you have in politics: a lot, some, a little, or none?
-A lot
-Some
-A little
-None

Do you approve or disapprove of the Brazilian Democratic Movement Party — that is, the party currently in control of the Brazilian national government?
-Strongly approve
-Somewhat approve
-Neither approve nor disapprove
-Somewhat disapprove
-Strongly disapprove

This is a scale, from 1 to 10, in which the number 1 means "left" and the 10 means "right." Nowadays, when one speaks of political tendencies, one speaks of people who sympathize more with the left and of people who sympathize more with the right. According to the meaning that the terms "left" and "right" have for you, and thinking of your own political leanings, where would you place yourself on this scale?
-1
-2
-3
-4
-5
-6
-7
-8
-9
-10

Do you currently identify with a political party?
-Yes
-No

— Page break —

[if identifies with a party:]
Which political party do you identify with?
-PMDB (Party of the Brazilian Democratic Movement)
-PSDB (Brazilian Social Democracy Party)
-PSB (Brazilian Socialist Party)
-DEMOCRATS
-CP of the B (Communist Party of Brazil)
-PPS (Popular Socialist Party)
-PTB (Brazilian Labor Party)
-PSOL (Socialism and Freedom Party)
-PP (Progressive Party)

-PL (Liberal Party)
-PV (Green Party)
-PDT (Labor Democratic Party)
-OTHER

— Page break —

Please indicate whether you believe the following statements are accurate or not.

Big events like wars, the current recession, and the outcomes of elections are controlled by small groups of people who are working in secret against the rest of us.

Some people have Extra Sensory Perception (ESP) and can read other people's minds or see events before they happen.

Ghosts can communicate with the living and take action in the physical world.

-Very accurate
-Somewhat accurate
-Not very accurate
-Not at all accurate

— Page break —

The next series of sentences describes the way some people feel about how much control they have over their lives. Please indicate whether you think each statement is not at all accurate, not very accurate, somewhat accurate, very accurate, or extremely accurate.

I can solve the problems I have.

I sometimes feel I am being pushed around.

I have little control over what happens to me.

I can do just about anything I really set my mind to.

I often feel helpless in dealing with the problems of life.

What happens to me in the future depends mostly on me.

There is little I can do to change important things in my life.

-Extremely accurate
-Very accurate
-Somewhat accurate
-Not very accurate
-Not at all accurate

— Page break —

Please answer the next set of questions on your own without asking anyone or looking up the answers. Many people don't know the answers to these questions, but please answer every question even if you're not sure what the right answer is.

It is important to us that you do NOT use outside sources like the Internet to search for the correct answer. Will you answer the following questions without help from outside sources?
-Yes
-No

— Page break —

The center of the Earth is very hot.

All radioactivity is man-made.

Lasers work by focusing sound waves.

Electrons are smaller than atoms.

It is the father's gene that decides whether the baby is a boy or a girl.

Antibiotics kill viruses as well as bacteria.

-True
-False

How long does it take for the Earth to go around the Sun?
-One day
-One month
-One year

Does the Earth go around the Sun, or does the Sun go around the Earth?
-The Earth goes around the Sun

-The Sun goes around the Earth

— Page break —

What is the name of the current president of the United States of America?
-Barack Obama
-George W. Bush
-Al Gore
-John Kerry

In which continent is Nigeria?
-Africa
-Asia
-North America
-South America

How long is the presidential term of office in Brazil?
-Two years
-Three years
-Four years
-Five years

How many representatives does the Chamber of Deputies have?
-81
-232
-388
-513

— Page break —

There are a lot of issues in the news, and it is hard to keep up with every area. We will now list some topics that get covered in the media. Please indicate how closely you follow the news relating to each topic in either the newspaper, on television, on radio, or on the Internet.

Government or politics
Sports
Religion
International affairs
Scientific research or discoveries
New technologies
Entertainment or celebrities

-Do not follow at all
-Follow a little
-Follow closely
-Follow very closely

— Page break —

We will now list some topics that some people are interested in and some people are not interested in. For each topic, please indicate how interested you are in that topic.

Government or politics
Sports
Religion
International affairs
Scientific research or discoveries
New technologies
Entertainment or celebrities

-Not at all interested
-Slightly interested
-More than slightly interested
-Very interested

— Page break —

This is a scale of 1 to 7 points, where 1 means NOT AT ALL, and 7 means VERY MUCH.

To what extent do you trust the Federal Supreme Court?
-1 (NOT AT ALL)
-2
-3
-4
-5
-6
-7 (VERY MUCH)

To what extent do you trust the National Congress?
-1 (NOT AT ALL)
-2
-3
-4

-5
-6
-7 (VERY MUCH)

To what extent do you trust the press?
-1 (NOT AT ALL)
-2
-3
-4
-5
-6
-7 (VERY MUCH)

To what extent do you trust the government?
-1 (NOT AT ALL)
-2
-3
-4
-5
-6
-7 (VERY MUCH)

To what extent do you trust doctors?
-1 (NOT AT ALL)
-2
-3
-4
-5
-6
-7 (VERY MUCH)

To what extent do you trust banks and financial institutions?
-1 (NOT AT ALL)
-2
-3
-4
-5
-6
-7 (VERY MUCH)

To what extent do you trust the Ministry of Health?
-1 (NOT AT ALL)

-2
-3
-4
-5
-6
-7 (VERY MUCH)

— Page break —

Now, we'd like to get your thoughts on a recent article. Please read the article on the next page carefully.

— Page break —

[Random assignment into one of the following four conditions]

Five sauces for the modern cook

Travis Lett often steals. Of course, the only person this pensive chef ever steals from is himself. At his Los Angeles, USA restaurant, "We're constantly appropriating elements from dishes we've done in the past to create new combinations," he said.

There's a lesson here: To improve your cooking, learn how to make and use sauce like a professional.

Five basic types of sauces appear over and over again on menus and in cookbooks that feature the kind of vegetable-heavy, flavor-dense food that cooks and eaters favor today: yogurt sauce, pepper sauce, herb sauce, tahini sauce and pesto. Master each one, and you'll immediately have access to the dozens of variations that descend from them, too.

Think of them as the new mother sauces, an updated version of the five mother sauces of French cuisine. Armed with one of these five sauces, the home cook can go on and cook what he or she is most comfortable cooking. The right sauce will transform the distinct elements of a dish into a unified statement of taste.

[Condition 2]

What you need to know about Aedes aegypti mosquitoes

The Aedes aegypti mosquito is the main carrier for the Zika virus.

1. It's found throughout the Americas, except in Canada and continental Chile.
2. It's well adapted to human settlements, living in and around homes.
3. It bites primarily early in the morning and at sunset, but also at other times of the day.
4. Females bite and are responsible for disease transmission.
5. It needs blood to reproduce.
6. It's black with white lyre-shaped markings and banded legs.
7. It sucks blood every three or four days or sometimes more frequently.
8. Shortly after a blood meal, females lay their eggs in the inside walls of any container with clean standing water.
9. A female Aedes can lay around 400 eggs during her lifetime.
10. Aedes eggs can resist drought and survive for up to a year.
11. An egg can develop into a larva, pupa and adult within 7 to 10 days.
12. An adult mosquito can live 4 to 6 weeks.

[Condition 3]

How to prevent mosquito breeding sites in and around your home

The Aedes aegypti mosquito is the main carrier for the Zika virus.

1. Make sure all tanks, water deposits, and containers are covered and sealed to keep out mosquitoes.
2. Change the water and brush the insides of sinks and water barrels at least once a week.
3. Pour out water from flower pots and planters and replace with damp sand.
4. Turn over any containers that cannot be thrown away and protect them from rain.
5. Change the water in flower vases at least once a week, pouring the used water out over the ground.
6. Safely dispose of any unused containers and objects that can accumulate water and serve as breeding sites.
7. Keep swimming pools treated with recommended products and frequency.
8. Change the water in pet bowls at least once a week.
9. Clean all drains and gutters.
10. Keep grass short and weed-free, and keep your patio clean.

[Condition 4]

Dispelling rumours around Zika and complications

The Aedes aegypti mosquito is the main carrier for the Zika virus.

No evidence that Zika virus and its complications are linked to releases of genetically modified mosquitoes

There is no evidence that Zika virus disease or microcephaly in Brazil is caused by genetically modified mosquitoes. Only male mosquitoes are released, so there is no risk of disease transmission because only females bite humans. The genes of male mosquitoes are modified, causing future offspring to die. This practice is designed to control mosquito populations.

No evidence that vaccines cause microcephaly in babies

There is no evidence linking any vaccine to recent increases in microcephaly cases in Brazil. An extensive review of the literature published in 2014 found no evidence that any vaccine administered during pregnancy resulted in birth defects.

No evidence that pyriproxyfen insecticide causes microcephaly

A team of World Health Organization (WHO) scientists recently reviewed data on the toxicology of pyriproxyfen, one of the larvicides that WHO recommends to reduce mosquito populations. It found no evidence the larvicide affects the development of a fetus. U.S. and European Union investigators have reached a similar conclusion.

— Page break —

Now, we would like to ask you about the Zika virus, a virus that has been in the news recently. Please indicate whether you believe the following statements are accurate or not.

A person can be infected with Zika by the bite of a mosquito carrying the virus.

Being infected with the Zika virus increases the likelihood of developing neurological problems.

A person can be infected with Zika by having sex with someone who is infected.

A person can be infected with Zika by casual contact, like shaking hands, with someone who is infected.

Genetically modified mosquitoes – NOT wild mosquitoes – caused the Zika outbreak in Latin America.

-Very accurate [4]
-Somewhat accurate [3]
-Not very accurate [2]
-Not at all accurate [1]

— Page break —

The next two statements are about microcephaly, a birth defect in which babies are born with abnormally small heads. Please indicate whether you believe each statement is accurate or not.

The prevalence of microcephaly in Brazil has increased as a result of larvicides added to water to kill mosquitoes.

The prevalence of microcephaly in Brazil has increased as a result of the government mandating the increased use of vaccines among pregnant women.

-Very accurate [4]
-Somewhat accurate [3]
-Not very accurate [2]
-Not at all accurate [1]

— Page break —

Now, we are going to ask your opinion on different government policies. This is a scale of 1 to 10 points, where 1 means "strongly disapprove" and 10 means "strongly approve." Please indicate whether you approve or disapprove the following policies.

The DPTaP vaccine, also known as a triple vaccine, protects against tetanus, diphtheria and pertussis, also known as pertussis or chronic cough. There is a government recommendation for pregnant women to take the DTaP vaccine. To what extent do you approve or disapprove of this recommendation for pregnant women?
-1 [Strongly disapprove]
-2
-3
-4
-5
-6
-7
-8
-9
-10 [Strongly approve]

The use of larvicides in water to prevent mosquito breeding in areas where Zika is believed to be present. To what extent do you approve or disapprove?
-1 [Strongly disapprove]
-2
-3
-4
-5
-6
-7
-8
-9
-10 [Strongly approve]

The release of genetically modified mosquitoes to the environment to combat the spread of Zika. To what extent do you approve or disapprove of this measure?
-1 [Strongly disapprove]
-2
-3
-4
-5
-6
-7
-8

-9
-10 [Strongly approve]

To combat the Zika virus, government health workers have the right to enter private homes to look for mosquito breeding points / outbreaks when the resident or owner is not present. To what extent do you approve or disapprove of this policy?
-1 [Strongly disapprove]
-2
-3
-4
-5
-6
-7
-8
-9
-10 [Strongly approve]

— Page break —

How much risk do you believe the Zika virus poses to human health in Brazil?
-No risk at all
-Very low risk
-Low risk
-Moderate risk
-High risk
-Very high risk

— Page break —

Now we'd like to ask you your opinions on this issue.

— Page break —

How much risk do you believe the Zika virus poses to you personally?
-No risk at all
-Very low risk
-Low risk
-Moderate risk
-High risk
-Very high risk

— Page break —

How concerned are you personally about potential health risk from Zika?
-Not at all concerned
-Not very concerned
-Somewhat concerned
-Very concerned
-Extremely concerned

— Page break —

How often do you do the following to protect yourself against Zika and other mosquito-born diseases...

Wear long-sleeved shirts and long pants?

Use mosquito repellent or spray on your body?

Use screens or close windows to keep mosquitoes outside?

-All of the time
-Most of the time
-Some of the time
-Not very often
-Not at all

— Page break —

Has a doctor or health worker ever told you that you contacted the Zika virus?
-No
-Yes

— Page break —

To the best of your knowledge, has a doctor or health worker ever told one of your close friends or family members that they contracted the Zika virus?
-No
-Yes

[Respondents in conditions 1 and 4, who will be recontacted for wave 2, read the following:]

Thank you for participating in this study!

[Respondents in conditions 2 and 3, who will not be recontacted for wave 2, read the following:]

Thank you for answering these questions. The purpose of this study was to examine public opinion on disease epidemics. During this study, participants were asked to express opinions about possible causes of the Zika virus and about potential solutions.

Zika is a mosquito-borne virus that has been linked with microcephaly, a condition in which infants are born with abnormally small heads and brains when pregnant mothers contract the virus. In Brazil, local mosquito transmission of Zika virus infection has been reported. Local mosquito transmission means that mosquitoes in the area are infected with Zika virus and are spreading it to people. Measures for vector control (control of mosquitoes that spread Zika) include use of larvicides (which kill mosquito larvae) and genetically modified mosquitoes. The larvicide pyriproxyfen is an effective tool in reducing harmful mosquito populations, and there is no evidence that the larvicide affects the course of pregnancy or the development of the fetus.

Please do not share any information about the content of this study with other potential participants. If you have any questions about this study, please contact [REDACTED FOR PEER REVIEW] at [REDACTED FOR PEER REVIEW]. Your questions can be written in Portuguese.

— Page break —

It is essential for the validity of this study that we know whether participants looked up any information online during the study. Did you make an effort to look for information during the study? Please be honest; you will not be penalized in any way if you did.
-Yes, I looked up information.
-No, I did not look up information.

— Page break —

Do you have any comments about this study? Please let us know about any problems you had or aspects of the study that were confusing. [free response]

— Page break —

If you are interested in reading more information about Zika and how to prevent it, please click the link below and we will redirect you to the website of the Pan American Health Organization. If you are not interested, please select that instead.
-Yes, I am interested in receiving more information about Zika. [redirected to external

URL]
-No, I am not interested in receiving more information about Zika.

2017 Zika experiment: Wave 2

Are you at least 18 years old?
-Yes
-No [screened out]

— Page break —

Now, we would like to ask you about the Zika virus, a virus that has been in the news recently. Please indicate whether you believe the following statements are accurate or not.

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— Page break —

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— Page break —

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Use screens or close windows to keep mosquitoes outside?

-All of the time
-Most of the time
-Some of the time
-Not very often
-Not at all

— Page break —

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-No
-Yes

— Page break —

To the best of your knowledge, has a doctor or health worker ever told one of your close friends or family members that they contracted the Zika virus?
-No

-Yes

— Page break —

Thank you for answering these questions. The purpose of this study was to examine public opinion on disease epidemics. During this study, participants were asked to express opinions about possible causes of the Zika virus and about potential solutions.

Zika is a mosquito-borne virus that has been linked with microcephaly, a condition in which infants are born with abnormally small heads and brains when pregnant mothers contract the virus. In Brazil, local mosquito transmission of Zika virus infection has been reported. Local mosquito transmission means that mosquitoes in the area are infected with Zika virus and are spreading it to people. Measures for vector control (control of mosquitoes that spread Zika) include use of larvicides (which kill mosquito larvae) and genetically modified mosquitoes. The larvicide pyriproxyfen is an effective tool in reducing harmful mosquito populations, and there is no evidence that the larvicide affects the course of pregnancy or the development of the fetus.

Please do not share any information about the content of this study with other potential participants. If you have any questions about this study, please contact [REDACTED FOR PEER REVIEW] at [REDACTED FOR PEER REVIEW]. Your questions can be written in Portuguese.

— Page break —

It is essential for the validity of this study that we know whether participants looked up any information online during the study. Did you make an effort to look for information during the study? Please be honest; you will not be penalized in any way if you did.
-Yes, I looked up information.
-No, I did not look up information.

— Page break —

Do you have any comments about this study? Please let us know about any problems you had or aspects of the study that were confusing. [free response]

— Page break —

If you are interested in reading more information about Zika and how to prevent it, please click the link below and we will redirect you to the website of the Pan American Health Organization. If you are not interested, please select that instead.
-Yes, I am interested in receiving more information about Zika. [redirected to external

URL]
-No, I am not interested in receiving more information about Zika.

2018 Zika experiment

This first set of questions asks for some information about you.

— Page break —

Are you at least 18 years old?
-Yes
-No [screened out]

— Page break —

How old are you in years? [free response]

What is your gender?
-Male
-Female
-Other

What was the last year of school that you completed?
-None
-Primary incomplete
-Primary complete
-Secondary incomplete
-Secondary complete
-Technical/technological incomplete
-Technical/technological complete
-University incomplete
-University complete

Do you consider yourself white, mestizo, indigenous, black, mulatto, or of another race?
-White
-Mestizo
-Indigenous
-Black
-Mulatto
-Other

In which of the following categories is your family's monthly household income, including remittances from abroad and the income of all working adults and children?
-No income
-Less than R$700

-R$700 – R$950
-R$951 – R$1050
-R$1051 – R$1200
-R$1201 – R$1350
-R$1351 – R$1500
-R$1501 – R$1750
-R$1751 – R$1950
-R$1951 – R$2150
-R$2151 – R$2350
-R$2351 – R$2550
-R$2551 – R$3150
-R$3151 – R$3800
-R$3801 – R$4950
-R$4951 – R$6700
-More than R$6700

— Page break —

In what state do you live?
-Acre
-Alagoas
-Amapá
-Amazonas
-Bahia
-Ceará
-Distrito Federal
-Espírito Santo
-Goiás
-Maranhão
-Mato Grosso
-Mato Grosso do Sul
-Minas Gerais
-Pará
-Paraíba
-Paraná
-Pernambuco
-Piaui
-Rio de Janeiro
-Rio Grande do Norte
-Rio Grande do Sul
-Rondônia
-Roraima

-Santa Catarina
-São Paulo
-Sergipe
-Tocantins

What is your postal code? [free response]

What is your religion, if any?
-Catholic
-Protestant, Mainline Protestant or Protestant non-Evangelical (Christian; Calvinist; Lutheran; Methodist; Presbyterian; Disciple of Christ; Anglican; Episcopalian; Moravian)
-Non-Christian Eastern Religions (Islam; Buddhist; Hinduism; Taoist; Confucianism; Baha'i)
-Evangelical and Pentecostal (Evangelical; Pentecostals; Church of God; Assemblies of God; Universal Church of the Kingdom of God; International Church of the Foursquare Gospel; Christ Pentecostal Church; Christian Congregation; Mennonite; Brethren; Christian Reformed Church; Charismatic non-Catholic; Light of World; Baptist; Nazarene; Salvation Army; Adventist; Seventh-Day Adventist; Sara Nossa Terra)
-LDS (Mormon)
-Traditional Religions or Native Religions (Santería, Candomblé, Voodoo, Rastafarian, Mayan Traditional Religion; Umbanda; Maria Lonza; Inti; Kardecista, Santo Daime, Esoterica).
-Jewish (Orthodox; Conservative; Reform)
-Jehovah's Witness
-None (believe in a Supreme Entity but do not belong to any religion)
-Agnostic, atheist (do not believe in God)

How do you mainly spend your time? Are you currently...
-working?
-not working, but have a job?
-actively looking for a job?
-a student?
-taking care of the home?
-retired, a pensioner or permanently disabled to work?
-not working and not looking for a job?

— Page break —

This is a scale, from 1 to 10, in which the number 1 means "left" and the 10 means "right." Nowadays, when one speaks of political tendencies, one speaks of people who sympathize more with the left and of people who sympathize more with the right. According to the meaning that the terms "left" and "right" have for you, and thinking of your own political leanings, where would you place yourself on this scale?

-1
-2
-3
-4
-5
-6
-7
-8
-9
-10

Do you currently identify with a political party?
-Yes
-No

— Page break —

[If identifies with a party:]
Which political party do you identify with?
-PMDB (Party of the Brazilian Democratic Movement)
-PSDB (Brazilian Social Democracy Party)
-PSB (Brazilian Socialist Party)
-DEMOCRATS
-CP of the B (Communist Party of Brazil)
-PPS (Popular Socialist Party)
-PTB (Brazilian Labor Party)
-PSOL (Socialism and Freedom Party)
-PP (Progressive Party)
-PL (Liberal Party)
-PV (Green Party)
-PDT (Labor Democratic Party)
-OTHER

— Page break —

Please indicate whether you believe the following statement is accurate or not.

Big events like wars, the current recession, and the outcomes of elections are controlled by small groups of people who are working in secret against the rest of us.

-Very accurate
-Somewhat accurate

-Not very accurate
-Not at all accurate

— Page break —

Please answer the next set of questions on your own without asking anyone or looking up the answers. Many people don't know the answers to these questions, but please answer every question even if you're not sure what the right answer is.

It is important to us that you do NOT use outside sources like the Internet to search for the correct answer. Will you answer the following questions without help from outside sources?
-Yes
-No

— Page break —

The center of the Earth is very hot.

All radioactivity is man-made.

Lasers work by focusing sound waves.

Electrons are smaller than atoms.

It is the father's gene that decides whether the baby is a boy or a girl.

Antibiotics kill viruses as well as bacteria.

-True
-False

— Page break —

Does the Earth go around the Sun, or does the Sun go around the Earth?
-The Earth goes around the Sun
-The Sun goes around the Earth

— Page break —

How long does it take for the Earth to go around the Sun?
-One day

-One month
-One year

— Page break —

There are a lot of issues in the news, and it is hard to keep up with every area. We will now list some topics that get covered in the media. Please indicate how closely you follow the news relating to each topic in either the newspaper, on television, on radio, or on the Internet.

Government or politics
Sports
Religion
International affairs
Scientific research or discoveries
New technologies
Entertainment or celebrities

-Do not follow at all
-Follow a little
-Follow closely
-Follow very closely

— Page break —

This is a scale of 1 to 7 points, where 1 means NOT AT ALL, and 7 means VERY MUCH.

To what extent do you trust the Federal Supreme Court?
-1 (NOT AT ALL)
-2
-3
-4
-5
-6
-7 (VERY MUCH)

To what extent do you trust the National Congress?
-1 (NOT AT ALL)
-2
-3
-4
-5

-6
-7 (VERY MUCH)

To what extent do you trust the press?
-1 (NOT AT ALL)
-2
-3
-4
-5
-6
-7 (VERY MUCH)

To what extent do you trust the government?
-1 (NOT AT ALL)
-2
-3
-4
-5
-6
-7 (VERY MUCH)

To what extent do you trust doctors?
-1 (NOT AT ALL)
-2
-3
-4
-5
-6
-7 (VERY MUCH)

To what extent do you trust banks and financial institutions?
-1 (NOT AT ALL)
-2
-3
-4
-5
-6
-7 (VERY MUCH)

To what extent do you trust the Ministry of Health?
-1 (NOT AT ALL)
-2

-3
-4
-5
-6
-7 (VERY MUCH)

— Page break —

Now, we'd like to get your thoughts on a recent article. Please read the article on the next page carefully.

— Page break —

[Random assignment into one of the following two conditions]

Five sauces for the modern cook

Travis Lett often steals. Of course, the only person this pensive chef ever steals from is himself. At his Los Angeles, USA restaurant, "We're constantly appropriating elements from dishes we've done in the past to create new combinations," he said.

There's a lesson here: To improve your cooking, learn how to make and use sauce like a professional.

Five basic types of sauces appear over and over again on menus and in cookbooks that feature the kind of vegetable-heavy, flavor-dense food that cooks and eaters favor today: yogurt sauce, pepper sauce, herb sauce, tahini sauce and pesto. Master each one, and you'll immediately have access to the dozens of variations that descend from them, too.

Think of them as the new mother sauces, an updated version of the five mother sauces of French cuisine. Armed with one of these five sauces, the home cook can go on and cook what he or she is most comfortable cooking. The right sauce will transform the distinct elements of a dish into a unified statement of taste.

[Condition 2]

Dispelling rumours around Zika and complications

The Aedes aegypti mosquito is the main carrier for the Zika virus.

No evidence that Zika virus and its complications are linked to releases of genetically modified mosquitoes

There is no evidence that Zika virus disease or microcephaly in Brazil is caused by genetically modified mosquitoes. Only male mosquitoes are released, so there is no risk of disease transmission because only females bite humans. The genes of male mosquitoes are modified, causing future offspring to die. This practice is designed to control mosquito populations.

No evidence that vaccines cause microcephaly in babies

There is no evidence linking any vaccine to recent increases in microcephaly cases in Brazil. An extensive review of the literature published in 2014 found no evidence that any vaccine administered during pregnancy resulted in birth defects.

No evidence that pyriproxyfen insecticide causes microcephaly

A team of World Health Organization (WHO) scientists recently reviewed data on the toxicology of pyriproxyfen, one of the larvicides that WHO recommends to reduce mosquito populations. It found no evidence the larvicide affects the development of a fetus. U.S. and European Union investigators have reached a similar conclusion.

— Page break —

Now, we would like to ask you about the Zika virus, a virus that has been in the news recently. Some of these issues focus on microcephaly, a birth defect in which babies are born with abnormally small heads. Please indicate whether you believe the following statements are accurate or not.

A person can be infected with Zika by casual contact, like shaking hands, with someone who is infected.

Genetically modified mosquitoes – NOT wild mosquitoes – caused the Zika outbreak in Latin America.

Being infected with the Zika virus increases the likelihood of developing neurological problems.

A person can be infected with Zika by having sex with someone who is infected.

A person can be infected with Zika by the bite of a mosquito carrying the virus.

People with weak immune systems are more likely to become infected with the Zika virus.

The prevalence of microcephaly in Brazil has increased as a result of larvicides added to water to kill mosquitoes.

The prevalence of microcephaly in Brazil has increased as a result of the government mandating the increased use of vaccines among pregnant women.

Women can transmit the Zika virus to their fetuses during pregnancy.

If a pregnant woman is infected with the Zika virus, this will greatly increase the likelihood that the baby will be born with microcephaly.

A person may be infected with Zika as a result of receiving donated blood.

Microcephaly causes paralysis (inability to move).

-Very accurate [4]
-Somewhat accurate [3]
-Not very accurate [2]
-Not at all accurate [1]

Now, we are going to ask your opinion on different government policies. This is a scale of 1 to 10 points, where 1 means "strongly disapprove" and 10 means "strongly approve." Please indicate whether you approve or disapprove the following policies.

The DPTaP vaccine, also known as a triple vaccine, protects against tetanus, diphtheria and pertussis, also known as pertussis or chronic cough. There is a government recommendation for pregnant women to take the DTaP vaccine. To what extent do you approve or disapprove of this recommendation for pregnant women?
-1 [Strongly disapprove]
-2
-3
-4
-5
-6
-7
-8
-9
-10 [Strongly approve]

The use of larvicides in water to prevent mosquito breeding in areas where Zika is believed to be present. To what extent do you approve or disapprove?
-1 [Strongly disapprove]
-2
-3
-4
-5
-6
-7
-8
-9
-10 [Strongly approve]

The release of genetically modified mosquitoes to the environment to combat the spread of Zika. To what extent do you approve or disapprove of this measure?
-1 [Strongly disapprove]
-2
-3
-4
-5
-6

-7
-8
-9
-10 [Strongly approve]

To combat the Zika virus, government health workers have the right to enter private homes to look for mosquito breeding points / outbreaks when the resident or owner is not present. To what extent do you approve or disapprove of this policy?
-1 [Strongly disapprove]
-2
-3
-4
-5
-6
-7
-8
-9
-10 [Strongly approve]

— Page break —

How much risk do you believe the Zika virus poses to human health in Brazil?
-No risk at all
-Very low risk
-Low risk
-Moderate risk
-High risk
-Very high risk

— Page break —

Now we'd like to ask you your opinions on this issue.

— Page break —

How much risk do you believe the Zika virus poses to you personally?
-No risk at all
-Very low risk
-Low risk
-Moderate risk
-High risk
-Very high risk

— Page break —

How concerned are you personally about potential health risk from Zika?
-Not at all concerned
-Not very concerned
-Somewhat concerned
-Very concerned
-Extremely concerned

— Page break —

How often do you do the following to protect yourself against Zika and other mosquito-born diseases...

Wear long-sleeved shirts and long pants?

Use mosquito repellent or spray on your body?

Use screens or close windows to keep mosquitoes outside?

-All of the time
-Most of the time
-Some of the time
-Not very often
-Not at all

— Page break —

Has a doctor or health worker ever told you that you contacted the Zika virus?
-No
-Yes

— Page break —

Do you agree or disagree with the following statements?

I feel confident that I can find the truth about health and science issues.

If I wanted to, I could discover the facts behind most disputes about health and science.

There are objective facts behind most health and science disputes, and you can find them if

you try hard enough.

-Strongly agree
-Somewhat agree
-Somewhat disagree
-Strongly disagree

— Page break —

To the best of your knowledge, has a doctor or health worker ever told one of your close friends or family members that they contracted the Zika virus?
-No
-Yes

— Page break —

Have you been vaccinated against the Zika virus?
-Yes, I have been vaccinated against Zika.
-No, I have not been vaccinated against Zika.

— Page break —

[If not vaccinated:]
How likely are you to get vaccinated against the Zika virus in the future?
-Very unlikely
-Quite unlikely
-Somewhat likely
-Fairly likely
-Very likely

— Page break —

Thank you for answering these questions. The purpose of this study was to examine public opinion on disease epidemics. During this study, participants were asked to express opinions about possible causes of the Zika virus and about potential solutions.

Zika is a mosquito-borne virus that has been linked with microcephaly, a condition in which infants are born with abnormally small heads and brains when pregnant mothers contract the virus. In Brazil, local mosquito transmission of Zika virus infection has been reported. Local mosquito transmission means that mosquitoes in the area are infected with Zika virus and are spreading it to people. Measures for vector control (control of mosquitoes that spread Zika) include use of larvicides (which kill mosquito larvae) and genetically

modified mosquitoes. The larvicide pyriproxyfen is an effective tool in reducing harmful mosquito populations, and there is no evidence that the larvicide affects the course of pregnancy or the development of the fetus.

Please do not share any information about the content of this study with other potential participants. If you have any questions about this study, please contact [REDACTED FOR PEER REVIEW] at [REDACTED FOR PEER REVIEW]. Your questions can be written in Portuguese.

— Page break —

It is essential for the validity of this study that we know whether participants looked up any information online during the study. Did you make an effort to look for information during the study? Please be honest; you will not be penalized in any way if you did.
-Yes, I looked up information.
-No, I did not look up information.

— Page break —

Sometimes people do not take research seriously and prefer to give funny or insincere answers to questions. How often do you do this?
-Never
-Rarely
-Sometimes
-Most of the time
-Always

— Page break —

Do you have any comments about this study? Please let us know about any problems you had or aspects of the study that were confusing. [free response]

— Page break —

If you are interested in reading more information about Zika and how to prevent it, please click the link below and we will redirect you to the website of the Pan American Health Organization. If you are not interested, please select that instead.
-Yes, I am interested in receiving more information about Zika. [redirected to external URL]
-No, I am not interested in receiving more information about Zika.

2018 yellow fever experiment

This first set of questions asks for some information about you.

— Page break —

Are you at least 18 years old?
-Yes
-No [screened out]

— Page break —

How old are you in years? [free response]

What is your gender?
-Male
-Female
-Other

What was the last year of school that you completed?
-None
-Primary incomplete
-Primary complete
-Secondary incomplete
-Secondary complete
-Technical/technological incomplete
-Technical/technological complete
-University incomplete
-University complete

Do you consider yourself white, mestizo, indigenous, black, mulatto, or of another race?
-White
-Mestizo
-Indigenous
-Black
-Mulatto
-Other

In which of the following categories is your family's monthly household income, including remittances from abroad and the income of all working adults and children?
-No income
-Less than R$700

-R$700 – R$950
-R$951 – R$1050
-R$1051 – R$1200
-R$1201 – R$1350
-R$1351 – R$1500
-R$1501 – R$1750
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-R$2151 – R$2350
-R$2351 – R$2550
-R$2551 – R$3150
-R$3151 – R$3800
-R$3801 – R$4950
-R$4951 – R$6700
-More than R$6700

— Page break —

In what state do you live?
-Acre
-Alagoas
-Amapá
-Amazonas
-Bahia
-Ceará
-Distrito Federal
-Espírito Santo
-Goiás
-Maranhão
-Mato Grosso
-Mato Grosso do Sul
-Minas Gerais
-Pará
-Paraíba
-Paraná
-Pernambuco
-Piaui
-Rio de Janeiro
-Rio Grande do Norte
-Rio Grande do Sul
-Rondônia
-Roraima

-Santa Catarina
-São Paulo
-Sergipe
-Tocantins

What is your postal code? [free response]

What is your religion, if any?
-Catholic
-Protestant, Mainline Protestant or Protestant non-Evangelical (Christian; Calvinist; Lutheran; Methodist; Presbyterian; Disciple of Christ; Anglican; Episcopalian; Moravian)
-Non-Christian Eastern Religions (Islam; Buddhist; Hinduism; Taoist; Confucianism; Baha'i)
-Evangelical and Pentecostal (Evangelical; Pentecostals; Church of God; Assemblies of God; Universal Church of the Kingdom of God; International Church of the Foursquare Gospel; Christ Pentecostal Church; Christian Congregation; Mennonite; Brethren; Christian Reformed Church; Charismatic non-Catholic; Light of World; Baptist; Nazarene; Salvation Army; Adventist; Seventh-Day Adventist; Sara Nossa Terra)
-LDS (Mormon)
-Traditional Religions or Native Religions (Santería, Candomblé, Voodoo, Rastafarian, Mayan Traditional Religion; Umbanda; Maria Lonza; Inti; Kardecista, Santo Daime, Esoterica).
-Jewish (Orthodox; Conservative; Reform)
-Jehovah's Witness
-None (believe in a Supreme Entity but do not belong to any religion)
-Agnostic, atheist (do not believe in God)

How do you mainly spend your time? Are you currently...
-working?
-not working, but have a job?
-actively looking for a job?
-a student?
-taking care of the home?
-retired, a pensioner or permanently disabled to work?
-not working and not looking for a job?

— Page break —

This is a scale, from 1 to 10, in which the number 1 means "left" and the 10 means "right." Nowadays, when one speaks of political tendencies, one speaks of people who sympathize more with the left and of people who sympathize more with the right. According to the meaning that the terms "left" and "right" have for you, and thinking of your own political leanings, where would you place yourself on this scale?

-1
-2
-3
-4
-5
-6
-7
-8
-9
-10

Do you currently identify with a political party?
-Yes
-No

— Page break —

[if identifies with a party:]
Which political party do you identify with?
-PMDB (Party of the Brazilian Democratic Movement)
-PSDB (Brazilian Social Democracy Party)
-PSB (Brazilian Socialist Party)
-DEMOCRATS
-CP of the B (Communist Party of Brazil)
-PPS (Popular Socialist Party)
-PTB (Brazilian Labor Party)
-PSOL (Socialism and Freedom Party)
-PP (Progressive Party)
-PL (Liberal Party)
-PV (Green Party)
-PDT (Labor Democratic Party)
-OTHER

— Page break —

Please indicate whether you believe the following statement is accurate or not.

Big events like wars, the current recession, and the outcomes of elections are controlled by small groups of people who are working in secret against the rest of us.

-Very accurate
-Somewhat accurate

-Not very accurate
-Not at all accurate

— Page break —

Please answer the next set of questions on your own without asking anyone or looking up the answers. Many people don't know the answers to these questions, but please answer every question even if you're not sure what the right answer is.

It is important to us that you do NOT use outside sources like the Internet to search for the correct answer. Will you answer the following questions without help from outside sources?
-Yes
-No

— Page break —

The center of the Earth is very hot.

All radioactivity is man-made.

Lasers work by focusing sound waves.

Electrons are smaller than atoms.

It is the father's gene that decides whether the baby is a boy or a girl.

Antibiotics kill viruses as well as bacteria.

-True
-False

— Page break —

Does the Earth go around the Sun, or does the Sun go around the Earth?
-The Earth goes around the Sun
-The Sun goes around the Earth

— Page break —

How long does it take for the Earth to go around the Sun?
-One day

-One month
-One year

— Page break —

There are a lot of issues in the news, and it is hard to keep up with every area. We will now list some topics that get covered in the media. Please indicate how closely you follow the news relating to each topic in either the newspaper, on television, on radio, or on the Internet.

Government or politics
Sports
Religion
International affairs
Scientific research or discoveries
New technologies
Entertainment or celebrities

-Do not follow at all
-Follow a little
-Follow closely
-Follow very closely

— Page break —

This is a scale of 1 to 7 points, where 1 means NOT AT ALL, and 7 means VERY MUCH.

To what extent do you trust the Federal Supreme Court?
-1 (NOT AT ALL)
-2
-3
-4
-5
-6
-7 (VERY MUCH)

To what extent do you trust the National Congress?
-1 (NOT AT ALL)
-2
-3
-4
-5

-6
-7 (VERY MUCH)

To what extent do you trust the press?
-1 (NOT AT ALL)
-2
-3
-4
-5
-6
-7 (VERY MUCH)

To what extent do you trust the government?
-1 (NOT AT ALL)
-2
-3
-4
-5
-6
-7 (VERY MUCH)

To what extent do you trust doctors?
-1 (NOT AT ALL)
-2
-3
-4
-5
-6
-7 (VERY MUCH)

To what extent do you trust banks and financial institutions?
-1 (NOT AT ALL)
-2
-3
-4
-5
-6
-7 (VERY MUCH)

To what extent do you trust the Ministry of Health?
-1 (NOT AT ALL)
-2

-3
-4
-5
-6
-7 (VERY MUCH)

— Page break —

Now, we'd like to get your thoughts on a recent article. Please read the article on the next page carefully.

— Page break —

[Random assignment into one of the following two conditions]

Five sauces for the modern cook

Travis Lett often steals. Of course, the only person this pensive chef ever steals from is himself. At his Los Angeles, USA restaurant, "We're constantly appropriating elements from dishes we've done in the past to create new combinations," he said.

There's a lesson here: To improve your cooking, learn how to make and use sauce like a professional.

Five basic types of sauces appear over and over again on menus and in cookbooks that feature the kind of vegetable-heavy, flavor-dense food that cooks and eaters favor today: yogurt sauce, pepper sauce, herb sauce, tahini sauce and pesto. Master each one, and you'll immediately have access to the dozens of variations that descend from them, too.

Think of them as the new mother sauces, an updated version of the five mother sauces of French cuisine. Armed with one of these five sauces, the home cook can go on and cook what he or she is most comfortable cooking. The right sauce will transform the distinct elements of a dish into a unified statement of taste.

[Condition 2]

Dispelling rumours around yellow fever and its complications

The Aedes aegypti mosquito is the main carrier for the yellow fever virus.

No evidence that the effectiveness of the yellow fever vaccine decreased as the virus mutated

In 2017, the Oswaldo Cruz Institute (IOC / Fiocruz) conducted a study on the yellow fever virus circulating in Brazil, in which mutations were identified in the virus. However, these mutations did not affect the efficacy of the yellow fever vaccine. Both the Brazilian Ministry of Health and the World Health Organization still consider the vaccine the most effective way to contain the spread of the disease.

No evidence that the yellow fever vaccine causes meningitis, Guillain-Barré syndrome or encephalopathy

A recent false report says that the yellow fever vaccine can cause a variety of serious medical conditions, such as meningitis, Guillain-Barré syndrome and encephalopathy. According to the Brazilian Society of Immunizations, the vaccine may have side effects, but they are generally minimal. Serious side effects are extremely rare. In fact, according to the US Centers for Disease Control and Prevention, only 1 out of 250,000 people vaccinated have serious side effects.

No evidence that taking propolis is an effective substitute for the yellow fever vaccine

Recent social media posts suggest that propolis, a viscous mixture produced by honeybees, can repel mosquitoes that transmit yellow fever because mosquitoes cannot withstand the odor of the substance. According to Antonio Salatino, Ph.D. in Biological Sciences and professor at the University of São Paulo (USP), these publications are false: there is no evidence that propolis repels mosquitoes.

— Page break —

Now, we would like to ask you about yellow fever, a virus that has been in the news recently. Some of these issues focus on the potential health consequences of people infected with the yellow fever virus. Please indicate whether you believe the following statements are accurate or not.

A person can be infected with yellow fever by the bite of a mosquito carrying the virus.

Yellow fever can be transmitted by the Aedes aegypti mosquito, the same type of mosquito that transmits the Zika virus.

The symptoms of yellow fever include fever, headache, vomiting and fatigue.

Yellow fever can be fatal.

Health officials now recommend that Brazilians living in all areas of the country be vaccinated against yellow fever.

Traditionally, yellow fever virus has been more common in tropical regions, especially in the rainforest, but it has recently become increasingly common in cities as well.

There is no effective vaccine against yellow fever.

The yellow fever vaccine can damage children's immune system.

The yellow fever vaccine that is being distributed by the Ministry of Health is no longer effective because the virus has undergone a genetic mutation, which makes it resistant to the vaccine.

The yellow fever vaccine is a hoax perpetrated by pharmaceutical companies.

The yellow fever vaccine being distributed by the Ministry of Health frequently causes life-threatening side effects.

Propolis, a viscous mixture produced by honey bees, repels mosquitoes that can transmit yellow fever.

-Very accurate [4]
-Somewhat accurate [3]
-Not very accurate [2]
-Not at all accurate [1]

Now, we are going to ask your opinion on different government policies. This is a scale of 1 to 10 points, where 1 means "strongly disapprove" and 10 means "strongly approve." Please indicate whether you approve or disapprove the following policies.

It should be compulsory for children to be vaccinated against yellow fever in order to attend public schools. To what extent do you approve or disapprove?
-1 [Strongly disapprove]
-2
-3
-4
-5
-6
-7
-8
-9
-10 [Strongly approve]

Citizens who do not vaccinate against yellow fever should be subject to fines imposed by the government. To what extent do you approve or disapprove?
-1 [Strongly disapprove]
-2
-3
-4
-5
-6
-7
-8
-9
-10 [Strongly approve]

The government should use larvicides in the water to prevent mosquito breeding in areas where yellow fever is believed to be present. To what extent do you approve or disapprove?
-1 [Strongly disapprove]
-2
-3
-4
-5
-6
-7

-8
-9
-10 [Strongly approve]

The release of genetically modified mosquitoes to the environment to combat the spread of yellow fever. To what extent do you approve or disapprove of this measure?
-1 [Strongly disapprove]
-2
-3
-4
-5
-6
-7
-8
-9
-10 [Strongly approve]

To combat yellow fever, government health workers have the right to enter private homes to look for mosquito breeding points / outbreaks when the resident or owner is not present. To what extent do you approve or disapprove of this policy?
-1 [Strongly disapprove]
-2
-3
-4
-5
-6
-7
-8
-9
-10 [Strongly approve]

— Page break —

How much risk do you believe yellow fever poses to human health in Brazil?
-No risk at all
-Very low risk
-Low risk
-Moderate risk
-High risk
-Very high risk

— Page break —

Now we'd like to ask you your opinions on this issue.

— Page break —

How much risk do you believe yellow fever poses to you personally?
-No risk at all
-Very low risk
-Low risk
-Moderate risk
-High risk
-Very high risk

— Page break —

How concerned are you personally about potential health risk from yellow fever?
-Not at all concerned
-Not very concerned
-Somewhat concerned
-Very concerned
-Extremely concerned

— Page break —

How often do you do the following to protect yourself against yellow fever and other mosquito-born diseases...

Wear long-sleeved shirts and long pants?

Use mosquito repellent or spray on your body?

Use screens or close windows to keep mosquitoes outside?

-All of the time
-Most of the time
-Some of the time
-Not very often
-Not at all

— Page break —

Has a doctor or health worker ever told you that you contacted yellow fever?

-No
-Yes

— Page break —

Do you agree or disagree with the following statements?

I feel confident that I can find the truth about health and science issues.

If I wanted to, I could discover the facts behind most disputes about health and science.

There are objective facts behind most health and science disputes, and you can find them if you try hard enough.

-Strongly agree
-Somewhat agree
-Somewhat disagree
-Strongly disagree

— Page break —

To the best of your knowledge, has a doctor or health worker ever told one of your close friends or family members that they contracted yellow fever?
-No
-Yes

— Page break —

Have you been vaccinated against yellow fever?
-Yes, I have been vaccinated against yellow fever.
-No, I have not been vaccinated against yellow fever.

— Page break —

[if not vaccinated:]
How likely are you to get vaccinated against yellow fever in the future?
-Very unlikely
-Quite unlikely
-Somewhat likely
-Fairly likely
-Very likely

— Page break —

Thank you for answering these questions. The purpose of this study was to examine public opinion on disease epidemics. During this study, participants were asked to express opinions about possible causes of yellow fever and about potential solutions.

Yellow fever is a virus transmitted primarily by mosquitoes. In Brazil, local transmission of yellow fever has been reported. Local mosquito transmission means mosquitoes in the area are infected with the yellow fever virus and are transmitting the virus to people. Vector control measures (control of mosquitoes transmitting yellow fever) include the use of larvicides (which kill mosquito larvae) and genetically modified mosquitoes. The larvicide pyriproxyfen is an effective tool in reducing harmful mosquito populations and there is no evidence that larvicide affects the course of pregnancy or fetal development.

Please do not share any information about the content of this study with other potential participants. If you have any questions about this study, please contact [REDACTED FOR PEER REVIEW] at [REDACTED FOR PEER REVIEW]. Your questions can be written in Portuguese.

— Page break —

It is essential for the validity of this study that we know whether participants looked up any information online during the study. Did you make an effort to look for information during the study? Please be honest; you will not be penalized in any way if you did.
-Yes, I looked up information.
-No, I did not look up information.

— Page break —

Sometimes people do not take research seriously and prefer to give funny or insincere answers to questions. How often do you do this?

-Never
-Rarely
-Sometimes
-Most of the time
-Always

— Page break —

Do you have any comments about this study? Please let us know about any problems you had or aspects of the study that were confusing. [free response]

— Page break —

If you are interested in reading more information about yellow fever and how to prevent it, please click the link below and we will redirect you to the website of the Pan American Health Organization. If you are not interested, please select that instead.
-Yes, I am interested in receiving more information about yellow fever. [redirected to external URL]
-No, I am not interested in receiving more information about yellow fever.

Additional results

Data overview

Table S1. Study summaries.

Dates	Sample	Mode	Design	Disease	Waves
April/May 2017	Representative	Face-to-face	Survey	Zika	1
April 2017	Convenience	Online	Experiment	Zika	2
May 2018	Convenience	Online	Experiment	Zika	1
May 2018	Convenience	Online	Experiment	Yellow fever	1

Sample statistics

Table S2. Sample statistics.

	Population sample (LAPOP)	2017 Zika experiment	2018 Zika experiment	2018 yellow fever experiment
Male	49.6%	44.5%	50.1%	46.9%
White	30.0%	61.6%	62.7%	63.6%
Median age	37	35	36	35
% high school degree	42.8%	94.1%	97.4%	98.3%
Median monthly income	R$1351–1500	R$3151–3800	R$3801–4950	R$3801–4950
Median ideology (1–10)	5	5	5	6
Left-of-center	62.0%	52.4%	50.2%	48.1%
Right-of-center	38.0%	47.6%	49.8%	51.9%
Mean conspiracy predisp. (1–4)	2.3	2.6	2.6	2.6
Total respondents	1532	2546	1081	1092

Characteristics of respondents in the nationally representative 2017 survey and the 2017 and 2018 experiments reported in the main text. Summary statistics for the 2017 Zika experiment sample include respondents assigned to the mosquito information and preventive behavior conditions (results including these respondents are reported below). Respondents were classified as identifying as left-of-center if they chose 1–5 on a 1–10 scale from left to right and as right-of-center if they chose 6–10. Conspiracy predispositions were measured by asking respondents to evaluate the accuracy of the statement "Big events like wars, the current recession, and the outcomes of elections are controlled by small groups of people who are working in secret against the rest of us" on a four-point scale from "Not at all accurate" (1) to "Very accurate" (4). See Supplementary Materials for question wording.

Supplementary results from 2017 Zika experiment

As discussed in the main text, the 2017 Zika experiment examined the effects of two additional treatments. Specifically, we preregistered a research question stating that we would test the effects of alternate messages providing information about the *Aedes aegypti* mosquito and how to protect oneself from it on the outcome measures listed above in the first wave (RQ3).

First, we evaluate the effects of providing accurate information about the *Aedes aegypti* mosquito, the main carrier of Zika. During times of disease outbreaks, increasing awareness of the disease has been shown to be an effective method of causing behavior changes among susceptible populations, which can help to lower the incidence of disease and prevent outbreaks from escalating (42). The same results may thus be expected when people are exposed to accurate information about Zika. Increasing people's awareness of their susceptibility to mosquito-born transmission may help people better understand how Zika is spread, increase their support for policies designed to reduce the risk of transmission, and

encourage them to take actions to reduce their vulnerability to the virus (43). In addition, providing accurate information about how Zika is transmitted may be more effective at displacing false beliefs than denying their validity, which can be less effective if an alternative explanation is not provided (43).

We also test the effect of a message that instead encourages people to take specific steps to prevent mosquito breeding — a direct form of encouragement that might provide a cue to action for people to engage in preventive health behaviors (43). In addition to increasing awareness of Zika, this type of message could help induce a sense of control and self-efficacy. Past studies have found that likelihood of conspiracy belief increases when people feel a lack of control (14, e.g.,). These findings suggest that increasing feelings of control over one's vulnerability to the disease could potentially help mitigate conspiracy belief.

As shown below, we find no evidence that either treatment reduces conspiracy theory belief, increases support for prevention policies, or changes behavioral intentions compared to the placebo condition (all effects $p > .05$; see Tables S3 and S4). (We also find no evidence that one of these treatments is more effective than the other.) Similar to the myths correction treatment, then, the mosquito information treatment not only fails to reduce conspiracy theories but actually *reduced* respondents' understanding of the true causes of Zika.

Finally, the measures of trust in six institutions we collected in the 2017 Zika experiment did not scale together. Our preregistration indicated that we would separately analyze "government and health/science trust factors" if they were distinct. We therefore present separate models in Tables S6–S10 below including interactions with the four trust measures most closely related to these (trust in government, the Ministry of Health, medicine, and scientists; trust in the press and Congress are excluded but available upon request). Interaction models predicting conspiracy beliefs, policy support, and behavioral intentions were preregistered (H4a and RQ2); models predicting factual beliefs were not included in the preregistration and are therefore exploratory.[3]

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[3]Results are similar using indicators for each value of the moderators and for wave 2 outcome measures (available upon request).

Table S3. Treatment effects on Zika beliefs (experimental data).

(a) Effects on corrected Zika conspiracy/misperception beliefs

	Misperception beliefs (mean)	GMO mosquitoes caused outbreak (F)	Larvicides responsible for microcephaly (F)	Vaccines responsible for microcephaly (F)
Myths correction	-0.00	-0.08	0.02	0.07
	(0.04)	(0.06)	(0.05)	(0.05)
Mosquito vector information	0.07	0.10	0.04	0.05
	(0.04)	(0.06)	(0.05)	(0.05)
Preventive behavior	0.04	0.08	0.02	0.02
	(0.04)	(0.06)	(0.05)	(0.05)
Constant (placebo)	1.69***	1.92***	1.63***	1.53***
	(0.03)	(0.04)	(0.04)	(0.04)
Treatment effect differences				
Correction − mosquito	-0.07	-0.18***	-0.03	0.01
	(0.04)	(0.06)	(0.05)	(0.06)
Correction − prevention	-0.04	-0.16**	0.00	0.04
	(0.04)	(0.06)	(0.05)	(0.05)
Mosquito − prevention	0.03	0.02	0.03	0.03
	(0.04)	(0.06)	(0.05)	(0.05)
N	2501	2520	2514	2513

(b) Effects on other Zika factual beliefs

	Causes neurological problems (T)	Spreads via mosquito bite (T)	Spreads via sexual contact (T)	Spread via casual contact (F)
Myths correction	-0.22***	-0.09***	-0.03	-0.10***
	(0.06)	(0.03)	(0.07)	(0.03)
Mosquito information	0.02	-0.03	-0.13*	-0.05
	(0.06)	(0.03)	(0.06)	(0.04)
Preventive behavior	0.05	0.03	-0.07	-0.02
	(0.06)	(0.03)	(0.07)	(0.04)
Constant (placebo)	3.01***	3.85***	1.98***	1.25***
	(0.04)	(0.02)	(0.05)	(0.03)
Treatment effect differences				
Correction − mosquito	-0.24***	-0.07	0.10	-0.05
	(0.06)	(0.03)	(0.07)	(0.03)
Correction − prevention	-0.27***	-0.12***	0.04	-0.09**
	(0.06)	(0.03)	(0.07)	(0.03)
Mosquito − prevention	-0.03	-0.05	-0.06	-0.04
	(0.06)	(0.03)	(0.06)	(0.04)
N	2520	2520	2518	2523

* $p < 0.05$, ** $p < .01$, *** $p < .005$ (two-sided); OLS models with robust standard errors. Respondents are members of Survey Sampling International's online panel in Brazil (2017 Zika experiment). For each outcome measure, higher values indicate greater belief in the claim or claims in question (measured on a Likert scale ranging from "Not at all accurate" [1] to "Very accurate" [4]; see Supplementary Materials for wording). "Misperception belief" is a composite measure calculated as the mean of the three items listed. All conspiracy/misperception measures are false. "T" and "F" indicate true and false, respectively, for the other outcome measures.

(a) Targeted Zika misperceptions
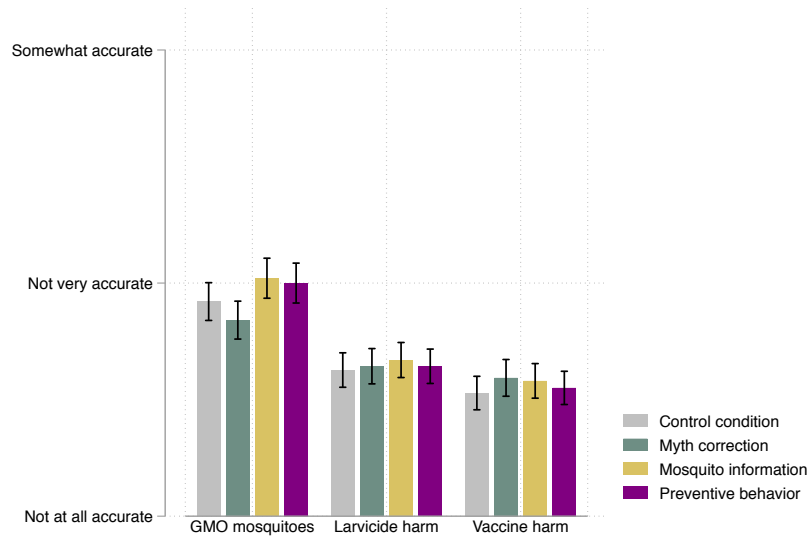
(b) Other Zika-related beliefs
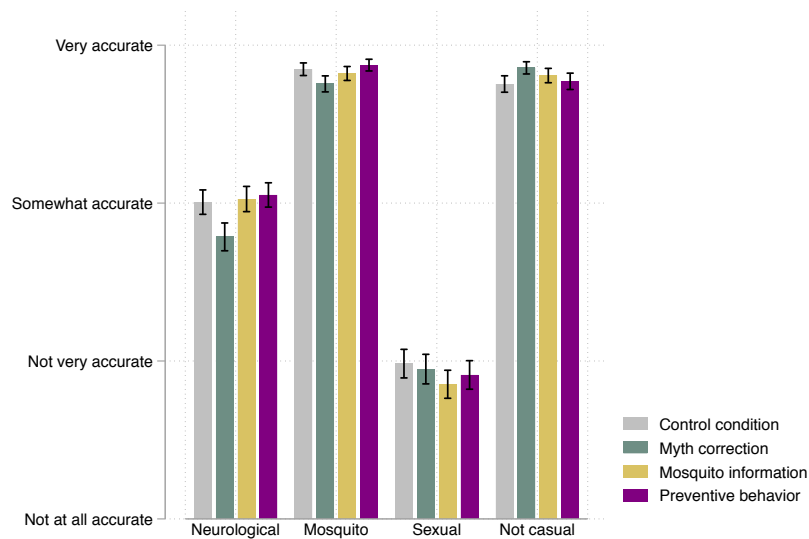
Fig. S1. Beliefs about Zika (experimental data). Data from the Survey Sampling International online panel in Brazil (N=2554; April 12–24, 2017). "Not spread by casual contact" indicates that respondents rated the casual contact claim as inaccurate.

Table S4. Treatment effects on Zika attitudes and behavioral intentions.

	Support Zika prevention policies	Preventive behavioral intentions
Myths correction	0.15	-0.02
	(0.12)	(0.06)
Mosquito information	0.00	0.01
	(0.12)	(0.06)
Preventive behavior	-0.06	0.05
	(0.11)	(0.06)
Constant (placebo)	7.25***	3.06***
	(0.08)	(0.04)
Treatment effect differences		
Correction − mosquito	0.14	-0.02
	(0.12)	(0.06)
Correction − prevention	0.21	-0.06
	(0.12)	(0.06)
Mosquito − prevention	0.06	-0.04
	(0.12)	(0.06)
N	2474	2463

* $p < 0.05$, ** $p < .01$, *** $p < .005$ (two-sided); OLS models with robust standard errors. Respondents are members of Survey Sampling International's online panel in Brazil (2017 Zika experiment). Outcome variables are composite measures indicating greater support for Zika prevention policies and intention to engage in preventive behavior, respectively (see Supplementary Materials for wording).

**Table S5. Correction effects in 2017 Zika experiment (ordered probit).**

(a) Effects on targeted misperceptions

	GMO mosquitoes caused outbreak	Larvicides responsible for microcephaly	Vaccines responsible for microcephaly
Myths correction	-0.09	0.03	0.08
	(0.06)	(0.07)	(0.07)
Cutpoint 1	-0.02	0.35***	0.56***
	(0.05)	(0.05)	(0.05)
Cutpoint 2	0.50***	0.88***	0.96***
	(0.05)	(0.05)	(0.05)
Cutpoint 3	1.26***	1.47***	1.45***
	(0.06)	(0.06)	(0.06)
N	1260	1254	1255

(b) Effects on other Zika beliefs

	Causes neurological problems (T)	Spreads via mosquito bite (T)	Spreads via sexual contact (T)	Spread via casual contact (F)
Myths correction	-0.22***	-0.29***	-0.01	-0.26***
	(0.06)	(0.09)	(0.07)	(0.09)
Cutpoint 1	-1.18***	-2.22***	0.09	1.07***
	(0.05)	(0.10)	(0.05)	(0.06)
Cutpoint 2	-0.54***	-1.80***	0.42***	1.44***
	(0.05)	(0.08)	(0.05)	(0.07)
Cutpoint 3	0.21***	-1.29***	0.95***	1.97***
	(0.05)	(0.07)	(0.05)	(0.10)
N	1259	1261	1260	1261

* $p < 0.05$, ** $p < .01$, *** $p < .005$ (two-sided); ordered probit models with robust standard errors. Respondents are separate samples from Survey Sampling International's online panel in Brazil. For each outcome measure, higher values indicate greater belief in the claim or claims in question (measured on a Likert scale ranging from "Not at all accurate" [1] to "Very accurate" [4]; see Supplementary Materials for wording). All targeted misperception outcome measures are false. "T" and "F" indicate true and false, respectively, for the other outcome measures.

Table S6. Treatment effects on Zika beliefs and attitudes (conspiracy predispositions).

	Causes neuro. problems (T)	Spreads via mosquito (T)	Spreads via sex (T)	Spread via casual contact (F)	Misperception beliefs	Support prevention	Preventive intentions
Myths correction	0.01	-0.09	0.06	-0.08	0.17	0.46	0.12
	(0.15)	(0.08)	(0.16)	(0.07)	(0.11)	(0.30)	(0.14)
Conspiracy predispositions	0.10***	0.02	0.03	0.00	0.08***	-0.08	0.01
	(0.02)	(0.01)	(0.03)	(0.01)	(0.02)	(0.05)	(0.02)
Correction × conspiracy	-0.09	-0.00	-0.04	-0.01	-0.07	-0.11	-0.05
	(0.05)	(0.03)	(0.06)	(0.02)	(0.04)	(0.11)	(0.05)
Mosquito information	0.02	-0.03	-0.13*	-0.05	0.06	0.00	0.01
	(0.06)	(0.03)	(0.06)	(0.04)	(0.04)	(0.12)	(0.06)
Preventive behavior	0.05	0.03	-0.07	-0.02	0.04	-0.06	0.05
	(0.06)	(0.03)	(0.07)	(0.04)	(0.04)	(0.11)	(0.06)
Constant	2.74***	3.79***	1.90***	1.24***	1.48***	7.45***	3.04***
	(0.08)	(0.04)	(0.08)	(0.05)	(0.05)	(0.15)	(0.07)
N	2517	2517	2515	2520	2499	2472	2460

* $p < 0.05$, ** $p < .01$, *** $p < .005$ (two-sided); OLS models with robust standard errors. Respondents are members of Survey Sampling International's online panel in Brazil (2017 Zika experiment). Outcome variables are measures of factual belief about Zika and composite measures indicating greater misperceptions about Zika, support for Zika prevention policies, and intention to engage in preventive behavior, respectively (see Supplementary Materials for wording).

Table S7. Treatment effects on Zika beliefs and attitudes (confidence in government).

	Causes neuro. problems (T)	Spreads via mosquito (T)	Spreads via sex (T)	Spread via casual contact (F)	Misperception beliefs	Support prevention	Preventive intentions
Correction	-0.30***	-0.13*	-0.02	-0.11	-0.08	0.16	0.00
	(0.10)	(0.06)	(0.11)	(0.06)	(0.07)	(0.19)	(0.09)
Confidence in government	-0.02	-0.05***	0.05**	0.08***	0.03*	0.17***	0.11***
	(0.02)	(0.01)	(0.02)	(0.02)	(0.01)	(0.03)	(0.02)
Correction × confidence in govt.	0.04	0.02	-0.01	0.00	0.04	0.01	-0.00
	(0.04)	(0.02)	(0.04)	(0.03)	(0.03)	(0.07)	(0.04)
Mosquito information	0.03	-0.02	-0.12	-0.05	0.07	0.00	0.00
	(0.06)	(0.03)	(0.06)	(0.03)	(0.04)	(0.12)	(0.06)
Preventive behavior	0.05	0.03	-0.08	-0.02	0.04	-0.05	0.04
	(0.06)	(0.03)	(0.07)	(0.04)	(0.04)	(0.11)	(0.05)
Constant	3.05***	3.96***	1.87***	1.08***	1.63***	6.89***	2.81***
	(0.05)	(0.03)	(0.06)	(0.04)	(0.04)	(0.11)	(0.05)
N	2504	2503	2501	2506	2487	2460	2449

* $p < 0.05$, ** $p < .01$, *** $p < .005$ (two-sided); OLS models with robust standard errors. Respondents are members of Survey Sampling International's online panel in Brazil (2017 Zika experiment). Outcome variables are measures of factual belief about Zika and composite measures indicating greater misperceptions about Zika, support for Zika prevention policies, and intention to engage in preventive behavior, respectively (see Supplementary Materials for wording).

Table S8. Treatment effects on Zika beliefs and attitudes (confidence in Ministry of Health).

	Causes neuro. problems (T)	Spreads via mosquito (T)	Spreads via sex (T)	Spread via casual contact (F)	Misperception beliefs	Support prevention	Preventive intentions
Correction	-0.29*	-0.04	0.08	-0.12	-0.14	0.28	-0.05
	(0.11)	(0.06)	(0.12)	(0.06)	(0.08)	(0.23)	(0.11)
Confidence in Ministry of Health	-0.03	-0.04***	0.03	0.06***	0.04***	0.18***	0.10***
	(0.02)	(0.01)	(0.02)	(0.01)	(0.01)	(0.03)	(0.02)
Correction × confidence in Ministry of Health	0.02	-0.02	-0.04	0.01	0.05*	-0.04	0.02
	(0.03)	(0.02)	(0.04)	(0.02)	(0.02)	(0.07)	(0.03)
Mosquito information	0.02	-0.03	-0.13*	-0.05	0.07	-0.00	0.01
	(0.06)	(0.03)	(0.06)	(0.03)	(0.04)	(0.11)	(0.06)
Preventive behavior	0.05	0.02	-0.07	-0.02	0.04	-0.04	0.06
	(0.06)	(0.03)	(0.07)	(0.04)	(0.04)	(0.11)	(0.06)
Constant	3.09***	3.97***	1.89***	1.07***	1.58***	6.72***	2.76***
	(0.06)	(0.03)	(0.07)	(0.04)	(0.04)	(0.13)	(0.06)
N	2510	2509	2507	2512	2490	2464	2452

* $p < 0.05$, ** $p < .01$, *** $p < .005$ (two-sided); OLS models with robust standard errors. Respondents are members of Survey Sampling International's online panel in Brazil (2017 Zika experiment). Outcome variables are measures of factual belief about Zika and composite measures indicating greater misperceptions about Zika, support for Zika prevention policies, and intention to engage in preventive behavior, respectively (see Supplementary Materials for wording).

Table S9. Treatment effects on Zika beliefs and attitudes (confidence in medicine).

	Causes neuro. problems (T)	Spreads via mosquito (T)	Spreads via sex (T)	Spread via casual contact (F)	Misperception beliefs	Support prevention	Preventive intentions
Correction	-0.22	0.11	-0.19	-0.23**	-0.16	0.25	-0.07
	(0.18)	(0.09)	(0.20)	(0.09)	(0.13)	(0.39)	(0.17)
Confidence in medicine	0.05**	0.02*	-0.02	-0.01	-0.07***	0.49***	0.04*
	(0.02)	(0.01)	(0.02)	(0.01)	(0.01)	(0.04)	(0.02)
Correction × confidence in medicine	-0.00	-0.04*	0.03	0.03	0.03	-0.02	0.01
	(0.04)	(0.02)	(0.04)	(0.02)	(0.03)	(0.07)	(0.04)
Mosquito information	0.03	-0.02	-0.14*	-0.06	0.05	0.09	0.01
	(0.06)	(0.03)	(0.06)	(0.04)	(0.04)	(0.11)	(0.06)
Preventive behavior	0.04	0.03	-0.08	-0.02	0.03	0.00	0.05
	(0.06)	(0.03)	(0.07)	(0.04)	(0.04)	(0.11)	(0.06)
Constant	2.78***	3.74***	2.09***	1.29***	2.05***	4.84***	2.87***
	(0.09)	(0.05)	(0.11)	(0.06)	(0.07)	(0.19)	(0.10)
N	2504	2504	2502	2507	2485	2458	2447

* $p < 0.05$, ** $p < .01$, *** $p < .005$ (two-sided); OLS models with robust standard errors. Respondents are members of Survey Sampling International's online panel in Brazil (2017 Zika experiment). Outcome variables are measures of factual belief about Zika and composite measures indicating greater misperceptions about Zika, support for Zika prevention policies, and intention to engage in preventive behavior, respectively (see Supplementary Materials for wording).

Table S10. Treatment effects on Zika beliefs and attitudes (confidence in scientists).

	Causes neuro. problems (T)	Spreads via mosquito (T)	Spreads via sex (T)	Spread via casual contact (F)	Misperception beliefs	Support prevention	Preventive intentions
Correction	-0.13	-0.07	-0.02	-0.30***	-0.08	0.44	0.04
	(0.19)	(0.11)	(0.21)	(0.10)	(0.14)	(0.41)	(0.18)
Confidence in scientists	0.04*	0.02**	-0.01	-0.03*	-0.09***	0.56***	0.08***
	(0.02)	(0.01)	(0.02)	(0.01)	(0.01)	(0.04)	(0.02)
Correction × confidence in scientists	-0.02	-0.01	-0.00	0.04*	0.02	-0.06	-0.01
	(0.04)	(0.02)	(0.04)	(0.02)	(0.03)	(0.07)	(0.03)
Mosquito information	0.03	-0.02	-0.12	-0.06	0.06	0.05	0.02
	(0.06)	(0.03)	(0.06)	(0.04)	(0.04)	(0.11)	(0.06)
Preventive behavior	0.05	0.03	-0.07	-0.02	0.04	-0.04	0.05
	(0.06)	(0.03)	(0.07)	(0.04)	(0.04)	(0.11)	(0.06)
Constant	2.78***	3.72***	2.03***	1.40***	2.14***	4.34***	2.66***
	(0.09)	(0.05)	(0.11)	(0.07)	(0.08)	(0.21)	(0.10)
N	2502	2502	2500	2505	2483	2457	2446

* $p < 0.05$, ** $p < .01$, *** $p < .005$ (two-sided); OLS models with robust standard errors. Respondents are members of Survey Sampling International's online panel in Brazil. Outcome variables are measures of factual belief about Zika and composite measures indicating greater misperceptions about Zika, support for Zika prevention policies, and intention to engage in preventive behavior, respectively (see Supplementary Materials for wording).

Table S11. Correction effects on other Zika beliefs in 2017 Zika experiment.

(a) Effects on other Zika beliefs by education

	Causes neurological problems (T)	Spreads via mosquito bite (T)	Spreads via sexual contact (T)	Spread via casual contact (F)
Myths correction	-0.25***	-0.08	-0.06	-0.08
	(0.09)	(0.05)	(0.10)	(0.05)
College degree	-0.06	0.01	0.03	-0.03
	(0.08)	(0.04)	(0.10)	(0.05)
Correction × college degree	0.04	-0.02	0.08	-0.05
	(0.12)	(0.07)	(0.14)	(0.07)
Constant	3.04***	3.85***	1.96***	1.25***
	(0.06)	(0.03)	(0.07)	(0.04)
N	1193	1194	1193	1194

(b) Effects on other Zika beliefs by science knowledge

	Causes neurological problems (T)	Spreads via mosquito bite (T)	Spreads via sexual contact (T)	Spread via casual contact (F)
Myths correction	-0.24	-0.06	-0.30	-0.38***
	(0.22)	(0.14)	(0.24)	(0.13)
Science knowledge	-0.24	0.42***	0.41	-0.56***
	(0.20)	(0.11)	(0.22)	(0.13)
Correction × science knowledge	0.02	-0.04	0.38	0.40*
	(0.31)	(0.18)	(0.34)	(0.16)
Constant	3.17***	3.55***	1.70***	1.64***
	(0.14)	(0.09)	(0.16)	(0.10)
N	1259	1261	1260	1261

* $p < 0.05$, ** $p < .01$, *** $p < .005$ (two-sided); OLS models with robust standard errors. Respondents are separate samples from Survey Sampling International's online panel in Brazil. Scientific knowledge is the proportion of items respondents answered correctly from an eight-item battery (see Supplementary Materials for wording). For each outcome measure, higher values indicate greater belief in the claim or claims in question (measured on a Likert scale ranging from "Not at all accurate" [1] to "Very accurate" [4]; see Supplementary Materials for wording). "T" and "F" indicate true and false, respectively, for the other outcome measures.

Table S12. Correction effects on Zika beliefs and attitudes after delay.

	Causes neuro. problems (T)	Spreads via mosquito (T)	Spreads via sex (T)	Spread via casual contact (F)	Misperception beliefs	Support prevention	Preventive intentions
Myths correction	-0.11	-0.04	-0.07	0.05	-0.01	0.16	-0.09
	(0.06)	(0.03)	(0.08)	(0.04)	(0.05)	(0.13)	(0.07)
Constant	3.21***	3.87***	2.15***	3.75***	1.69***	7.76***	3.17***
	(0.04)	(0.02)	(0.06)	(0.03)	(0.03)	(0.09)	(0.05)
N	892	892	889	892	880	867	864

* $p < 0.05$, ** $p < .01$, *** $p < .005$ (two-sided); OLS models with robust standard errors. Respondents are members of Survey Sampling International's online panel in Brazil (2017 Zika experiment). Outcome variables are measures of factual belief about Zika and composite measures indicating greater misperceptions about Zika, support for Zika prevention policies, and intention to engage in preventive behavior, respectively (see Supplementary Materials for wording).

Supplementary results from 2018 Zika experiment

Table S13. Treatment effects on Zika attitudes and behavioral intentions.

	Support Zika prevention policies	Preventive behavioral intentions
Myths correction	0.09	-0.03
	(0.12)	(0.06)
Constant	7.20***	3.05***
	(0.08)	(0.04)
N	1043	1045

* $p < 0.05$, ** $p < .01$, *** $p < .005$ (two-sided); OLS models with robust standard errors. Respondents are members of Survey Sampling International's online panel in Brazil (2018 Zika experiment). Outcome variables are composite measures indicating greater support for Zika prevention policies and intention to engage in preventive behavior, respectively (see Supplementary Materials for wording).

Table S14. Correction effects in 2018 Zika experiment (ordered probit).

(a) Effects on targeted misperceptions

	caused outbreak	GMO mosquitoes for microcephaly	Larvicides responsible for microcephaly	Vaccines responsible
Myths correction		-0.21***	0.01	0.03
		(0.07)	(0.07)	(0.08)
Cutpoint 1		0.03	0.33***	0.47***
		(0.05)	(0.05)	(0.06)
Cutpoint 2		0.56***	0.87***	0.98***
		(0.06)	(0.06)	(0.06)
Cutpoint 3		1.23***	1.59***	1.56***
		(0.06)	(0.07)	(0.07)
N	1059	1062	1058	

(b) Effects on other Zika beliefs

	Causes neurological problems (T)	Spreads via mosquito bite (T)	Spreads via sexual contact (T)	Spread via casual contact (F)	Weak immune more vulnerable (F)	Transmit Zika in utero (T)	Zika increases microcephaly (T)	Get Zika from donated blood (T)	Microcephaly causes paralysis (F)
Myths correction	-0.20***	-0.34***	-0.06	-0.12	-0.03	-0.22***	-0.37***	-0.11	-0.11
	(0.07)	(0.09)	(0.07)	(0.10)	(0.07)	(0.07)	(0.08)	(0.07)	(0.07)
Cutpoint 1	-1.20***	-2.35***	0.15**	1.09***	-0.80***	-1.33***	-2.13***	-0.58***	-1.07***
	(0.06)	(0.11)	(0.05)	(0.07)	(0.06)	(0.07)	(0.10)	(0.05)	(0.06)
Cutpoint 2	-0.52***	-1.79***	0.55***	1.35***	-0.29***	-1.00***	-1.56***	-0.11*	-0.41***
	(0.05)	(0.08)	(0.05)	(0.07)	(0.05)	(0.06)	(0.07)	(0.05)	(0.05)
Cutpoint 3	0.22***	-1.16***	1.13***	1.82***	0.50***	-0.37***	-0.76***	0.59***	0.52***
	(0.05)	(0.07)	(0.06)	(0.09)	(0.05)	(0.06)	(0.06)	(0.05)	(0.05)
N	1059	1061	1053	1061	1057	1056	1056	1059	1062

* $p < 0.05$, ** $p < .01$, *** $p < .005$ (two-sided); ordered probit models with robust standard errors. Respondents are separate samples from Survey Sampling International's online panel in Brazil. For each outcome measure, higher values indicate greater belief in the claim or claims in question (measured on a Likert scale ranging from "Not at all accurate" [1] to "Very accurate" [4]; see Supplementary Materials for wording). All targeted misperception outcome measures are false. "T" and "F" indicate true and false, respectively, for the other outcome measures.

Table S15. Treatment effects on Zika beliefs and attitudes (conspiracy predispositions).

	Causes neurological problems (T)	Spreads via mosquito bite (T)	Spreads via sexual contact (T)	Spread via casual contact (F)	Weak immune more vulnerable (F)	Transmit Zika in utero (T)	Zika increases microcephaly (T)	Get Zika from donated blood (T)	Microcephaly causes paralysis (F)	Misperception beliefs	Support prevention	Preventive intentions
Correction	-0.39* (0.18)	-0.09 (0.11)	0.04 (0.19)	-0.11 (0.12)	0.16 (0.20)	-0.08 (0.18)	-0.29* (0.13)	-0.49* (0.20)	-0.18 (0.19)	0.09 (0.13)	-0.40 (0.33)	-0.07 (0.17)
Conspiracy predispositions	-0.02 (0.05)	0.05 (0.02)	0.06 (0.05)	-0.03 (0.03)	0.05 (0.05)	0.05 (0.05)	-0.02 (0.03)	-0.08 (0.05)	0.07 (0.05)	-0.04 (0.04)	-0.13 (0.09)	-0.05 (0.05)
Correction × conspiracy	0.07 (0.07)	-0.01 (0.04)	-0.03 (0.07)	0.02 (0.04)	-0.07 (0.07)	-0.03 (0.06)	0.04 (0.05)	0.14 (0.07)	0.03 (0.07)	-0.01 (0.05)	0.19 (0.13)	0.02 (0.06)
Constant	3.04*** (0.13)	3.71*** (0.07)	1.70*** (0.14)	1.34*** (0.10)	2.58*** (0.15)	3.23*** (0.13)	3.76*** (0.08)	2.74*** (0.15)	2.64*** (0.14)	3.42*** (0.10)	7.53*** (0.24)	3.18*** (0.13)
N	1056	1058	1050	1058	1054	1053	1053	1056	1059	1044	1041	1043

Table S16. Treatment effects on Zika beliefs and attitudes (confidence in government).

	Causes neurological problems (T)	Spreads via mosquito bite (T)	Spreads via sexual contact (T)	Spread via casual contact (F)	Weak immune more vulnerable (F)	Transmit Zika in utero (T)	Zika increases microcephaly (T)	Get Zika from donated blood (T)	Microcephaly causes paralysis (F)	Misperception beliefs	Support prevention	Preventive intentions
Correction	-0.09	-0.05	-0.20	-0.05	-0.07	-0.11	-0.18*	-0.00	0.08	-0.05	0.12	-0.11
	(0.12)	(0.07)	(0.12)	(0.08)	(0.12)	(0.11)	(0.08)	(0.13)	(0.12)	(0.09)	(0.22)	(0.11)
Confidence in government	-0.02	-0.04*	0.02	0.13***	0.01	-0.02	-0.09***	0.06	0.02	-0.11***	0.20***	0.08*
	(0.03)	(0.02)	(0.04)	(0.03)	(0.04)	(0.03)	(0.03)	(0.04)	(0.03)	(0.03)	(0.05)	(0.03)
Correction × confidence in govt.	-0.06	-0.04	0.08	0.01	0.02	-0.02	-0.01	-0.06	-0.09	0.05	-0.01	0.04
	(0.05)	(0.04)	(0.06)	(0.05)	(0.05)	(0.05)	(0.04)	(0.05)	(0.05)	(0.04)	(0.08)	(0.05)
Constant	3.05***	3.90***	1.82***	1.00***	2.70***	3.41***	3.87***	2.43***	2.77***	3.53***	6.80***	2.91***
	(0.08)	(0.04)	(0.09)	(0.06)	(0.09)	(0.08)	(0.05)	(0.09)	(0.08)	(0.06)	(0.15)	(0.08)
N	1055	1056	1048	1056	1052	1051	1051	1054	1057	1043	1038	1040

* $p < 0.05$, ** $p < .01$, *** $p < .005$ (two-sided); OLS models with robust standard errors. Respondents are members of Survey Sampling International's online panel in Brazil (2018 Zika experiment). Outcome variables are measures of factual belief about Zika and composite measures indicating greater misperceptions about Zika, support for Zika prevention policies, and intention to engage in preventive behavior, respectively (see Supplementary Materials for wording).

Table S17. Treatment effects on Zika beliefs and attitudes (confidence in Ministry of Health).

	Causes neurological problems (T)	Spreads via mosquito bite (T)	Spreads via sexual contact (T)	Spread via casual contact (F)	Weak immune more vulnerable (F)	Transmit Zika in utero (T)	Zika increases microcephaly (T)	Get Zika from donated blood (T)	Microcephaly causes paralysis (F)	Misperception beliefs	Support prevention	Preventive intentions
Correction	-0.14	-0.10	-0.29*	-0.02	0.05	-0.18	-0.22*	0.18	0.08	-0.12	-0.05	-0.03
	(0.14)	(0.08)	(0.14)	(0.09)	(0.15)	(0.13)	(0.09)	(0.16)	(0.13)	(0.10)	(0.27)	(0.13)
Confidence in Ministry of Health	-0.00	-0.03	0.03	0.09***	0.06	-0.03	-0.06***	0.10***	0.03	-0.09***	0.17***	0.05
	(0.03)	(0.02)	(0.03)	(0.03)	(0.03)	(0.03)	(0.02)	(0.03)	(0.03)	(0.03)	(0.05)	(0.03)
Correction × confidence in Ministry of Health	-0.02	-0.01	0.09	-0.01	-0.03	0.01	0.01	-0.11*	-0.06	0.06	0.05	0.00
	(0.04)	(0.03)	(0.05)	(0.04)	(0.05)	(0.04)	(0.03)	(0.05)	(0.04)	(0.03)	(0.08)	(0.04)
Constant	3.00***	3.91***	1.76***	0.99***	2.55***	3.47***	3.86***	2.26***	2.72***	3.58***	6.72***	2.90***
	(0.09)	(0.05)	(0.11)	(0.07)	(0.11)	(0.09)	(0.06)	(0.11)	(0.10)	(0.07)	(0.19)	(0.09)
N	1053	1055	1048	1055	1051	1050	1050	1054	1056	1042	1038	1040

* $p < 0.05$, ** $p < .01$, *** $p < .005$ (two-sided); OLS models with robust standard errors. Respondents are members of Survey Sampling International's online panel in Brazil (2018 Zika experiment). Outcome variables are measures of factual belief about Zika and composite measures indicating greater misperceptions about Zika, support for Zika prevention policies, and intention to engage in preventive behavior, respectively (see Supplementary Materials for wording).

Table S18. Treatment effects on Zika beliefs and attitudes (confidence in medicine).

	Causes neurological problems (T)	Spreads via mosquito bite (T)	Spreads via sexual contact (T)	Spread via casual contact (F)	Weak immune more vulnerable (F)	Transmit Zika in utero (T)	Zika increases microcephaly (T)	Get Zika from donated blood (T)	Microcephaly causes paralysis (F)	Misperception beliefs	Support prevention	Preventive intentions
Correction	0.09	-0.25	-0.47	0.03	-0.01	-0.27	-0.32	-0.28	-0.07	-0.14	-0.24	-0.26
	(0.25)	(0.14)	(0.26)	(0.17)	(0.26)	(0.24)	(0.18)	(0.28)	(0.25)	(0.18)	(0.46)	(0.24)
Confidence in medicine	0.03	0.02	-0.02	0.02	-0.00	0.04	0.04	0.02	0.03	0.02	0.43***	0.04
	(0.03)	(0.02)	(0.04)	(0.02)	(0.04)	(0.03)	(0.02)	(0.04)	(0.03)	(0.03)	(0.06)	(0.03)
Correction × confidence in medicine	-0.06	0.02	0.09	-0.02	-0.01	0.02	0.03	0.03	-0.01	0.04	0.06	0.04
	(0.05)	(0.03)	(0.05)	(0.04)	(0.05)	(0.05)	(0.03)	(0.06)	(0.05)	(0.04)	(0.09)	(0.05)
Constant	2.85***	3.74***	1.96***	1.17***	2.72***	3.18***	3.52***	2.47***	2.65***	3.24***	5.11***	2.85***
	(0.17)	(0.08)	(0.18)	(0.12)	(0.18)	(0.16)	(0.13)	(0.19)	(0.17)	(0.12)	(0.32)	(0.17)
N	1054	1056	1048	1056	1053	1051	1051	1054	1057	1043	1038	1040

* $p < 0.05$, ** $p < .01$, *** $p < .005$ (two-sided); OLS models with robust standard errors. Respondents are members of Survey Sampling International's online panel in Brazil (2018 Zika experiment). Outcome variables are measures of factual belief about Zika and composite measures indicating greater misperceptions about Zika, support for Zika prevention policies, and intention to engage in preventive behavior, respectively (see Supplementary Materials for wording).

Table S19. Treatment effects on Zika beliefs and attitudes (confidence in scientists).

	Causes neurological problems (T)	Spreads via mosquito bite (T)	Spreads via sexual contact (T)	Spread via casual contact (F)	Weak immune more vulnerable (F)	Transmit Zika in utero (T)	Zika increases microcephaly (T)	Get Zika from donated blood (T)	Microcephaly causes paralysis (F)	Misperception beliefs	Support prevention	Preventive intentions
Correction	-0.33	-0.38*	0.16	-0.17	-0.03	-0.01	-0.03	-0.00	-0.32	-0.17	-0.56	-0.48*
	(0.26)	(0.17)	(0.25)	(0.22)	(0.26)	(0.24)	(0.19)	(0.28)	(0.24)	(0.19)	(0.49)	(0.24)
Confidence in scientists	0.01	0.04*	0.02	-0.06*	-0.01	0.06*	0.07**	0.01	0.01	0.08***	0.47***	0.00
	(0.03)	(0.02)	(0.03)	(0.03)	(0.04)	(0.03)	(0.03)	(0.04)	(0.03)	(0.03)	(0.07)	(0.03)
Correction × confidence in scientists	0.02	0.05	-0.04	0.02	-0.00	-0.03	-0.03	-0.02	0.04	0.04	0.13	0.09
	(0.05)	(0.03)	(0.05)	(0.04)	(0.05)	(0.04)	(0.03)	(0.05)	(0.04)	(0.03)	(0.09)	(0.04)
Constant	2.97***	3.63***	1.73***	1.58***	2.79***	3.05***	3.31***	2.51***	2.75***	2.90***	4.75***	3.04***
	(0.18)	(0.10)	(0.18)	(0.16)	(0.19)	(0.17)	(0.14)	(0.20)	(0.17)	(0.14)	(0.37)	(0.17)
N	1054	1056	1048	1056	1052	1051	1051	1054	1057	1043	1038	1040

* $p < 0.05$, ** $p < .01$, *** $p < .005$ (two-sided); OLS models with robust standard errors. Respondents are members of Survey Sampling International's online panel in Brazil (2018 Zika experiment). Outcome variables are measures of factual belief about Zika and composite measures indicating greater misperceptions about Zika, support for Zika prevention policies, and intention to engage in preventive behavior, respectively (see Supplementary Materials for wording).

Table S20. Correction effects on other Zika beliefs in 2018 Zika experiment.

(a) Effects on other Zika beliefs by education

	Causes neurological problems (T)	Spreads via mosquito bite (T)	Spreads via sexual contact (T)	Spread via casual contact (F)	Weak immune more vulnerable (F)	Transmit Zika in utero (T)	Zika increases microcephaly (T)	Get Zika from donated blood (T)	Microcephaly causes paralysis (F)
Myths correction	-0.33***	-0.13*	0.04	-0.07	-0.01	-0.03	-0.18*	-0.17	-0.27*
	(0.10)	(0.06)	(0.11)	(0.08)	(0.11)	(0.10)	(0.07)	(0.11)	(0.10)
College degree	-0.19*	0.04	0.04	-0.17*	-0.29***	0.17	0.06	-0.03	-0.13
	(0.09)	(0.05)	(0.10)	(0.07)	(0.10)	(0.09)	(0.06)	(0.10)	(0.09)
Correction × college degree	0.21	0.00	-0.13	0.04	-0.04	-0.20	-0.03	0.08	0.27*
	(0.13)	(0.08)	(0.14)	(0.09)	(0.14)	(0.13)	(0.09)	(0.15)	(0.13)
Constant	3.11***	3.80***	1.83***	1.36***	2.89***	3.27***	3.66***	2.56***	2.90***
	(0.06)	(0.04)	(0.08)	(0.06)	(0.08)	(0.08)	(0.05)	(0.08)	(0.07)
N	1059	1061	1053	1061	1057	1056	1056	1059	1062

(b) Effects on other Zika beliefs by science knowledge

	Causes neurological problems (T)	Spreads via mosquito bite (T)	Spreads via sexual contact (T)	Spread via casual contact (F)	Weak immune more vulnerable (F)	Transmit Zika in utero (T)	Zika increases microcephaly (T)	Get Zika from donated blood (T)	Microcephaly causes paralysis (F)
Myths correction	-0.47	-0.45**	0.46	-0.07	0.05	-0.16	-0.28	-0.28	-0.14
	(0.24)	(0.16)	(0.26)	(0.18)	(0.25)	(0.25)	(0.18)	(0.28)	(0.24)
Science knowledge	-0.40	0.26*	0.41	-0.56***	-0.57*	0.28	0.21	0.16	-0.43*
	(0.21)	(0.12)	(0.25)	(0.15)	(0.24)	(0.22)	(0.16)	(0.25)	(0.22)
Correction × science knowledge	0.37	0.43*	-0.70*	0.04	-0.11	0.01	0.11	0.22	0.06
	(0.33)	(0.20)	(0.35)	(0.21)	(0.34)	(0.33)	(0.24)	(0.37)	(0.32)
Constant	3.29***	3.64***	1.56***	1.66***	3.12***	3.17***	3.55***	2.42***	3.13***
	(0.16)	(0.10)	(0.18)	(0.12)	(0.18)	(0.17)	(0.12)	(0.19)	(0.16)
N	1059	1061	1053	1061	1057	1056	1056	1059	1062

* $p < 0.05$, ** $p < .01$, *** $p < .005$ (two-sided); OLS models with robust standard errors. Respondents are separate samples from Survey Sampling International's online panel in Brazil. Scientific knowledge is the proportion of items respondents answered correctly from an eight-item battery (see Supplementary Materials for wording). For each outcome measure, higher values indicate greater belief in the claim or claims in question (measured on a Likert scale ranging from "Not at all accurate" [1] to "Very accurate" [4]; see Supplementary Materials for wording). "T" and "F" indicate true and false, respectively, for the other outcome measures.

Table S21. Treatment effect on perceived ability to discern truth about health/science.

	Coefficient (SE)
Myths correction (Zika)	-0.02
	(0.04)
Constant (placebo)	2.76***
	(0.03)
N	1043

* $p < 0.05$, ** $p < .01$, *** $p < .005$ (two-sided); OLS models with robust standard errors. Respondents are members of Survey Sampling International's online panel in Brazil (2018 Zika experiment). Outcome variable is a composite measure indicating greater belief respondents can discern the truth about health and science issues (see Supplementary Materials for wording).

Supplementary results from 2018 yellow fever experiment

Table S22. Treatment effects on yellow fever attitudes and behavioral intentions.

	Support Zika prevention policies	Preventive behavioral intentions
Myths correction	0.00	0.12*
	(0.13)	(0.06)
Constant (placebo)	5.75***	2.99***
	(0.08)	(0.04)
N	1053	1058

* $p < 0.05$, ** $p < .01$, *** $p < .005$ (two-sided); OLS models with robust standard errors. Respondents are members of Survey Sampling International's online panel in Brazil (2018 yellow fever experiment). Outcome variables are composite measures indicating greater support for yellow fever prevention policies and intention to engage in preventive behavior, respectively (see Supplementary Materials for wording).

Table S23. Correction effects in 2018 yellow fever experiment (ordered probit).

(a) Effects on targeted misperceptions

	Yellow fever vaccine ineffective	Life-threatening side effects	Propolis protects from yellow fever
Myths correction	-0.06	-0.24***	-0.43***
	(0.07)	(0.07)	(0.07)
Cutpoint 1	-0.04	-0.32***	-0.36***
	(0.05)	(0.05)	(0.05)
Cutpoint 2	0.64***	0.56***	0.29***
	(0.05)	(0.05)	(0.05)
Cutpoint 3	1.64***	1.35***	1.26***
	(0.07)	(0.06)	(0.06)
N	1072	1072	1075

(b) Effects on other yellow fever beliefs

	Spreads via mosquito bite (T)	No effective vaccine (F)	Same mosquito as Zika (T)	Symptoms include fever, vomiting (T)	Disease can be fatal (T)	Govt. recommends vaccine (T)	Yellow fever in cities (T)	Vaccine causes immune damage (F)	Hoax by drug companies (F)
Myths correction	0.06	0.01	0.41***	0.04	-0.20*	0.12	0.04	-0.16*	0.03
	(0.09)	(0.07)	(0.07)	(0.08)	(0.09)	(0.07)	(0.07)	(0.07)	(0.08)
Cutpoint 1	-2.01***	0.33***	-0.95***	-2.52***	-2.19***	-1.19***	-2.20***	-0.23***	0.48***
	(0.10)	(0.05)	(0.06)	(0.14)	(0.10)	(0.06)	(0.10)	(0.05)	(0.05)
Cutpoint 2	-1.59***	1.02***	-0.63***	-1.68***	-1.76***	-0.65***	-1.24***	0.48***	1.19***
	(0.08)	(0.06)	(0.05)	(0.08)	(0.08)	(0.05)	(0.06)	(0.05)	(0.06)
Cutpoint 3	-1.03***	1.93***	-0.10*	-0.61***	-1.14***	0.08	-0.33***	1.24***	1.95***
	(0.06)	(0.09)	(0.05)	(0.05)	(0.07)	(0.05)	(0.05)	(0.06)	(0.09)
N	1068	1077	1070	1075	1073	1073	1073	1074	1068

* $p < 0.05$, ** $p < .01$, *** $p < .005$ (two-sided); ordered probit models with robust standard errors. Respondents are members of Survey Sampling International's online panel in Brazil. For each outcome measure, higher values indicate greater belief in the claim or claims in question (measured on a Likert scale ranging from "Not at all accurate" [1] to "Very accurate" [4]; see Supplementary Materials for wording). "Misperception belief" is a composite measure calculated as the mean of the three items listed. All targeted misperception measures are false. "T" and "F" indicate true and false, respectively, for the other outcome measures.

Table S24. Treatment effects on yellow fever beliefs and attitudes (conspiracy predispositions).

	Spreads via mosquito bite (T)	No effective vaccine (F)	Same mosquito as Zika (T)	Symptoms include fever, vomiting (T)	Disease can be fatal (T)	Govt. recommends vaccine (T)	Yellow fever in cities (T)	Vaccine causes immune damage (F)	Hoax by drug companies (F)	Misperception beliefs	Support prevention	Preventive intentions
Correction	0.03	-0.09	0.19	-0.09	-0.02	0.10	-0.02	-0.18	0.04	0.17	-0.16	0.27
	(0.12)	(0.15)	(0.20)	(0.11)	(0.13)	(0.19)	(0.14)	(0.18)	(0.13)	(0.12)	(0.39)	(0.18)
Conspiracy predispositions	0.04	0.04	0.03	-0.01	0.07**	0.09	0.04	0.10*	0.13***	-0.12***	-0.12	0.03
	(0.03)	(0.04)	(0.05)	(0.02)	(0.02)	(0.05)	(0.03)	(0.05)	(0.03)	(0.03)	(0.10)	(0.04)
Correction × conspiracy	0.00	0.04	0.06	0.04	-0.02	0.00	0.02	0.01	-0.01	0.02	0.06	-0.05
	(0.04)	(0.05)	(0.07)	(0.04)	(0.04)	(0.07)	(0.05)	(0.07)	(0.05)	(0.04)	(0.14)	(0.06)
Constant	3.66***	1.44***	3.02***	3.70***	3.64***	2.86***	3.40***	1.77***	1.12***	3.33***	6.05***	2.91***
	(0.08)	(0.10)	(0.15)	(0.06)	(0.08)	(0.13)	(0.09)	(0.13)	(0.09)	(0.08)	(0.26)	(0.11)
N	1066	1075	1068	1073	1071	1071	1071	1072	1066	1061	1051	1056

* $p < 0.05$, ** $p < .01$, *** $p < .005$ (two-sided); OLS models with robust standard errors. Respondents are members of Survey Sampling International's online panel in Brazil (2018 yellow fever experiment). Outcome variables are measures of factual belief about yellow fever and composite measures indicating greater misperceptions about yellow fever, support for yellow fever prevention policies, and intention to engage in preventive behavior, respectively (see Supplementary Materials for wording).

Table S25. Treatment effects on yellow fever beliefs and attitudes (confidence in government).

	Spreads via mosquito bite (T)	No effective vaccine (F)	Same mosquito as Zika (T)	Symptoms include fever, vomiting (T)	Disease can be fatal (T)	Govt. recommends vaccine (T)	Yellow fever in cities (T)	Vaccine causes immune damage (F)	Hoax by drug companies (F)	Misperception beliefs	Support prevention	Preventive intentions
Correction	-0.01	0.19	0.38***	-0.02	-0.13	0.02	-0.03	0.00	0.12	0.15	-0.04	0.20
	(0.06)	(0.10)	(0.11)	(0.06)	(0.07)	(0.11)	(0.08)	(0.12)	(0.10)	(0.08)	(0.23)	(0.11)
Confidence in government	-0.09***	0.12***	0.01	-0.04	-0.07***	-0.04	-0.07**	0.07	0.05	-0.05*	0.23***	0.11***
	(0.02)	(0.03)	(0.03)	(0.02)	(0.02)	(0.03)	(0.03)	(0.04)	(0.03)	(0.02)	(0.06)	(0.03)
Correction × confidence in govt.	0.03	-0.09*	-0.01	0.02	0.03	0.05	0.03	-0.08	-0.05	0.02	0.02	-0.04
	(0.03)	(0.05)	(0.05)	(0.03)	(0.04)	(0.05)	(0.04)	(0.05)	(0.05)	(0.04)	(0.10)	(0.05)
Constant	3.94***	1.33***	3.09***	3.75***	3.95***	3.17***	3.64***	1.87***	1.36***	3.12***	5.31***	2.78***
	(0.05)	(0.06)	(0.08)	(0.04)	(0.04)	(0.08)	(0.06)	(0.08)	(0.06)	(0.05)	(0.15)	(0.07)
N	1062	1071	1064	1068	1067	1067	1067	1068	1062	1057	1048	1053

* $p < 0.05$, ** $p < .01$, *** $p < .005$ (two-sided); OLS models with robust standard errors. Respondents are members of Survey Sampling International's online panel in Brazil (2018 yellow fever experiment). Outcome variables are measures of factual belief about yellow fever and composite measures indicating greater misperceptions about yellow fever, support for yellow fever prevention policies, and intention to engage in preventive behavior, respectively (see Supplementary Materials for wording).

Table S26. Treatment effects on yellow fever beliefs and attitudes (confidence in Ministry of Health).

	Spreads via mosquito bite (T)	No effective vaccine (F)	Same mosquito as Zika (T)	Symptoms include fever, vomiting (T)	Disease can be fatal (T)	Govt. recommends vaccine (T)	Yellow fever in cities (T)	Vaccine causes immune damage (F)	Hoax by drug companies (F)	Misperception beliefs	Support prevention	Preventive intentions
Correction	-0.03	0.17	0.10	0.05	-0.12	0.05	0.07	-0.03	0.11	0.24*	-0.12	0.03
	(0.07)	(0.12)	(0.14)	(0.07)	(0.08)	(0.13)	(0.09)	(0.13)	(0.11)	(0.09)	(0.29)	(0.13)
Confidence in Ministry of Health	-0.04*	0.04	-0.05	0.00	-0.04*	0.00	-0.00	0.03	0.01	-0.01	0.20***	0.05*
	(0.02)	(0.03)	(0.03)	(0.01)	(0.02)	(0.03)	(0.02)	(0.03)	(0.02)	(0.02)	(0.06)	(0.03)
Correction × confidence in Ministry of Health	0.03	-0.06	0.09*	-0.01	0.02	0.02	-0.02	-0.04	-0.03	-0.01	0.03	0.03
	(0.02)	(0.04)	(0.04)	(0.02)	(0.03)	(0.04)	(0.03)	(0.04)	(0.04)	(0.03)	(0.09)	(0.04)
Constant	3.87***	1.44***	3.25***	3.67***	3.93***	3.08***	3.52***	1.92***	1.42***	3.06***	5.19***	2.84***
	(0.05)	(0.07)	(0.10)	(0.05)	(0.04)	(0.08)	(0.06)	(0.09)	(0.07)	(0.06)	(0.19)	(0.09)
N	1063	1072	1065	1069	1069	1068	1068	1069	1064	1058	1048	1053

* $p < 0.05$, ** $p < .01$, *** $p < .005$ (two-sided); OLS models with robust standard errors. Respondents are members of Survey Sampling International's online panel in Brazil (2018 yellow fever experiment). Outcome variables are measures of factual belief about yellow fever and composite measures indicating greater misperceptions about yellow fever, support for yellow fever prevention policies, and intention to engage in preventive behavior, respectively (see Supplementary Materials for wording).

Table S27. Treatment effects on yellow fever beliefs and attitudes (confidence in medicine).

	Spreads via mosquito bite (T)	No effective vaccine (F)	Same mosquito as Zika (T)	Symptoms include fever, vomiting (T)	Disease can be fatal (T)	Govt. recommends vaccine (T)	Yellow fever in cities (T)	Vaccine causes immune damage (F)	Hoax by drug companies (F)	Misperception beliefs	Support prevention	Preventive intentions
Correction	0.01	0.23	0.27	-0.03	-0.18	0.06	-0.25	0.21	0.09	0.26	-0.52	0.15
	(0.16)	(0.21)	(0.25)	(0.16)	(0.17)	(0.24)	(0.17)	(0.24)	(0.21)	(0.16)	(0.49)	(0.24)
Confidence in medicine	0.03	-0.06*	0.06	0.04*	0.01	0.04	0.01	-0.05	-0.13***	0.07***	0.29***	0.08*
	(0.02)	(0.03)	(0.04)	(0.02)	(0.02)	(0.03)	(0.02)	(0.04)	(0.03)	(0.02)	(0.07)	(0.03)
Correction × confidence in medicine	0.01	-0.05	0.02	0.01	0.02	0.01	0.06	-0.07	-0.02	-0.01	0.11	-0.00
	(0.03)	(0.04)	(0.05)	(0.03)	(0.03)	(0.05)	(0.03)	(0.05)	(0.04)	(0.03)	(0.10)	(0.05)
Constant	3.69***	1.85***	2.80***	3.46***	3.75***	2.88***	3.47***	2.28***	2.10***	2.66***	4.32***	2.59***
	(0.11)	(0.14)	(0.19)	(0.10)	(0.10)	(0.18)	(0.11)	(0.18)	(0.14)	(0.11)	(0.36)	(0.17)
N	1063	1070	1063	1067	1066	1066	1066	1067	1061	1056	1047	1051

Table S28. Treatment effects on yellow fever beliefs and attitudes (confidence in scientists).

	Spreads via mosquito bite (T)	No effective vaccine (F)	Same mosquito as Zika (T)	Symptoms include fever, vomiting (T)	Disease can be fatal (T)	Govt. recommends vaccine (T)	Yellow fever in cities (T)	Vaccine causes immune damage (F)	Hoax by drug companies (F)	Misperception beliefs	Support prevention	Preventive intentions
Correction	0.03	0.37	0.09	0.08	-0.11	0.07	0.22	0.21	0.01	-0.14	-0.33	0.16
	(0.16)	(0.22)	(0.25)	(0.16)	(0.16)	(0.25)	(0.19)	(0.25)	(0.22)	(0.17)	(0.54)	(0.26)
Confidence in scientists	0.04	-0.05	0.01	0.05**	0.03	0.02	0.08***	-0.05	-0.10***	0.03	0.34***	0.05
	(0.02)	(0.03)	(0.03)	(0.02)	(0.02)	(0.03)	(0.02)	(0.03)	(0.03)	(0.02)	(0.06)	(0.03)
Correction × confidence in scientists	0.00	-0.07	0.05	-0.01	0.01	0.01	-0.04	-0.06	0.01	0.06*	0.06	-0.01
	(0.03)	(0.04)	(0.05)	(0.03)	(0.03)	(0.05)	(0.03)	(0.05)	(0.04)	(0.03)	(0.10)	(0.05)
Constant	3.57***	1.79***	3.03***	3.43***	3.66***	3.01***	3.10***	2.29***	1.98***	2.85***	3.97***	2.73***
	(0.11)	(0.14)	(0.18)	(0.10)	(0.09)	(0.17)	(0.12)	(0.17)	(0.14)	(0.11)	(0.36)	(0.17)
N	1066	1075	1068	1072	1071	1071	1071	1072	1066	1061	1052	1056

* $p < 0.05$, ** $p < .01$, *** $p < .005$ (two-sided); OLS models with robust standard errors. Respondents are members of Survey Sampling International's online panel in Brazil (2018 yellow fever experiment). Outcome variables are measures of factual belief about yellow fever and composite measures indicating greater misperceptions about yellow fever, support for yellow fever prevention policies, and intention to engage in preventive behavior, respectively (see Supplementary Materials for wording).

Table S29. Treatment effect on perceived ability to discern truth about health/science.

	Coefficient (SE)
Myths correction (yellow fever)	0.07
	(0.04)
Constant (placebo)	2.74***
	(0.03)
N	1060

* $p < 0.05$, ** $p < .01$, *** $p < .005$ (two-sided); OLS models with robust standard errors. Respondents are members of Survey Sampling International's online panel in Brazil (2018 yellow fever experiment). Outcome variable is a composite measure indicating greater belief respondents can discern the truth about health and science issues (see Supplementary Materials for wording).

Table S30. Correction effects on other Zika beliefs by pre-experiment response time.

(a) 2017 Zika experiment

	Causes neurological problems (T)	Spreads via mosquito bite (T)	Spreads via sexual contact (T)	Spread via casual contact (F)
Myths correction	-0.29*	-0.14*	-0.00	-0.21***
	(0.12)	(0.07)	(0.13)	(0.07)
First quartile response time (fastest)	-0.10	-0.08	0.38**	0.02
	(0.11)	(0.06)	(0.13)	(0.09)
Second quartile response time	-0.11	-0.00	0.10	-0.11
	(0.11)	(0.06)	(0.12)	(0.08)
Third quartile response time	0.01	0.05	0.18	-0.13
	(0.12)	(0.05)	(0.13)	(0.08)
Correction × first quartile	0.20	0.04	-0.00	0.13
	(0.17)	(0.10)	(0.19)	(0.10)
Correction × second quartile	0.12	0.12	0.04	0.14
	(0.17)	(0.09)	(0.18)	(0.09)
Correction × third quartile	-0.05	0.04	-0.15	0.16
	(0.18)	(0.09)	(0.19)	(0.09)
Constant	3.06***	3.86***	1.82***	1.30***
	(0.08)	(0.04)	(0.09)	(0.06)
N	1259	1261	1260	1261

(b) 2018 Zika experiment

	Causes neurological problems (T)	Spreads via mosquito bite (T)	Spreads via sexual contact (T)	Spread via casual contact (F)	Weak immune more vulnerable (F)	Transmit Zika in utero (T)	Zika increases microcephaly (T)	Get Zika from donated blood (T)	Microcephaly causes paralysis (F)
Myths correction	-0.28*	-0.15*	-0.13	-0.03	-0.10	0.02	-0.20*	-0.23	-0.26
	(0.13)	(0.08)	(0.13)	(0.08)	(0.14)	(0.13)	(0.08)	(0.15)	(0.14)
First quartile response time (fastest)	0.21	-0.09	0.32*	0.13	0.07	0.11	-0.14	0.13	0.03
	(0.12)	(0.07)	(0.14)	(0.09)	(0.13)	(0.13)	(0.09)	(0.14)	(0.12)
Second quartile response time	0.15	0.05	0.00	-0.05	-0.20	0.20	0.04	0.27	0.01
	(0.12)	(0.05)	(0.13)	(0.08)	(0.14)	(0.13)	(0.07)	(0.14)	(0.13)
Third quartile response time	0.09	-0.03	-0.10	0.02	-0.21	0.20	-0.08	-0.17	-0.14
	(0.13)	(0.06)	(0.13)	(0.08)	(0.14)	(0.12)	(0.08)	(0.14)	(0.13)
Correction × first quartile	0.09	0.01	0.05	0.04	-0.12	-0.24	0.05	0.04	0.12
	(0.19)	(0.11)	(0.19)	(0.13)	(0.19)	(0.18)	(0.13)	(0.21)	(0.18)
Correction × second quartile	0.15	-0.06	-0.03	-0.02	0.11	-0.24	-0.01	-0.00	0.17
	(0.18)	(0.10)	(0.19)	(0.11)	(0.20)	(0.18)	(0.12)	(0.21)	(0.18)
Correction × third quartile	0.01	0.13	0.24	-0.10	0.24	-0.22	0.03	0.35	0.31
	(0.19)	(0.10)	(0.19)	(0.11)	(0.19)	(0.17)	(0.12)	(0.20)	(0.19)
Constant	2.89***	3.85***	1.81***	1.23***	2.80***	3.25***	3.74***	2.49***	2.84***
	(0.09)	(0.04)	(0.09)	(0.05)	(0.09)	(0.09)	(0.05)	(0.10)	(0.09)
N	1059	1061	1053	1061	1057	1056	1056	1059	1062

* $p < 0.05$, ** $p < .01$, *** $p < .005$ (two-sided); OLS models with robust standard errors. Respondents are members of Survey Sampling International's online panel in Brazil. For each outcome measure, higher values indicate greater belief in the claim or claims in question (measured on a Likert scale ranging from "Not at all accurate" [1] to "Very accurate" [4]; see Supplementary Materials for wording). "T" and "F" indicate true and false, respectively, for the outcome measures.

Table S31. Correction effects on other Zika beliefs by experimental response time.

(a) 2017 Zika experiment

	Causes neurological problems (T)	Spreads via mosquito bite (T)	Spreads via sexual contact (T)	Spread via casual contact (F)
Myths correction	-0.36***	-0.17***	0.01	-0.10
	(0.12)	(0.05)	(0.13)	(0.06)
First quartile response time (fastest)	-0.05	-0.37***	0.29*	0.26***
	(0.12)	(0.08)	(0.14)	(0.09)
Second quartile response time	-0.03	-0.03	0.18	0.02
	(0.11)	(0.04)	(0.13)	(0.07)
Third quartile response time	0.01	-0.01	0.25	-0.00
	(0.12)	(0.04)	(0.13)	(0.07)
Correction × first quartile	0.24	0.29**	0.13	-0.06
	(0.17)	(0.11)	(0.19)	(0.11)
Correction × second quartile	0.24	0.06	-0.20	-0.03
	(0.17)	(0.08)	(0.18)	(0.08)
Correction × third quartile	0.10	0.05	-0.13	-0.00
	(0.17)	(0.08)	(0.19)	(0.08)
Constant	3.02***	3.94***	1.80***	1.19***
	(0.09)	(0.03)	(0.10)	(0.05)
N	1259	1261	1260	1261

(b) 2018 Zika experiment

	Causes neurological problems (T)	Spreads via mosquito bite (T)	Spreads via sexual contact (T)	Spread via casual contact (F)	Weak immune more vulnerable (F)	Transmit Zika in utero (T)	Zika increases microcephaly (T)	Get Zika from donated blood (T)	Microcephaly causes paralysis (F)
Myths correction	-0.10	-0.24***	0.05	-0.07	-0.10	-0.23	-0.30***	-0.21	0.07
	(0.13)	(0.06)	(0.12)	(0.06)	(0.14)	(0.13)	(0.09)	(0.15)	(0.14)
First quartile response time (fastest)	0.29*	-0.37***	0.50***	0.54***	0.43***	-0.19	-0.26**	-0.04	0.24
	(0.13)	(0.07)	(0.14)	(0.11)	(0.14)	(0.14)	(0.10)	(0.15)	(0.14)
Second quartile response time	0.30*	-0.13***	0.07	-0.05	-0.02	-0.00	-0.10	0.01	0.16
	(0.13)	(0.05)	(0.13)	(0.06)	(0.14)	(0.13)	(0.08)	(0.15)	(0.13)
Third quartile response time	0.30*	-0.13***	0.07	-0.05	-0.02	-0.00	-0.10	0.01	0.16
	(0.13)	(0.05)	(0.13)	(0.06)	(0.14)	(0.13)	(0.08)	(0.15)	(0.13)
Correction × first quartile	-0.00	0.21	-0.21	-0.10	-0.08	0.36*	0.30*	0.21	-0.07
	(0.18)	(0.11)	(0.19)	(0.14)	(0.19)	(0.18)	(0.13)	(0.20)	(0.18)
Correction × second quartile	-0.08	0.13	-0.01	0.10	0.14	0.15	0.17	0.12	-0.23
	(0.18)	(0.09)	(0.18)	(0.09)	(0.19)	(0.18)	(0.13)	(0.20)	(0.18)
Correction × third quartile	-0.37*	0.15	-0.26	0.02	0.14	-0.17	-0.01	0.00	-0.37*
	(0.19)	(0.08)	(0.18)	(0.08)	(0.20)	(0.18)	(0.12)	(0.21)	(0.18)
Constant	2.81***	3.97***	1.71***	1.16***	2.64***	3.38***	3.76***	2.57***	2.64***
	(0.10)	(0.02)	(0.09)	(0.05)	(0.10)	(0.10)	(0.05)	(0.11)	(0.10)
N	1059	1061	1053	1061	1057	1056	1056	1059	1062

* $p < 0.05$, ** $p < .01$, *** $p < .005$ (two-sided); OLS models with robust standard errors. Respondents are members of Survey Sampling International's online panel in Brazil. For each outcome measure, higher values indicate greater belief in the claim or claims in question (measured on a Likert scale ranging from "Not at all accurate" [1] to "Very accurate" [4]; see Supplementary Materials for wording). "T" and "F" indicate true and false, respectively, for the outcome measures.