Using Short-term Surveys to Improve Communications during a Biological Threat

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What Do Public Health Officials Need to Know about the Public?

- **How concerned are they about the problem?**
- **How do they believe the disease is transmitted?**
- **Are they familiar with any recommended precautions and are they taking them?**
- **How many people do they believe have the disease and how many have died?**
- **Do they think there is a vaccine or a treatment?**
- **Where would they go for information and care?**
- **Do they believe certain groups are discriminated against in treatment?**
- **Who do they trust as a spokesperson?**
- **Do they support public policy measures (i.e. quarantine, vaccination policy)**

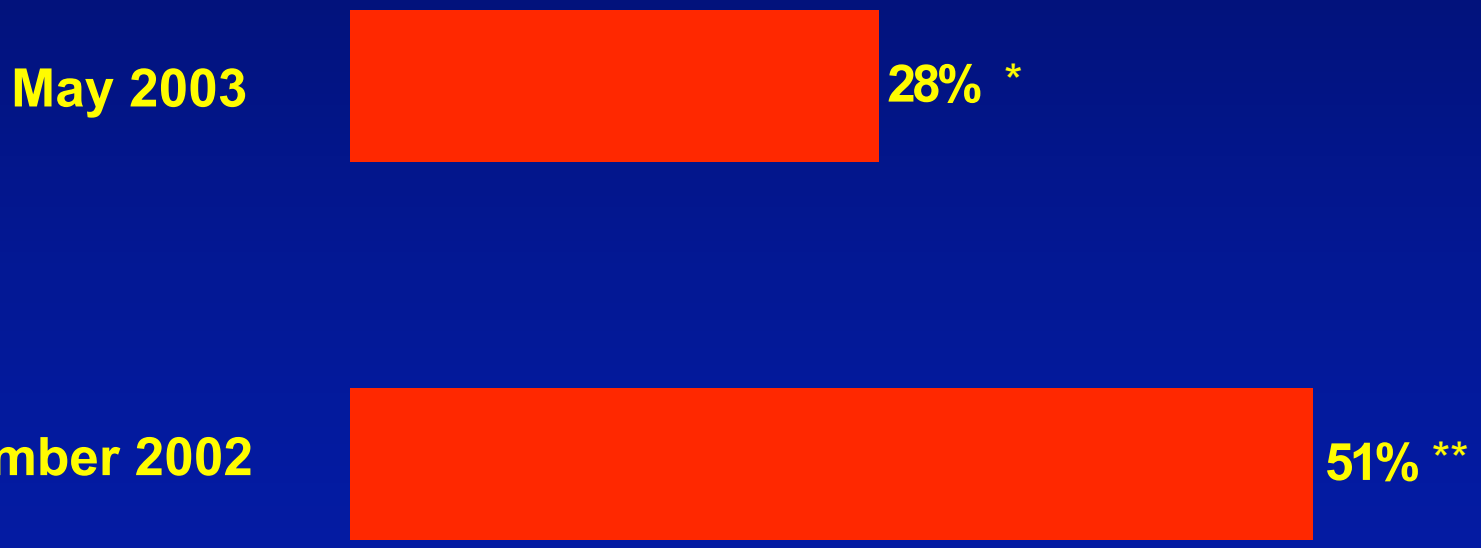
How Concerned Is the Public about the Problem?

Gauging the level of public concern will be important to public health officials because:

- **It provides a general measure of salience.**
- **A more concerned public is more likely to pay attention to public health officials than a disinterested one.**

Public Concern about a Terrorist Attack Using Smallpox

Percent of the public saying they were very or somewhat concerned about a terrorist attack using smallpox in the next 12 months



*HSPH/ICR survey, May 2003
**HSPH/RWJ/ICR survey, December 2002

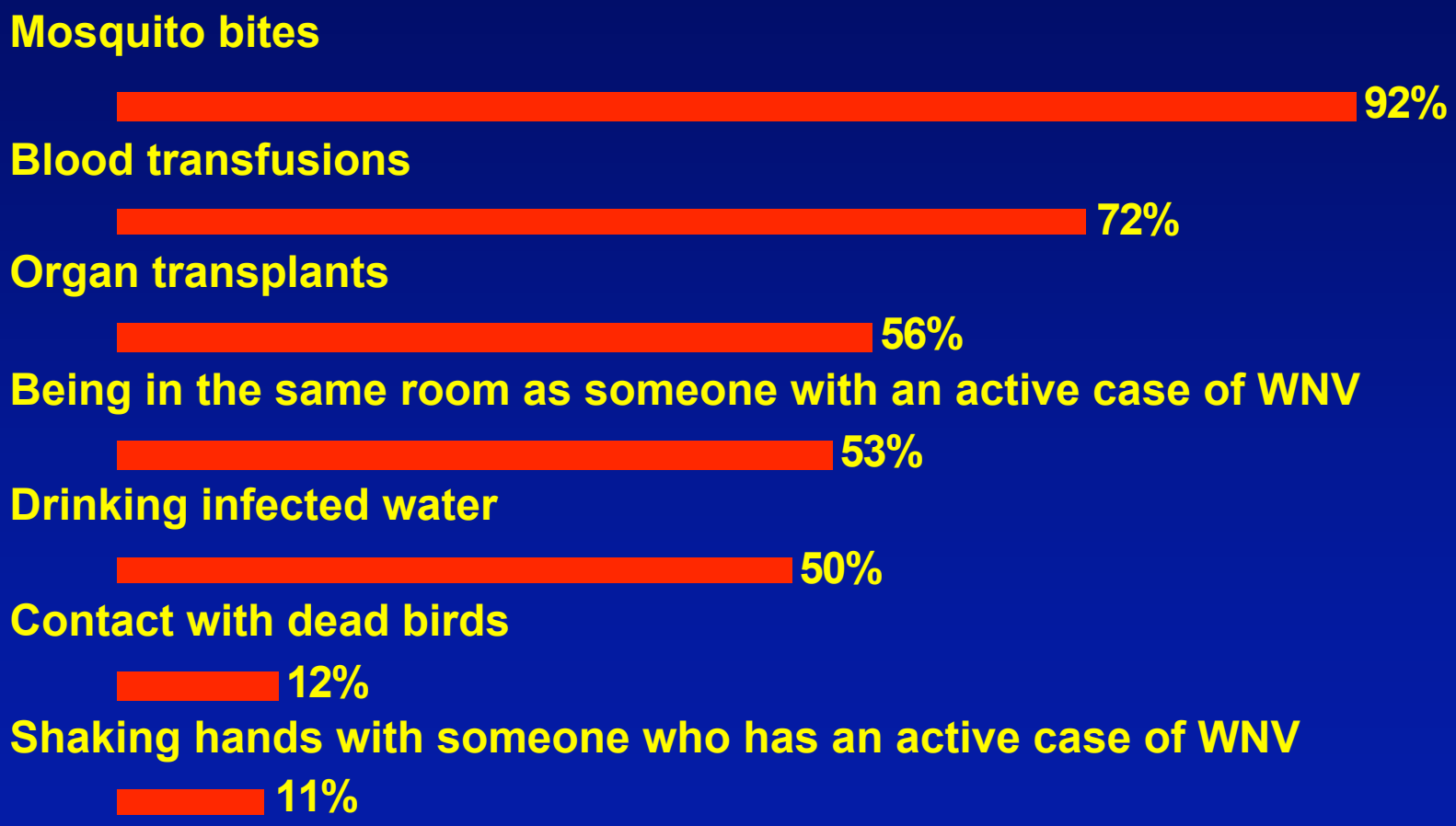
How Does the Public Believe the Disease Is Transmitted?

Gauging the public's level of knowledge about disease transmission is important because:

- **If the public believes that the disease is easily transmitted, they may be more willing to take precautions.**
- **Understanding the public's level of knowledge about transmission can help shape public health education campaigns.**
- **Often, the beliefs held by the public about transmission are wrong. The public makes decisions based on these beliefs.**

Beliefs about West Nile Virus Transmission

Percent of the public who believe virus can be transmitted by...



HSPH/ICR Survey, November 2002

Harvard School of Public Health Program on Biological Security and the Public

Is the Public Familiar With Any Recommended Precautions and Are They Taking Them?

Public health campaigns often include a list of precautions people can take to reduce their risk of infection. Understanding the public's knowledge of these precautions and any that they may be taking can:

- **Give public health officials a measure of the success of their education campaign and where they may need to target resources.**
- **Let officials know if the public is engaging in behaviors that are counter productive or harmful.**
- **Give officials a reality check against media stories about the mass purchase of gasmasks and duct tape.**

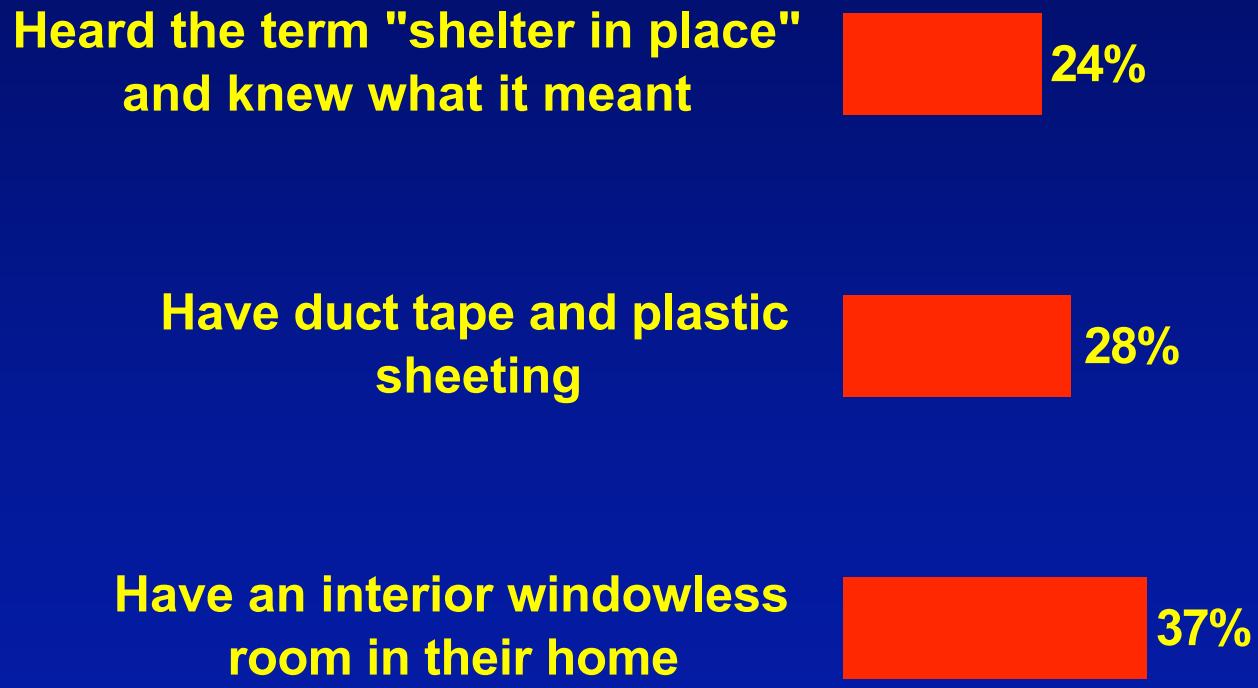
These results can look very different when affected areas are surveyed.

Precautions Americans Have Taken Against Possible Bioterrorism

HSPH/RWJF/ICR survey, October 2001

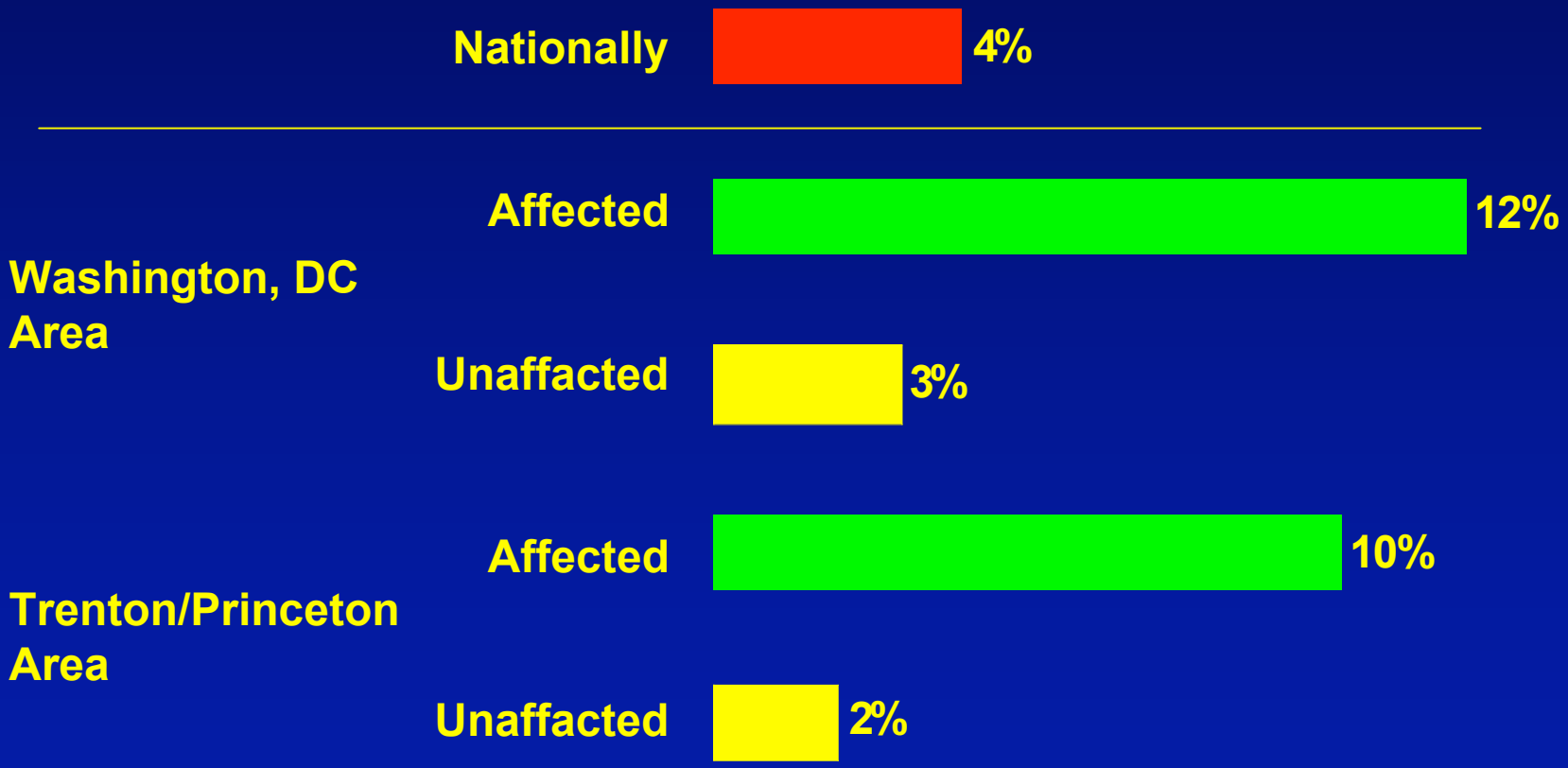
Harvard School of Public Health Program on Biological Security and the Public

Sheltering In Place



HSPH/ICR survey, March 2003

Got a Prescription or Antibiotics as a Precaution Against Anthrax



HSPH/RWJF/ICR survey, December 2001

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How Many People Does the Public Believe Have the Disease and How Many Have Died?

Understanding how much the public knows about the severity of the outbreak is important because:

- **The deadlier the public believes the disease to be, the more likely they are to be concerned about it.**
- **Both over and underestimating the mortality rate could have serious implications. If the public underestimates it, they may not take public health messages seriously. If the public overestimate it, they may take unnecessary or counter-productive precautions.**

Facts from CDC vs. Beliefs of the General Public

Facts	*Public's Beliefs*
Last case of smallpox reported...	**Cases of smallpox during past 5 years**
In U.S. in 1949	**In U.S.** ***30%***
In world in 1977	**In world** ***63%***

Source -Facts: CDC; Public's Beliefs: Harvard School of Public Health survey, as published online in New England Journal of Medicine, December 19, 2002.

Does the Public Believe There is a Vaccine or a Treatment?

The public's level of concern about a disease could vary based on their beliefs about vaccines and treatment.

- **If the public believes that there is no vaccine and no treatment for a disease, their level of concern is likely to rise if the number of cases increases.**

- **Conversely, if they believe there is a vaccine or treatment, they may be less concerned about the disease. Also, a surge in demand for a vaccine or treatment could place stress on the local health care system.**

Facts from CDC vs. Beliefs of the General Public

Facts	*Public's Beliefs*
No known effective treatment for smallpox once contracted	**Once someone contracts smallpox, there is a medical treatment to prevent death/serious consequences** ***78%***
Vaccine within 2-3 days of exposure to smallpox protects people	**Vaccine within a few days of smallpox exposure protects people** ***42%***

Source -Facts: CDC; Public's Beliefs: Harvard School of Public Health survey, as published online in New England Journal of Medicine, December 19, 2002.

Where Would the Public Go for Information and Care?

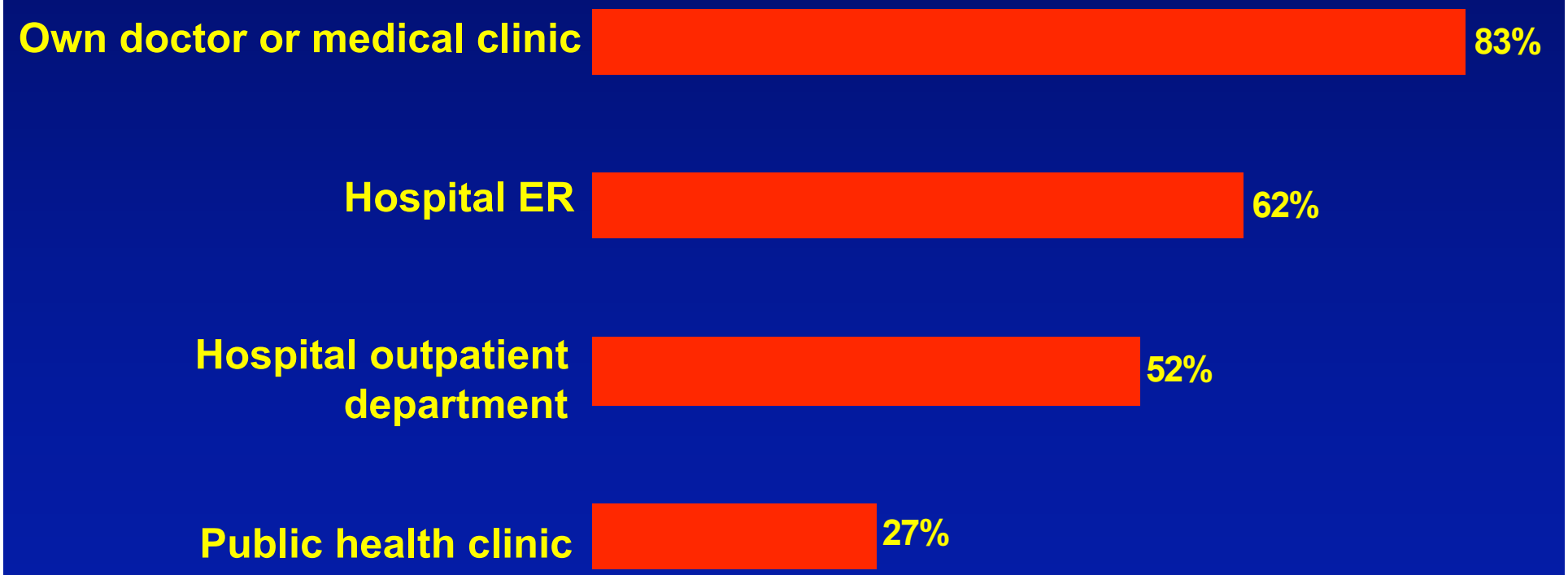
Knowing where the public would go for treatment and care is very important for public health officials for several reasons.

- **If public health officials know where people would go for information and treatment, they can direct educational resources there in advance.**

- **If there were an attack, public health officials would need to know where people were going for diagnosis and treatment in order to appropriately direct resources.**

Sources of Care

Percent of the public saying they would go to …. for diagnosis or treatment if they thought they had symptoms of smallpox



HSPH/RWJF/ICR survey, May 2002

Does the Public Believe Certain Groups Will Be Discriminated against in Treatment?

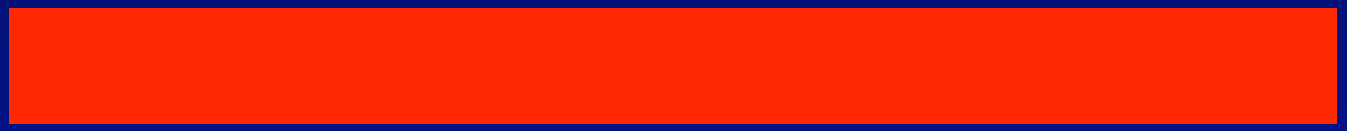
Understanding the public's beliefs about how they will be treated in terms of access to care, access to vaccines and quarantine is important because:

- **Information about the fear or experience of discrimination during a bioterrorist threat can alert public health officials to the problem and help them deal with it. People who expect unfair treatment may be reluctant to seek care or comply with quarantine orders.**

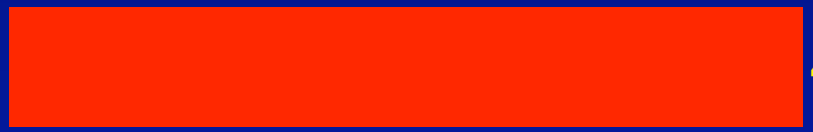
Discrimination in Vaccine Distribution

If an outbreak of smallpox occurred and not everyone could get vaccinated quickly, percent of the public saying…

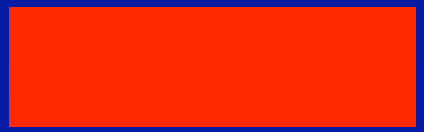
Wealthy and influential people would get vaccinated first



Elderly people would be discriminated against



African Americans would be discriminated against



HSPH/RWJF/ICR survey, December 2002

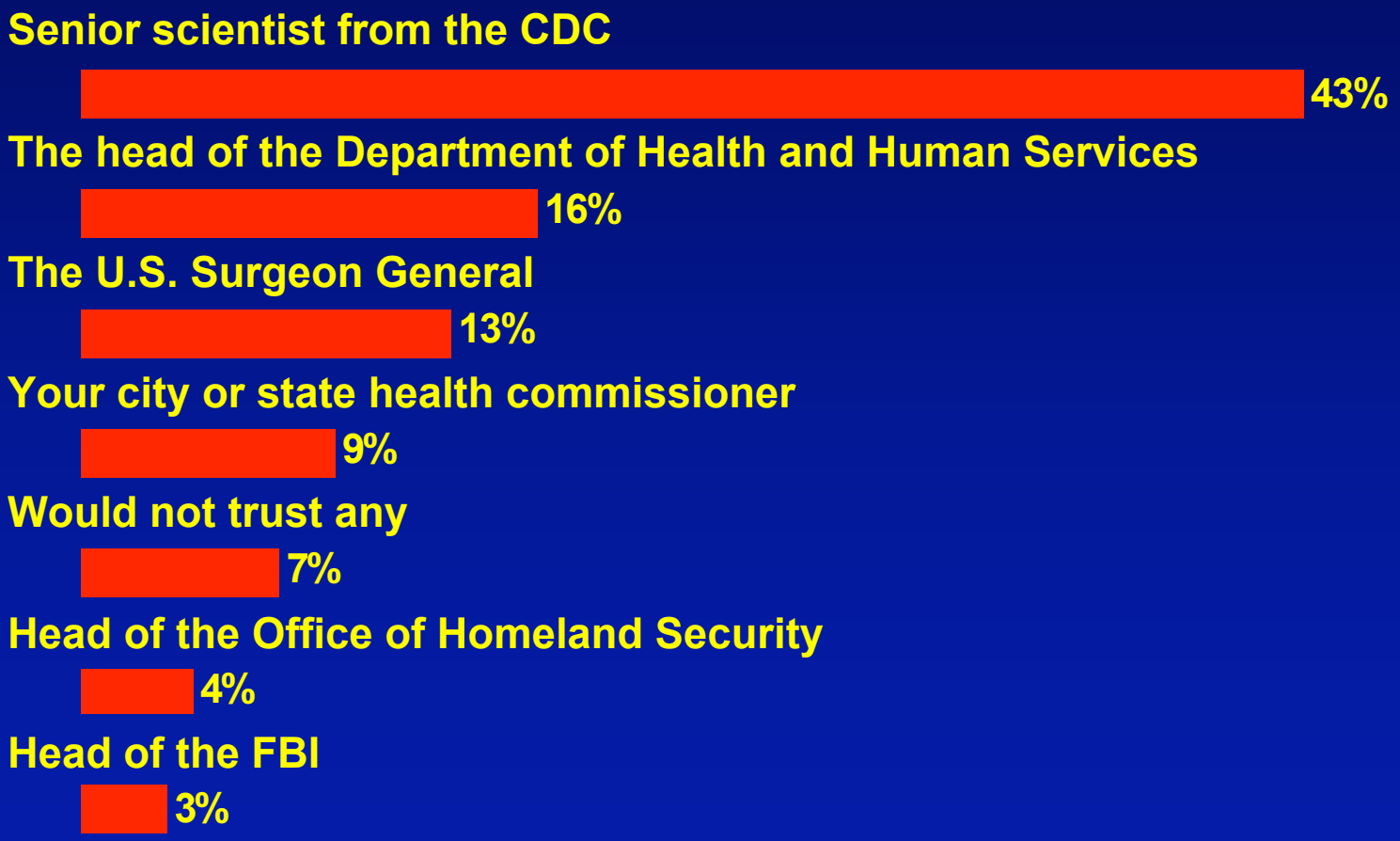
Whom Does the Public Trust as a Spokesperson?

In a public health crisis, the credibility of information sources could be crucial.

- **The public may be more likely to ignore information that comes from a source that they do not believe is credible.**
- **The information sources that the public believes are credible may not be completely informed about the crisis.**

Whom Does the Public Trust as a Spokesperson?

In the event of an bioterrorist attack, percent of the public saying they would trust….the most to provide the correct info on how to protect against disease



HSPH/RWJF/ICR survey, May 2002

Does the Public Support Public Policy Measures?

Gauging levels of public support for public policy measures (i.e. mass vaccinations, isolation, quarantine) can provide important information to public health officials.

- **Many of the recommended policies are controversial.**
- **Legislators are responsive to public opinion; they will want to know if their constituents are going to be upset by these measures.**

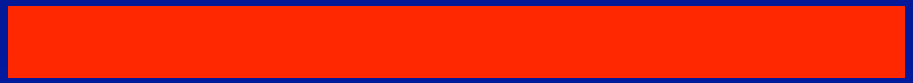
Support for Public Policy Measures

Percent of the public favoring

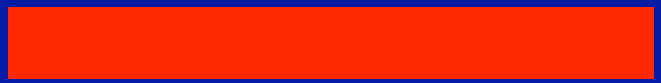
Requiring hospital/health clinics to provide services to people who think they have smallpox

Requiring people with smallpox to be isolated with others who have the disease

Quarantining people suspected of having been exposed to smallpox



Requiring a person to be vaccinated against smallpox



HSPH/ICR/RWJF survey, December 2002

Lessons Learned

- **The news media have no denominator. Neither do public health agencies.**
- **The importance of teachable moments: Unless there is a major event, the public is not likely to be paying a lot of attention to the issue. Public health agencies should have materials prepared ahead of time in order to capitalize on these teachable moments.**
- **Public responses are based on what people think they know, regardless of whether these "facts" are true.**

Lessons Learned

- **Public health agencies should be using physicians as a way to get information to the public.**
- **In order to avoid panic during an outbreak, there is a need to establish pre-identified local sources of information and advice.**
- **In any crisis, there are three populations – the national population, those living in the affected areas, and those directly affected by the crisis. These three groups have different information needs.**