IPSOS / REUTERS POLL DATA

Prepared by Ipsos Public Affairs

Ipsos Poll Conducted for Reuters

Zika Virus Topline 2.05.2016

These are findings from an Ipsos poll conducted February 1-5, 2016 on behalf Thomson Reuters. For the survey, a sample of roughly 1,595 adults age 18+ from the continental U.S., Alaska and Hawaii was interviewed online in English.

The sample for this study was randomly drawn from Ipsos's online panel (see link below for more info on "Access Panels and Recruitment"), partner online panel sources, and "river" sampling (see link below for more info on the Ipsos "Amparo Overview" sample method) and does not rely on a population frame in the traditional sense. Ipsos uses fixed sample targets, unique to each study, in drawing sample. After a sample has been obtained from the Ipsos panel, Ipsos calibrates respondent characteristics to be representative of the U.S. Population using standard procedures such as raking-ratio adjustments. The source of these population targets is U.S. Census 2015 American Community Survey data. The sample drawn for this study reflects fixed sample targets on demographics. Post-hoc weights were made to the population characteristics on gender, age, region, race/ethnicity and income.

Statistical margins of error are not applicable to online polls. All sample surveys and polls may be subject to other sources of error, including, but not limited to coverage error and measurement error. Where figures do not sum to 100, this is due to the effects of rounding. The precision of Ipsos online polls is measured using a credibility interval. In this case, the poll has a credibility interval of plus or minus 2.8 percentage point for all respondents (see link below for more info on Ipsos online polling "Credibility Intervals"). Ipsos calculates a design effect (DEFF) for each study based on the variation of the weights, following the formula of Kish (1965). This study had a credibility interval adjusted for design effect of the following (n=1,595, DEFF=1.5, adjusted Confidence Interval=4.3).

For more information about Ipsos online polling methodology, please go here http://goo.gl/yJBkuf

		Total
AB10_110 - Awareness...The Zika Virus	No	36%
	Yes	64%
	Total	1595
AB10_111 - Awareness...The virus spread via mosquito in Latin America that appears to be correlated with birth defects if pregnant women are infected	No	43%
	Yes	57%
	Total	1595
AB10_112 - Awareness...Centers for Disease Control and Prevention (CDC) issuing travel notices to the Caribbean, Mexico, Central America, and other regions	No	62%
	Yes	38%
	Total	1595
AB10_113 - Awareness...Centers for Disease Control and Prevention (CDC) recommending pregnant women consider postponing travel to areas with ongoing Zika transmission	No	49%
	Yes	51%
	Total	1595
AB10_114 - Awareness...Reported cases of the Zika virus in the United States	No	49%
	Yes	51%
	Total	1250
AB10_115 - Awareness...Reported cases of the Zika virus being transmitted through sexual contact *Added on 2/03	No	51%
	Yes	49%
	Total	601

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TM822Y16 - How concerned, if at all, are you about the Zika virus? **Asked of those aware of the Zika virus generally at AB10	Very concerned	18%
	Somewhat concerned	43%
	Not very concerned	29%
	Not at all concerned	9%
	Total	891

TM823Y16 - Are you more or less likely to travel to Mexico, Puerto Rico or South America in the next 12 months because of the Zika Virus? **Asked of those aware of the Zika virus generally at AB10	More likely	3%
	Less likely	41%
	About the same	48%
	Don't know	8%
	Total	891

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How to Calculate Bayesian Credibility Intervals

The calculation of credibility intervals assumes that Y has a binomial distribution conditioned on the parameter θ\, i.e., Y|θ~Bin(n,θ), where n is the size of our sample. In this setting, Y counts the number of "yes", or "1", observed in the sample, so that the sample mean ($\bar{y}$) is a natural estimate of the true population proportion θ. This model is often called the likelihood function, and it is a standard concept in both the Bayesian and the Classical framework. The Bayesian [1] statistics combines both the prior distribution and the likelihood function to create a posterior distribution. The posterior distribution represents our opinion about which are the plausible values for θ adjusted after observing the sample data. In reality, the posterior distribution is one's knowledge base updated using the latest survey information. For the prior and likelihood functions specified here, the posterior distribution is also a beta distribution (π(θ/y)~β(y+a,n-y+b)), but with updated hyper-parameters.

Our credibility interval for ϑ is based on this posterior distribution. As mentioned above, these intervals represent our belief about which are the most plausible values for ϑ given our updated knowledge base. There are different ways to calculate these intervals based on π(θ/y). Since we want only one measure of precision for all variables in the survey, analogous to what is done within the Classical framework, we will compute the largest possible credibility interval for any observed sample. The worst case occurs when we assume that a=1 and b=1 and y=$n/2$. Using a simple approximation of the posterior by the normal distribution, the 95% credibility interval is given by, approximately:

$$\bar{y} \mp \frac{1}{\sqrt{n}}$$

For this poll, the Bayesian Credibility Interval was adjusted using standard weighting design effect 1+L=1.3 to account for complex weighting[2]

Examples of credibility intervals for different base sizes are below. Ipsos does not publish data for base sizes (sample sizes) below 100.

Sample size	Credibility intervals
2,000	2.5
1,500	2.9
1,000	3.5
750	4.1
500	5.0
350	6.0
200	7.9
100	11.2