



Challenges and Benefits of Conducting High-Response Rate Research in a Small Border Town









Brownsville, TX - Population

- Total: 183,000
- Adult: 125,000
 - Hispanic: 93%
 - Born outside of U.S.: 40%
 - Under FPL: 31%

Brownsville named the poorest city in America

By **Craig Hlavaty** Updated 12:44 pm CDT, Thursday, October 31, 2013



CDC Declares Texas Town a 'Yellow' Zika Virus Zone



Health

CDC issues Zika travel guidance for Texas border city

By **Lena H. Sun**
December 14, 2016



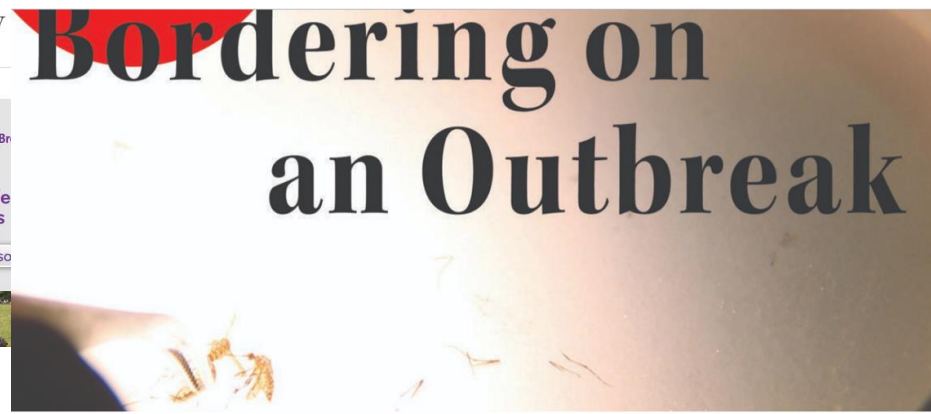
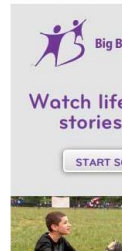
Federal health officials issue Zika warning for Brownsville

The Centers for Disease Control and Prevention is urging pregnant women to avoid Brownsville if they can and for those visiting the area to be tested for the virus, which is known to cause birth defects.

BY **MARISSA EVANS** DEC. 14, 2016 5 PM



Bordering on an Outbreak





The Project - And Its Challenges

- Zika reported in late 2016
- In 2017, researchers and stakeholders interested to understand:
 - What Brownsville residents knew about Zika
 - How, if at all, did the Zika alerts and guidance affect behaviors
 - On which sources of information did Brownsville residents rely for Zika-related information

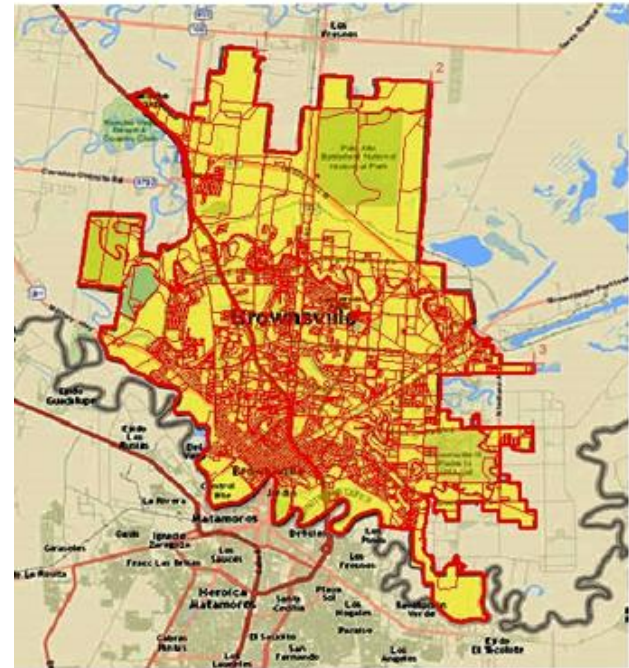


The Project - And Its Challenges

- How best to reach respondents given:
 - Geography is hard to target by cell phone
 - Overcoverage (Brownsville is a third of Cameron Co.)
 - Undercoverage (phone numbers outside of area)
 - High likelihood of CPO
 - Low likelihood of directory listing
 - Looking for high response rate (in combination with low incidence)

The Project - And Its Challenges

- ABS as a Solution
 - High geographic accuracy
 - Addressing over- and under-coverage
 - MSG's ability to match addresses to CDC's hot-spot mapping





The Project - Finding the Right Sequence

— ABS: Lingerin Concerns:

- Push to web with low-education and Spanish-speaking population
- Low likelihood for inbound phone
- Low-rate of phone-matching to addresses
- Uncertainty about household occupancy rates
- Cost



Brownsville Study - Procedures

- Sample: 1,200 households
- Mail invitation (7/24):
 - \$5 pre-incentive
 - \$20 post-incentive
 - Link to URL
- Reminder post card (7/31)
 - Dial-in number
 - Outbound follow-up to matched numbers (8/4-8/13)
- F2F (8/8-9/11)



Brownsville Study - Outcomes

- In total – 1,200 addresses were randomly selected
 - 562 completed interviews
 - 149 online (19 in Spanish)
 - 22 by phone (12 in Spanish)
 - 391 in person (208 in Spanish)
 - 121 households were found unoccupied, inaccessible or undeliverable
 - In 9 households, no eligible respondents in residence
 - To qualify respondents needed to have lived in Brownsville Texas between November and December 2016
 - RR3=52%

Is the Effort Worth It?

Whom do we reach?

	Web & Phone (n=171)	In-Person (n=391)	Population Benchmark
<30	27%	18%	25%
65+	19%	16%	15%
US Born	69%	55%	57%
HS or Less (25+)	40%	58%	59%
College+ (25+)	33%	28%	17%
Male	42%	36%	46%
Income < \$15k	18%	27%	
Spanish	18%	53%	

Is the Effort Worth It?

Zika Knowledge and Behavior

	Web & Phone (n=171)	CAPI (n=391)
Were very concerned (during timeframe) of getting Zika	33%	50%
Knows Zika is transmittable through sexual intercourse	69%	63%
Knows Zika can spread without showing symptoms	79%	53%
Used condoms often to protect against Zika	22%	20%
Avoided having sex to protect against Zika	8%	18%
Got Zika news in Spanish	35%	47%
Got most Zika News from TV	61%	67%

Is the Effort Worth It?

Zika Knowledge and Behavior (Weighted)

	Web & Phone (n=171)	Total (n=562)
Were very concerned (during timeframe) of getting Zika	34%	44%
Knows Zika is transmittable through sexual intercourse	67%	62%
Knows Zika can spread without showing symptoms	81%	62%
Used condoms often to protect against Zika	21%	21%
Avoided having sex to protect against Zika	5%	15%
Got Zika news in Spanish	38%	44%
Got most Zika News from TV	59%	66%
	<i>deff</i>	1.3
	<i>MoSE (at N=562)</i>	+/-4.7%
	+/-5.4%	



Conclusion

- High RR and accuracy are possible for small geographies
- ABS addresses many concerns (though introduces others)
- Multi-mode including F2F addresses concerns, but at a cost
 - Possible to do without F2F in some circumstances
 - But risk for data-quality in other circumstances
 - F2F improves representativeness
 - Increases statistical power
 - Allows more reliable subgroup analysis



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