

## Introduction

- Genesys, the current vendor for the Centers for Disease Control and Prevention (CDC), prescreens all Behavioral Risk Factor Surveillance System (BRFSS) phone numbers so that each phone number is classified as working, non-working, cell phone, or business.
- In 2002, CDC strongly encouraged states to only call all working numbers in BRFSS Policy Memo 2003.1, but the Texas BRFSS program has continued to call all phone numbers.
- The discrepancies between the BRFSS sample population and the adult population in the state continues to grow for age, gender, and race/ethnicity.

## Objectives

- To examine the differences between adults who had been reached through working numbers and those who had numbers that were classified as non-working or business.
- To determine how many interviews came from these prescreened categories.

## Methods

- The 2007 Texas Behavioral Risk Factor Surveillance System (BRFSS) is a statewide telephone survey of the non-institutionalized, civilian population who lived in a household with a residential phone line.
- A variable named "pre-call status" classified each respondent's phone number as working, non-working, cell phone, or business.
- Only seven respondents fell under the "cell phone" classification, so they were removed from the analyses.
- Data were managed and analyzed in SPSS (v. 16.0).
- Only prevalence estimates were weighted to adjust for the probabilities of selection and a post-stratification weighting factor that adjusted for the distribution of Texas adults by age and sex at the state level.

## Percent of Total Interviews

Figure 1: Percent of Total Completed Interviews By Year 2002-2008 Texas BRFSS

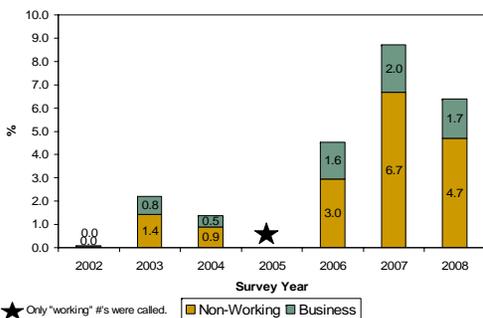


Figure 1: In 2002, only five interviews were obtained calling the non-working and business numbers in Texas (<0.1%), but in 2007, this percentage reached its highest at 8.7%. The increase is mainly due to the number of interviews coming from the "non-working" category.

## Results

Figure 2: Age Distribution by Pre-Call Status Compared to Population Estimates

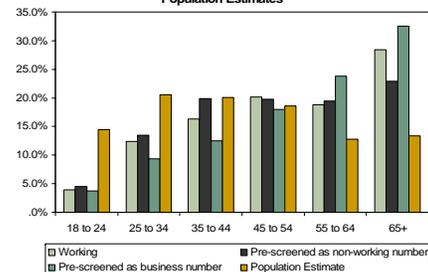


Figure 2: Fewer young adults were interviewed in all pre-call status categories. Among business numbers, there is a larger percentage of older respondents which could be contributing to the discrepancy in age.

Figure 3: Gender Distribution by Pre-Call Status Compared to Population Estimates

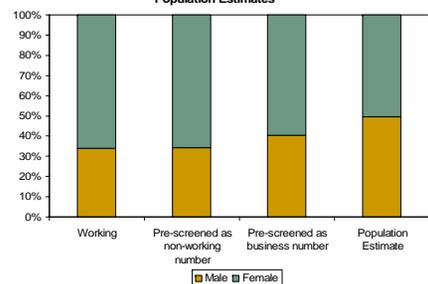


Figure 3: Compared to other pre-call statuses, pre-screened business numbers produced a slightly higher percentage of men.

Figure 4: Race/Ethnicity Distribution by Pre-Call Status Compared to Population Estimates

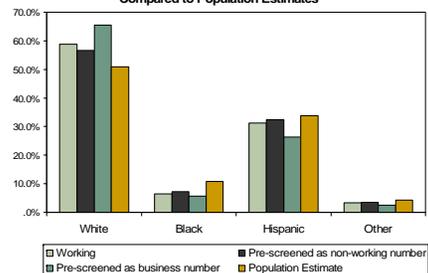


Figure 4: Fewer black adults were interviewed in all pre-call status categories. The percentage of Hispanics reached among working and non-working numbers was near Texas population estimates. Among business numbers, there is a larger percentage of white respondents which could be contributing to the discrepancy in race/ethnicity.

Figure 5: Employment Distribution by Pre-Call Status

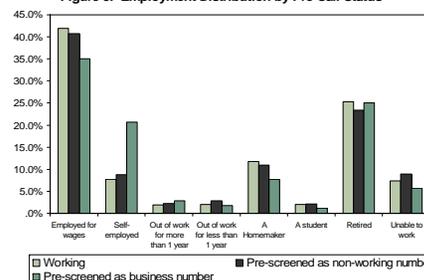


Figure 5: Numbers flagged as "business numbers" tended to produce a higher number of self-employed residents compared to working and non-working numbers.

Figure 6: Current Smokers by Pre-Call Status 2007 Texas BRFSS

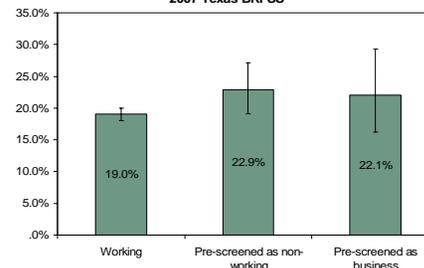


Figure 6: Although not significant, adults whose phone numbers were pre-screened as non-working or business had slightly higher estimates for smoking than those whose numbers were classified as working (22.9%, 22.1%, and 19.0%, respectively).

Figure 7: Had Routine Check-Up in Past Year 2007 Texas BRFSS

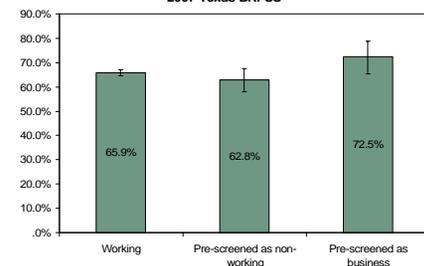


Figure 7: Although not significant, adults whose numbers were pre-screened as business had a slightly higher estimate for receiving a routine check-up in the past year than those whose numbers were classified as working or non-working.

## Response Rates

Table 1: Response Rates by Pre-Call Status 2007-2008 Texas BRFSS

Pre-Call Status	CASRO		Overall	
	2007	2008	2007	2008
Total	38.8	47.9	22.4	30.4
Working	26.6	34.5	23.2	31.7
Pre-screened as non-working number	52.5	57.7	16.2	18.3
Pre-screened as business number	53.6	61.0	18.7	25.4
Cell phone	49.0	34.6	7.2	11.2

Table 1: Council of American Survey Research Organizations (CASRO) response rates were higher for those numbers pre-screened as non-working or business compared to working phone numbers. The CASRO response rates were calculated by the Texas Department of State Health Services based on data that were received from their contractor.

## Facts

- 91.4% of the numbers that were flagged as cell phones were indeed cell phones.
- Among those who had a non-working telephone number but was interviewed, 10.7% of the respondents (unweighted) reported having a telephone interruption in the past year compared to 5.4% who were pre-screened as working and 5.2% who were pre-screened as business.
- The Texas CASRO response rate was increased due to calling every phone number.

## Recommendations

- Calling all phone numbers produces extra interviews and those adults who are reached from non-working and business phone numbers may be different than those who have working phone numbers.
- Since a high number of cell phones are reached in the pre-call status "cell phone," these phone numbers should be manually dialed to meet Federal Communications Commission (FCC) rules and regulations.
- Even though calling the "business" phone numbers seem to contribute to the discrepancies that are seen in the Texas BRFSS data, we will not stop calling these numbers partially due to the current economy.
  - Some smaller businesses are closing their doors, but allowing people to work from home instead.
  - If people are laid off from work, we may be able to still reach them, especially since non-working numbers can become working numbers in the future.
- Employment status should be a multiple response category. More people are retiring early and are getting rehired. Therefore when analyzing these data for this project, these data could be somewhat misleading since the respondent has to choose only one response.

## Things to Ponder

- In 2008, all states and territories have been requested to collect cell phone data through a supplemental sample. Would we want to consider collecting data from those respondents who answer "yes" to the question "Is this a cellular telephone?" in the BRFSS headline sample?
- Should all phone numbers be called to protocol or should each state determine what pre-call status groupings they want to call? For comparability purposes, perhaps every state should do the same?