Helpful Tips for a Successful CASPER

The Community Assessment for Public Health Emergency Response (CASPER) is a rapid needs assessment tool that enables public health officials and emergency managers to quickly assess the needs of their community, usually following a disaster. The focus of the CASPER is at the household-level and is based on census data, which does impose some limitations to the CASPER. Development of the survey should include input from response partners. Please see the CASPER toolkit, 2nd Edition for complete instructions on conducting a CASPER.

Prepare CASPER Survey

- **Talk to local law enforcement to determine which areas of the community are safe.**
- **Notify Media:** Alert residents that you will be in area and your purpose. DO NOT release questionnaire in advance!
- **Create Teams of Two: Female/Male teams best. Female/Female teams are ok. Male/Male teams may be intimidating to some residents.** Enlist students, interns, nurses, social workers, etc. to conduct interviews. Pair teams to be as diverse as possible: local/non-local, less experienced/more experienced, English-speaking/ other language ability, etc.
- **Provide Just-In-Time Training:** Explain CASPER, give background information about triggering event, explain interview questions and survey objectives/purpose, review Tracking Form (most important and most likely to be filled incorrectly!), enforce standardization to increase reliability
- **Provide Safety Briefing:** Have someone knowledgeable about the area lead briefing. Use briefing to identify hazards and develop awareness of any potential criminal activity.
- **Set up supplies, materials, and vehicles.**
- **Create and provide educational materials to surveyors for distribution to households.**
- **Prepare for translation of material and interpreters (if applicable).** Use interpreters where necessary and whenever able. Translate materials into the language and assign interviewers that fluently speak the language used in the cluster. You may consider setting up a call-in line for households that want to participate in survey but cannot communicate effectively with interviewer due to language barriers.

Conduct CASPER Survey

CASPER uses a 30/7 Framework: 30 clusters pre-selected with probability proportion to number of households * 7 interviews randomly selected by teams in each cluster = 210 total interviews

- **Selecting households to interview**
  - Count number of houses in each cluster and divide by 7 to obtain n
  - Pick random starting point (e.g., intersection, middle of cluster)
  - From random starting point, go to closest house and then every nth house
  - Try to obtain interview at every nth house

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- **Replace households with another randomly selected house (next nth house), if one of the following conditions exist:**
  - No answer after 3 attempts
  - House appears vacant
  - Resident refuses interview
  - House is unsafe or inaccessible (due to "no trespassing" signs, gated community/household, physical hazards, vicious dogs, criminal activity, etc.)
- **If cluster has ≤7 houses, attempt to interview all houses**
- **Apartment Complexes: Approximate units on one floor, multiply by #of floors, divide by 7**
- **High Rises: Randomly pick 1 residence on 7 randomly chosen floors**
- **Tracking Form: IMPORTANT! Use bright, neon-colored paper for this! Tracks response rates.**
- **Threats to life or health should be immediately reported. Use confidential referral forms and have a plan to communicate urgent needs to appropriate officials**

Be Respectful	**Stay Safe**	**Understand Objectives**
Adhere to Methodology	**Be Flexible**	**Know Personal Limitations**

Analyze Data

- **We recommend EpiInfo 7. However, you may use any type of analysis software that allows for weighting (e.g., SAS, STATA, SPSS)**
- **Tracking form data should be entered into a spreadsheet program (e.g., MS Excel).**
- **Prepare data shells before survey to help focus questionnaire**
  - All variables collected should be used. If certain variables will be unused, edit your questionnaire and eliminate those variables.

Data Calculations

Sampling Weight = $\dfrac{\text{total \#of housing units}}{\text{\#of housing units interviewed (≤7) x \#of clusters (≤30)}}$

Contact Rate = $\dfrac{\text{\#of completed interviews (approx. 210)}}{\text{ALL households where contact attempted}}$

Cooperation Rate = $\dfrac{\text{\#of completed interviews (approx. 210)}}{\text{ALL households where contact made}}$

Completion Rate = $\dfrac{\text{\#of completed interviews (approx. 210)}}{\text{\#of interviews intended (usually 210)}}$ **MUST BE ≥ 80%!**

Report Results

- **Preliminary Report to Stakeholders: Keep brief and focused!**
  - Typically in PowerPoint presentation format
  - Tables of key results
  - Summary of needs
  - Recommendations for solutions/actions
- **Final Report: Will be longer and include all details**
  - Full report structure
  - Includes additional content, tables and graphs
  - More detailed information - ensure accuracy of data before publishing!
  - Distribute widely
- **Know who will write report and who will present report. This may not always be the same person, so ensure there is good communication between them.**
- **Know your audience! Tailor your results!**
  - Epidemiologists: Give detailed data
  - Emergency Managers: Give bullet points, action items
  - Media: Give headline/main message, not complicated data
  - Politicians: Give talking points, simple graphs/pie charts
- **Consider WHAT actions will result from report and WHO will implement those actions**
- **Timing and Deadlines: Report to leadership within 36-hrs of data collection.**
- **Data Presentation**
  - Simple
  - Easy to read
  - Colorful tables/graphs
  - Link to objectives

Resources

- CASPER Website http://www.cdc.gov/nceh/hsb/disaster/CASPER.htm
- CASPER E-Learning http://www.cdc.gov/nceh/hsb/disaster/CASPER_elearning/
- CASPER Toolkit http://emergency.cdc.gov/disasters/surveillance/pdf/CASPER_Toolkit_Version_2_0_508_Compliant.pdf

CDC Assistance

CDC's Health Studies Branch (HSB) provides technical assistance remotely and in field (by request and availability). If you would like assistance in conducting a CASPER in your jurisdiction, please contact Amy Schnall at 770.488.3422 or GHU5@cdc.gov