Community Assessment for Public Health Emergency Response (CASPER)

[LOCATION]

[DATE]
Agenda

- CASPER Review
  - Background
  -Preparing for CASPER
  - Conducting CASPER in the field
  - Analyzing CASPER data & writing reports

- CASPER Case Study
Defining Disasters

(VULNERABILITY + HAZARD) / CAPACITY
CDC/WHO Definition of Disasters

A serious disruption of the functioning of society, causing widespread human, material or environmental losses, that exceeds the local capacity to respond and calls for external assistance*

Natural

Human-Induced

Complex
The Public Health Perspective

...disasters are defined by what they do to people, otherwise they are simply interesting geological or meteorological phenomena...
“...many of the problems we have identified can be categorized as ‘information gaps’...Better information would have been an optimal weapon against Katrina. Information sent to the right people at the right place at the right time.”
Disaster Epidemiology

- Use of core public health capabilities to assist leaders and decision-makers by providing timely information to the right people
  - Tracking and surveillance
  - Assessments and investigations
  - Research

- Characterize short and long-term health consequences
Importance of Disaster Epidemiology

- Provide situational awareness
- Identify risk factors
- Prevent or reduce deaths, illnesses, and injuries
- Improve prevention, response, recovery, and mitigation strategies

(Source: UNOCHA)
Challenges in a Disaster Setting

- **Data challenges**
  - Absence of baseline information
  - Denominator data difficult to obtain
- **Infrastructure damage**
  - Widespread power outages
  - Damaged phone and cell lines
- **Logistical constraints**
  - Environmental hazards
  - Roads blocked
  - Gasoline shortages
- **Competing priorities**
  - Working with many partners
CDC Disaster Epidemiology Products

- **Surveillance**
  - Mortality
  - Morbidity
  - National Poison Data System (NPDS)

- **Assessments**
  - Community Assessment for Public Health Emergency Response

- **Research**
  - Epidemiologic studies
  - Evaluation studies

- **Trainings**
History of CASPER

- 1970s: the WHO Expanded Programme on Immunization (EPI) looking for survey technique for estimating vaccine coverage
- 1980s: U.S. Academy of Science’s identified fastest technique for EPI
- 1990s: WHO published the protocol for best practice
- 1996: modified cluster-sampling method for rapid assessment of needs after a disaster published
- 2009: CDC Health Studies Branch published CASPER toolkit to assist personnel in conducting a CASPER
What CASPER is

- Epidemiologic technique designed to provide quickly and at low cost, **household-based** information about a community’s needs in a simple format to decision-makers.

- Goals of CASPER
  - Rapidly obtain information about the needs of a community
  - Produce population-based estimates for decision-makers
  - Assess new or changing needs
Advantages of CASPER

- Generalizable data (provides population estimates)
- Timely
- Relatively low cost
- Simple reporting format
- Flexible
CASPER Phases

- Prepare for the CASPER
  - Determine objectives and assessment area
  - Develop questionnaire and forms
  - Select first stage sample (30 clusters)

- Conduct the CASPER in the field
  - Organize and train assessment teams
  - Select second stage of sample (7 households) in the field

- Analyze the data
  - Calculate weighted frequencies and percentages

- Write the report and share results
When to Conduct CASPER

- When population-representative data is needed

- Determine if CASPERs 30x7 method is appropriate
  - Size and feasibility considerations (e.g., minimum of 800 households)
  - Other sampling methods may be more appropriate

- CASPER results will be descriptive of the entire area

- Useful throughout the disaster lifecycle
Public Health Emergency Preparedness (PHEP)

- **Capability 2: Community recovery**
  - Function 1 – Identify and monitor public health, medical, and mental/behavioral health system recovery needs
    - Priority 2 – Written plans should include how the health agency and other partners will conduct a community assessment and follow-up monitoring of public health, medical, and mental/behavioral health systems needs after an incident.

- **Capability 7: Mass care**
  - Function 4 – Monitor mass care population health
    - Priority 2 – Written plans should include templates for disaster-surveillance forms, including Active Surveillance and Facility 24-hour Report forms
Use of CASPER Across the Disaster Life Cycle

- **Preparedness phase**
  - Evacuation plans
  - Personal readiness plans
  - Communications

- **Response phase**

- **Recovery phase**
Use of CASPER Across the Disaster Life Cycle

- Preparedness phase

- Response phase
  - Needs change rapidly in first several days/weeks after a disaster
  - Communications

- Recovery phase
Use of CASPER Across the Disaster Life Cycle

- Preparedness phase
- Response phase
- Recovery phase
  - Assess long term or ongoing needs
  - Evaluate response efforts or programs
Non-disaster Uses of CASPER

- Non-emergent setting
  - Assess community knowledge, awareness, opinions, etc. of current topics related to public health
    - Zika virus, opioid epidemic, vaccination practices, etc.
  - Determine current health status, assess public health perceptions, estimate needs of a community

- Health Impact Assessments (HIA)
  - Assess community awareness, opinions and concerns regarding the impact of a new project (e.g., new transportation route, new power plant) on health in the community

- Community assessment for accreditation
Use of CASPER in the United States

http://www.cdc.gov/nceh/hsb/disaster/casper/casper_map.htm
Impact of PAST CASPERs

- **Resources**
  - Allocate scarce resources
  - Respond to specific needs (e.g., supplemental oxygen, medications)

- **Support**
  - Provide valid information to governors, news media, etc.
  - Support funding of projects

- **Messaging**
  - Target communication messages and education

- **Future planning**
  - Modify emergency management plans
Preparing for CASPER
CASPER Phases

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- Analyze the data
  - Calculate weighted frequencies and percentages

- Write the report and share results
Preparing for CASPER

- Many questions need to be addressed prior to conducting a CASPER
  - Work with leadership and key stakeholders

- Preparation
  - Determine partners and stakeholders for questionnaire development and recommendation implementation
  - Identify who will do first stage of sampling
  - Receive approvals for assessment

- Fieldwork
  - Identify interview team members
  - Find headquarter location and resources needed
  - Secure funding

- Analysis and reporting
  - Identify who will analyze data and write the report
  - Determine dissemination plan
Determine Objectives and Sampling Frame

- Every CASPER will have different objectives
  - Will help determine if CASPER is the appropriate methodology
  - Will help determine the sampling frame
  - Will focus the questionnaire

- Sampling frame: All households within the selected geographic area
  - Results descriptive of entire sampling frame
  - Determined by local official
  - May need to conduct more than one CASPER
Considerations for Choosing an Assessment Area(s)

- Impact area
  - Storm track
  - Damage maps
  - Utility information (e.g., electricity, water)

- Specific community
  - Most affected
  - Least available knowledge
  - High social vulnerability
  - Political/jurisdictional layout of state (resource distribution)

- Geographic size
Sampling Frame Example: Kentucky Ice Storms
Sampling Frame Example: Alabama Oil Spill

Deepwater Horizon Oil Spill, Mobile and Baldwin Counties
Sampling Frame Example: Elk River Chemical Spill

- “Do Not Use” order affected 10 counties in West Virginia
Develop data collection forms

- Introduction letter and consent script
- Questionnaire
- Tracking form
- Confidential referral form
- Public health materials
Survey Opening: Consent Script

- Introduction to the CASPER
- Verbal consent is sufficient
  - No personal identifiers collected
- Provide interviewee’s with written letter
- Follow your local guidance (area IRB)
  - Who you are
  - Why you are there
  - How long it will take
  - Explicit request for consent
  - Phone number for verification or questions

Community Assessment for Public Health Emergency Response (CASPER)

Good afternoon, my name is ___________________ and this is ___________________. We are with the Mariposa County Health Department. We are talking to randomly selected households about their experiences regarding the drought in Mariposa County.

- We are talking to residents about how the drought has affected them and how they are responding to the drought.
- We want to get an idea of how the county can better serve residents that are affected by the drought.
- Your house is one of 210 that has been randomly chosen to be in this survey.
- If you agree to participate, we will not ask you any personal questions such as those about education or place of birth. All the questions are about your entire household.
- The survey should take approximately 20 minutes to complete. Your answers will be kept private and the survey is voluntary and anonymous. You can refuse to take part in the survey or refuse to answer any of the questions. Nothing will happen to you or your household if you choose not to take part in the survey.
- We also have some information we would like to leave with you from the County that may be of interest to you and your household.

If you have any questions about this survey, you can ask anyone here right now. If you would like to confirm that we were sent by the Health Department, you may call the Health Department at [redacted] or [redacted].

[Surveyer: Wait for respondent to clearly answer YES or NO after each question below]

1. Would you like to participate in this survey? Yes ___ No ___
2. Do you live in this home? Yes ___ No ___
   a. If “No”: Is there someone else who lives in this home that we can speak to? Yes ___ No ___
3. Are you at least 18 years or older? Yes ___ No ___
   a. If “No”: Is there someone else who lives in this home that we can speak to? Yes ___ No ___

[Conduct interview if respondent answered yes to all three questions]

[If NOT, tell them: Thank you very much for your time.]
Data Collection Options

- **Paper Form**

  - **NORTH CAROLINA HURRICANE ISABEL RAPID NEEDS ASSESSMENT FORM**

- **Electronic Form**

  - Digital pens
  - Tablets
  - Cell phones
  - PDAs
Developing the CASPER Questionnaire

- Determine the scope and nature of the questions
  - Why ask the question? What ACTION can be taken?
  - What do you already know?

- Identify the critical information needed
  - Is the question necessary?
  - How will the data be used?
    - Outline basic analysis

- Questionnaire design
  - Keep questionnaires short
  - Closed-ended questions preferred
  - Sensitive information later
Finding Pre-Existing Questions for CASPER

- CASPER resources
  - CASPER toolkit
  - Previously used questionnaires
  - CSTE Disaster Epidemiology Subcommittee
  - Disaster Epidemiology Community of Practice (DECoP)
  - NIH Disaster Research Response Project (DR2)

- CDC resources
  - Behavioral Risk Factor Surveillance System (BRFSS)
  - National Health and Nutrition Examination Survey (NHANES)
Developing Questions

- Use as few questions as possible
- Consider the best ways to facilitate recall
- Determine who sees the questionnaire prior to field implementation
- Pilot test for acceptability, comprehension, and appropriate order
  - Develop interviewer instructions
  - Determine average completion time
  - Incorporate comments on wording, content, and format
Tips: Developing Questionnaires

- Modifying pre-existing questions
  - Changing individual questions to household

- Who pilot tests your questionnaire?
  - Pilot test your questionnaire with participants who are similar to the sampled population, but not a part of the sampled population
  - If no time allows, do the best you can

- Who sees the questionnaire prior to field implementation?
  - Key stakeholders
    - Do not release your questionnaire to the media or public as it may bias your results
<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
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<tbody>
<tr>
<td>1. Are you aware that the United States has a “cold warning” for your area?</td>
<td>Yes, No, DK, Refused</td>
</tr>
<tr>
<td>2. Have you ever heard a “cold warning” for your area?</td>
<td>Yes, No, DK, Refused</td>
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<tr>
<td>3. Do you feel sick in your area during the winter months?</td>
<td>Yes, No, DK, Refused</td>
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<td>4. How many people lived in this residence before the event?</td>
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<td>5. How many people slept here last night?</td>
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<td>6. How many people were 65 years or older?</td>
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<td>7. Was anyone injured in this residence due to or since the hurricane?</td>
<td>Yes, No, DK</td>
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<td>8. In your opinion, are there enough medical services available?</td>
<td>Yes, No, DK</td>
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<td>9. Do you have running water?</td>
<td>Yes, No, DK</td>
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<tr>
<td>10. Are the effects of the hurricane preventing anyone in the residents from obtaining medical care?</td>
<td>Yes, No, DK, Refused</td>
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<tr>
<td>11. Do you have access to enough food in the residence (for the next three days)?</td>
<td>Yes, No, DK, Refused</td>
</tr>
<tr>
<td>12. Do you have safe drinking water?</td>
<td>Yes, No, DK</td>
</tr>
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<td>13. Do you have enough clothing?</td>
<td>Yes, No, DK</td>
</tr>
<tr>
<td>14. Is there anything else that is particularly concerning you about an extreme cold event?</td>
<td>Yes, No, DK, Refused</td>
</tr>
<tr>
<td>15. Is there anything else that is particularly concerning you about an extreme cold event?</td>
<td>Yes, No, DK, Refused</td>
</tr>
<tr>
<td>16. Do you have a generator?</td>
<td>Yes, No, DK</td>
</tr>
<tr>
<td>17. Is there anything else that is particularly concerning you about an extreme cold event?</td>
<td>Yes, No, DK, Refused</td>
</tr>
</tbody>
</table>

Now, we would like to ask you some questions about how your household might prepare for a disaster or emergency.
Standardization Procedures

- Standardization increases reliability of data

- Tips for standardization
  - Ask the question in the *same order with exact wording*
  - Don’t prefill questions or finish respondents sentences
  - Read the entire question
  - Record answer verbatim

- Departures from standardization
  - Changing wording = asking different questions
  - If respondents have difficulty....pause!
  - Document any departures
CASPER Sampling (First Stage)
CASPER Phases

- Prepare for the CASPER
  - Determine objectives and assessment area
  - Develop questionnaire and forms
  - Select first stage sample (30 clusters)

- Conduct the CASPER in the field
  - Organize and train assessment teams
  - Select second stage of sample (7 households) in the field

- Analyze the data
  - Calculate weighted frequencies and percentages

- Write the report and share results
Stage 1: Selecting Clusters

- What is a cluster?
  - Mutually exclusive
  - Known number of households

- Census blocks are ideal clusters

- Select with **probability proportional to size**
  - This ensures that clusters with more households have a higher chance of being selected
  - Corrected during data analyses by **weighting**
Stage 1 Overview

- List all census blocks in the sampling frame with their corresponding number of households
  - Download from the Census website
- Number each household
- Randomly select 30 clusters using probability proportional to size (number of households)
  - Some clusters may be chosen twice
- Map the 30 clusters using the Census website or GIS software
Census FactFinder2 Website: County Level

http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml
ArcGIS 10 CASPER Toolkit

- Any sampling frame
  - Not limited to county or groups of counties
  - Can use zip codes, landmarks, disaster track, shapefiles, etc.
  - Contact Amy Schnall (GHU5@cdc.gov) or CASPER@cdc.gov for mapping assistance or toolkit

- Faster, less time-consuming
Example CASPER Cluster Maps
Conducting CASPER in the Field
CASPER Phases

- **Prepare for the CASPER**
  - Determine objectives and assessment area
  - Develop questionnaire and forms
  - Select first stage sample (30 clusters)

- **Conduct the CASPER in the field**
  - Organize and train assessment teams
  - Select second stage of sample (7 households) in the field

- **Analyze the data**
  - Calculate weighted frequencies and percentages

- **Write the report and share results**
Public Notice of CASPER

- Local police department
- Local media
  - Press release, official webpage, social media (NextDoor, Facebook, twitter)

Lake County Public Health officials to conduct CASPER survey to assess emergency preparedness

MONDAY - 16 NOVEMBER 2015 | ELIZABETH LARSON

LAKE COUNTY, Calif. — Lake County Public Health officials are overseeing a first-of-its-kind survey in Lake County that will look at how prepared local residents are for potential disasters.

Later this month the Community Assessment for Public Health Emergency Response — or CASPER — survey will take place in neighborhoods around Lake County, according to Lake County Public Health Office Dr. Karen Taft.

To the best of Taft’s knowledge, Lake County is the first area in California to use the CASPER survey.

“It’s actually something that we’re doing voluntarily,” she said.

The Centers for Disease Control and Prevention’s Division of Environmental Hazards and Health Effects, Health Studies Branch developed CASPER to enable government at all levels to rapidly assess a community’s health needs after a disaster, as well as to measure household preparedness for disasters or emergencies.

In Lake County’s case, Taft said it’s meant to measure preparedness and help her staff know how to best respond in times of disaster to help meet the community’s needs.

Taft, who is overseeing the local work, said that among its many benefits, the CASPER survey is “a rare opportunity for local, state and federal agencies to coordinate at the field level.”

Such work often is challenging and messy in real disasters, she pointed out, so it’s a good practice exercise.

Coming as it does following a summer of wildland fires that threatened Lake County communities, “it’s really perfect timing,” she said.

The survey will take place Monday, Nov. 20, through Wednesday, Nov. 25, in Nice, Lucerne, Clearlake Oaks, Clearlake, Clearlake Park, Middletown, Hidden Valley Lake, Cobb, Lakeport and Kelseyville, according to Taft.

Fifteen two-member survey teams will visit neighborhoods, going door to door, looking to locate survey respondent households within each census block. Taft said team members will have signage on their cars and will carry identification cards.

She said survey team members will include epidemiologists from neighboring counties, state public health personnel, public health students and some of the county’s own public health nurses.

They will be collecting any personal information and will only conduct the work during the daytime, Taft said.

Taft said that at the same time, there will be teams working in some neighborhoods to conduct air quality measurements in order to find evidence of postfire dusting, a phenomenon that’s been seen in parts of the county.

By Friday, Nov. 30, Taft anticipates having some initial analysis completed on the results. “It should be fairly fast,” she said.

How the process works

Taft and her staff began planning for the survey in June. “It’s been a pretty intensive planning process for us,” she said, adding that they’re also getting a lot of input in terms of experience and information.

Lake County Public Health is offering much more local support than CDC is accustomed to, said Taft. “We decided to make it a kind of logistical exercise for ourselves.”

Taft said the CASPER process involves choosing 20 census tracts within Lake County that are weighted toward more populated areas. Seven houses within each tract are then selected at random.

In Forest Valley, where a separate CASPER is being undertaken, 14 households will be canvassed. Taft said...
Just-In-Time Training

- **3-6 hours of training**
  - One day in advance OR morning of first day of the CASPER
  - Supplement to CASPER preparedness training

- **Items to cover**
  - Background and objectives
  - Assessment methodology
  - Roles, responsibilities, and logistics

- **Familiarize teams with forms/materials**
  - Questionnaire, tracking form, etc.
  - Any technology (tablets, GPS, etc.)
CASPER Teams

- 10+ teams of two interviewers
  - 15 or more is ideal
- Team composition
  - Local person
  - Level of experience
  - Diverse (gender, age, race, etc.)
- 1-2 headquarters staff
  - Coordinate field teams and safety
  - Answer field team questions
  - Begin data entry
Safety Briefing

- Watch out for domestic/wild animals
- No trespassing vs no solicitation
- Situation-specific hazards
- Personal safety
  - Entering households
  - Knowing limitations
  - Drinking plenty of water
Supplies and Materials

**FIELD TEAMS**
- Sufficient quantity of all forms and office supplies
- ID/authorization
- GPS or commercial map
- Wireless communication devices
- Car chargers for all devices
- Transportation
- Snacks, water, first aid

**HEADQUARTERS**
- Laptops preloaded with EpiInfo, SAS, or other statistical package
- Team/equipment tracking forms
- Base communication
- Large map of the entire sampling area including clusters
- Internet access (helpful)
- Access to a photocopy machine or printer
Providing Public Health Information

8 TIPS TO CLEAN UP MOLD

1. Cover all objects using plastic covering or homemade coverings made of fabric.
2. Remove all moldy places.
3. Open all windows for several days to dry the area.
4. Mold growth on ducts or air conditioning systems can spread mold to other places in the house.

Eat Safe Food

After a flood or power outage, some food may be safe to eat and should not be thrown out.

Throw out perishable food (such as meat, fish, eggs, milk, and leftovers) in your refrigerator when power has been off for 2 hours or more.

Throw out food that contains ice crystals can be refrigerated or cooled. If not, throw it away.

Do the following with food and containers that may have had contact with flood or storm water:

Throw out those foods:
- Food with unusual odor, color, or texture
- Cans of food containers that are bulging, spotty, or dented
- Food not in waterproof containers or cans
- Food canned at home
- Food in cardboard containers (including juice, milk, and baby formulas)
- Food in containers with screw caps, snap lids, crimped caps, twist caps, flip tops, and snap locs

Throw out those things:
- Wooden cutting boards
- Baby bottles nipples, and pacifiers
- Clean and sanitize things that touch food in a four-step process:
  1. Wash with soap and clean water.
  2. Rinse with clean water.
  3. Sanitize by soaking for 1 minute in a solution of 1 cup of bleach in 5 gallons of cleaning water.
  4. Allow to air dry

When in doubt, throw it out.

For more information on safe food and water after a natural disaster: please visit: www.cdc.gov/disasters/foodwater.html

http://www.cdc.gov/mold/cleanup.htm
Stage 2 Sampling: Systematic Sampling of Households

- Randomly choose a starting point (e.g., intersection, center) prior to heading into the field
- Select the nearest house, then every $n$th house after
- Choose $n$ based on the size of the cluster
  - Look at the approximate number of households found on the map
    - If 23 households, $23/7 = 3$... select every 3rd household
    - If 10 or less households, go to every one!
    - Apartment complexes: each unit is a separate household
  - Once you pick a number, stick to that number!
- The goal is to be sure interviews are spread out across the cluster
Tips: Selecting Households to Interview

- Apartment complexes
  - Approximate number of households by counting on one floor and multiplying by the number of floors
  - High-rises: randomly select 7 floors then get an interview on each floor
  - Mixed clusters: attempt houses first then move to apartment complex
    - Goal is to have interviews spread out in the cluster

- Replacing households only if vacant, refused, or after THIRD attempt with no answer

- Always call headquarters if there are any questions

- REMEMBER TO TRACK ALL HOUSEHOLDS!!!
Exercise: Selecting Households to Interview
Example: Replaced Households
Stage 2: Selecting Households to Interview

- Things to avoid
  - Convenience sampling
  - Target sampling
  - Sequential sampling
  - Poor record keeping

Remember: an individual can choose the clusters, but random selection of households is the responsibility of the whole team!
Stage 2 Sampling Tips

- Systematic sampling of households is always recommended!
- Some exceptions can be made
  - Less than 10 households in the cluster
  - Response urgency and cluster composition
    - Example, Bastrop fires
- Only use sequential sampling when absolutely necessary
  - Take every effort to not target starting point

*REMEMBER: Always track ALL households visited!!!*
Tracking Form

- Used for tracking *every* household that is sampled
- Each cluster is collected on a separate tracking form
- Allows for calculation of response rates
**Community Assessment for Public Health Emergency Response (CASPERS): Tracking Form**

City: Crook ∙ Cluster # (i.e., 1-30): ____ # of Houses in the Cluster ____ ∙ Team: ____________ ∙ Date of Interview: 5/1/2017

**Instructions:** Use one tracking form per cluster. Check where appropriate, but try to choose only one best option for each of the five categories. Go as far down the list as possible for each site you visit. Use neighbors to find information if no resident is available.

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<tr>
<th>Sampled Households</th>
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<td>2) TYPE OF DWELLING</td>
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<td>Single Family Home</td>
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<td>Survey # (i.e., 1-7) from Completed Questionnaire:</td>
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</tbody>
</table>
# Community Assessment for Public Health Emergency Response (CASPER): Tracking Form

**City:** Crook **Cluster # (i.e., 1-30): _____ # of Houses in the Cluster _____ Team: ____________ Date of Interview: 5/ 15.

**Instructions:** Use one tracking form per cluster. Check where appropriate, but try to choose only one best option for each of the five categories. Go as far down the list as possible for each site you visit. Use neighbors to find information if no resident is available.

## Sampled Households

<table>
<thead>
<tr>
<th>Sampled Households</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
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<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
<th>18</th>
<th>19</th>
</tr>
</thead>
</table>

### 1) ACCESS
- House is Accessible
- House is inaccessible

### 2) TYPE OF DWELLING
- No housing structure
- Mobile Home
- Single Family Home
- Apartment or Condo
- Other

### 3) ANSWER
- Door was answered
- Appears home, but no answer
- Appears vacant
- Nobody home
- 1st visit
- 2nd visit
- 3rd visit

### 4) INTERVIEW
- Language Barrier
- Refused to Participate
- Interview begun, not finished
- “Come back later”
- Interview Completed

**Survey # (i.e., 1-7) from Completed Questionnaire:**

---

**Tracking Form**

Make sure to mark every visit!
Tracking Form

Write information to identify households to return to or any notes that you may need to take (e.g., why the household is inaccessible) on the back of the form

Community Assessment for Public Health Emergency Response (CASPER): Notes
Instructions: Use this page to keep notes on which houses may need return visits

Sampled Households
1. 2-story with green roof and rock garden — Spanish, come back after 5:30pm
2. 3 big scary dogs w/no trespassing sign
3.
4. **CALL TONIGHT 9:00pm** - 123.555.4356
5. Red door, large gnome on the porch
6. McMansion on the corner
7. Dark brown with white awning
8.
9. Unique house w/columns in front & Christmas decorations still up
10.
11. 12 flag in window *(go hawks!)* bamboo garden on side
12.
13.
14.
15.
16.
17.
18.
19.
Confidential Referral Form

- Report urgent household need(s)
- May need to pass personal identifying information to the health department or other agency
- Ensure field interview teams know the plan in the event they come across an urgent need
- Should illicit immediate follow up
Sample Completed Tracking Form

Community Assessment for Public Health Emergency Response (CASPER): Notes
Instructions: Use this page to keep notes on which houses may need return visits
Sampled Households:
1. Corner house w/ red door - come back 7pm / call 404.555.5212
2.
3. 4765 - green house - statue
4. no trespassing - big dog!
5.
6.
7. call husband @ 6:30 - 404.555.1373
8. 5233 - white house w/ porch swing
9. halfway down street - 5257 - American flag
10.
11.
12.
13.
14.
15.
16.
17.
18.
19.
Ending the CASPER Interview

- Thank for participation!
- Offer how and when results will be available
- Check the entire questionnaire before leaving
When Teams Return

- Review all forms!
  - Clarify any unknowns in the questionnaire (e.g., missing, illegible)
  - Check correct completion of the tracking form
  - Collect any referral forms
- Return supplies to the team lead
- Enter data (or upload if using technology)
- Check out
Team Member Responsibilities

- Remain flexible – 2 person team
- Think safety
- Understand the objectives
- Adhere to the methodology
  - Map – sample validity
  - Interview – data quality
  - Tracking form – representativeness
  - Data entry - timeliness
- Be respectful
- Understand personal limitations
Analyzing CASPER Data & Interpreting Results
CASPER Phases

- Prepare for the CASPER
  - Determine objectives and assessment area
  - Develop questionnaire and forms
  - Select first stage sample (30 clusters)

- Conduct the CASPER in the field
  - Organize and train assessment teams
  - Select second stage of sample (7 households) in the field

- Analyze the data
  - Calculate weighted frequencies and percentages

- Write the report and share results
Analyzing Data Basics

- Data from the questionnaire can be entered into EpiInfo

- Any statistical software package that allows you to “weight” data is acceptable (EpiInfo, SAS, SPSS)

- Data from tracking form can be entered into any spreadsheet such as Microsoft Excel
Analysis Considerations

- How will the electronic format and the data entry be handled?
- Have you prepared your table shells?
- How will data analysis be conducted?
  - All variables vs selected variables
  - 95% confidence intervals
  - Weighted analysis for population estimates
Analyzing Data: Sampling Weight

\[
\text{(Total number of households in sampling frame)} = \frac{\text{(number of households interviewed within cluster)}}{\text{(number of clusters surveyed)}}
\]

- Numerator will be the same for every household within the assessment area (sampling frame)

- Denominator will differ (potentially) between clusters
  - Ideally 210 (i.e., 7 [households] x 30 [clusters])
  - Obtain information from tracking form
In this example, there were 354,241 total households in the sampling frame and 30 clusters surveyed (see the equation for cell E2 at the top of the page). NOTE: the weight value for clusters 2 and 4 is the same because the same number of interviews was completed in both clusters.
Analyzing Data in Classic Mode

- Recommend classic mode
  - Allows option to use code
Classic Mode: Read Data

- Import your excel file
  - “Read” data option under first folder
  - Ensure “database type” is .XLSX
Classic Mode: Weighted Analysis

- Complex sample frequencies under “Advanced Statistics”
  - May select more than one variable at same time
- Option write code
  - Use program editor at bottom of screen
  - “Run Commands”

Code for CASPER Analysis
FREQ [Variable Name] WEIGHTVAR=aWEIGHT PSUVAR=Cluster
## Example CASPER Presentation Table

<table>
<thead>
<tr>
<th>Primary source of drought information</th>
<th>Frequency</th>
<th>% of HH</th>
<th>Projected HH</th>
<th>Weighted %</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>TV</td>
<td>42</td>
<td>23.3</td>
<td>2,386</td>
<td>24.2</td>
<td>16.6–27.1</td>
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<tr>
<td>Newspaper</td>
<td>40</td>
<td>23.3</td>
<td>2,222</td>
<td>22.5</td>
<td>18.0–27.1</td>
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<tr>
<td>Internet/social media</td>
<td>34</td>
<td>19.8</td>
<td>1,861</td>
<td>18.9</td>
<td>12.1–25.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Preferred communication methods</th>
<th>Frequency</th>
<th>% of HH</th>
<th>Projected HH</th>
<th>Weighted %</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text message</td>
<td>60</td>
<td>34.9</td>
<td>3,203</td>
<td>32.5</td>
<td>23.2–41.7</td>
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<tr>
<td>TV</td>
<td>34</td>
<td>19.8</td>
<td>1,938</td>
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<td>Cell phone call</td>
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<td>16.3</td>
<td>1,510</td>
<td>15.3</td>
<td>10.0–20.7</td>
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</table>

<table>
<thead>
<tr>
<th>Reported barriers to communication</th>
<th>Frequency</th>
<th>% of HH</th>
<th>Projected HH</th>
<th>Weighted %</th>
<th>95% CI</th>
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<tr>
<td>Impaired hearing</td>
<td>28</td>
<td>16.3</td>
<td>1,567</td>
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<td>Impaired vision</td>
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<td>7.6</td>
<td>733</td>
<td>7.4</td>
<td>3.8–11.3</td>
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<td>Difficulty with written material</td>
<td>10</td>
<td>5.8</td>
<td>518</td>
<td>5.3</td>
<td>2.8–8.8</td>
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</table>
Analyzing Data: Tracking Form

- Calculation of these response rates provides an indication of the representativeness of the sample to the population
  - Contact Rate
  - Cooperation Rate
  - Completion Rate
Analyzing Data: Tracking Form

- Enter the tracking form data into spreadsheet
- Calculate totals for each row on the tracking form for each cluster
  - If discrepancies arise, use logic and judgment to rectify
- Calculate totals across clusters
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<th>V</th>
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</tr>
<tr>
<td>Refused to Participate</td>
<td></td>
<td>4</td>
<td>3</td>
<td>12</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>2</td>
<td>169</td>
<td></td>
</tr>
<tr>
<td>Non-resident</td>
<td></td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>No adult over 18 yrs old</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Interview begun, not finished</td>
<td></td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Interview Completed</td>
<td></td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>6</td>
<td>7</td>
<td>5</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>199</td>
<td></td>
</tr>
<tr>
<td><strong>Total HH Sampled/Attempted</strong></td>
<td></td>
<td>20</td>
<td>13</td>
<td>24</td>
<td>17</td>
<td>14</td>
<td>10</td>
<td>16</td>
<td>22</td>
<td>12</td>
<td>18</td>
<td>17</td>
<td>18</td>
<td>490</td>
<td></td>
</tr>
</tbody>
</table>

Contact Rate: 40.6%
Completion Rate: 94.8%
Cooperation Rate: 58.2%
Contact Rate

- The percentage of households that complete an interview after contact is attempted

\[
\text{Number of completed interviews} = \frac{\text{All HUs where contact was attempted}}{} 
\]
Cooperation Rate

- The percentage of households that complete an interview after contact has been made

\[
\frac{\text{Number of completed interviews}}{\text{All HUs where contact was made}} = \text{Cooperation Rate}
\]
Completion Rate

- Number of completed interviews compared to the ideal number of completed interviews
  - denominator usually 210

\[
\text{Number of completed interviews} = \frac{\text{Number of completed interviews}}{\text{Number of interviews intended to complete}}
\]
## Example Response Rates

<table>
<thead>
<tr>
<th>Questionnaire response (n=192)</th>
<th>Percent</th>
<th>Rate</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completion</td>
<td>91.4%</td>
<td>192/210</td>
<td>Total completed/210</td>
</tr>
<tr>
<td>Cooperation</td>
<td>56.5%</td>
<td>192/340</td>
<td>Total completed/total contact made</td>
</tr>
<tr>
<td>Contact</td>
<td>37.1%</td>
<td>192/517</td>
<td>Total completed/total selected</td>
</tr>
</tbody>
</table>
Review: Response Rates

- REVIEW: What are the three CASPER response rates?
  - How do they work together to determine the representativeness of the sample to the population?

- EXAMPLE:
  - 850 households approached (15 inaccessible, 835 accessible)
  - 470 answered doors
  - 210 interviews completed, 260 refused, 3 language barriers
  - What are the response rates? Is the sample representative?
    - $\frac{210}{210} = 100\%$
    - $\frac{210}{470} = 44.6\%$
    - $\frac{210}{850} = 24.7\%$

- QUESTION: Is it better to complete 210 surveys by approaching 800 households OR 200 surveys by approaching 500 households?
CASPER Phases

- **Prepare for the CASPER**
  - Determine objectives and assessment area
  - Develop questionnaire and forms
  - Select first stage sample (30 clusters)

- **Conduct the CASPER in the field**
  - Organize and train assessment teams
  - Select second stage of sample (7 households) in the field

- **Analyze the data**
  - Calculate weighted frequencies and percentages

- **Write the report and share results**
<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Frequency (n=203)</th>
<th>% of HH</th>
<th>Estimated HH</th>
<th>Weighted %</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor mental health</td>
<td>39</td>
<td>19.2</td>
<td>43,073</td>
<td>19.3</td>
<td>13.3-23.1</td>
</tr>
<tr>
<td>Access to Care/Special Needs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not getting medicine</td>
<td>12</td>
<td>5.9</td>
<td>13,253</td>
<td>5.7</td>
<td>1.7-9.7</td>
</tr>
<tr>
<td>Supplemental oxygen needed</td>
<td>6</td>
<td>2.9</td>
<td>6,523</td>
<td>3.1</td>
<td>1.1-7.3</td>
</tr>
<tr>
<td>Pets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have pets</td>
<td>139</td>
<td>68.5</td>
<td>153,515</td>
<td>68.9</td>
<td>57.0-74.8</td>
</tr>
<tr>
<td>Pets prevented from shelter</td>
<td>63</td>
<td>31.0</td>
<td>66,721</td>
<td>31.3</td>
<td>27.4-34.8</td>
</tr>
<tr>
<td>Generator use</td>
<td>115</td>
<td>56.7</td>
<td>121,787</td>
<td>56.7</td>
<td>51.8-60.3</td>
</tr>
<tr>
<td>Indoors/Garage</td>
<td>7</td>
<td>6.1</td>
<td>7,429</td>
<td>6.0</td>
<td>3.9-9.8</td>
</tr>
<tr>
<td>Outside</td>
<td>108</td>
<td>93.9</td>
<td>114,361</td>
<td>93.9</td>
<td>87.0-97.8</td>
</tr>
<tr>
<td>Near open window</td>
<td>6</td>
<td>5.6</td>
<td>6,353</td>
<td>5.5</td>
<td>4.1-9.8</td>
</tr>
<tr>
<td>Have CO detector</td>
<td>75</td>
<td>36.9</td>
<td>79,429</td>
<td>37.0</td>
<td>31.2-44.4</td>
</tr>
<tr>
<td>Working CO detector</td>
<td>49</td>
<td>65.3</td>
<td>51,891</td>
<td>65.1</td>
<td>61.2-72.1</td>
</tr>
<tr>
<td>Source of Drinking Water</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bottled</td>
<td>100</td>
<td>49.3</td>
<td>105,905</td>
<td>49.5</td>
<td>41.3-62.9</td>
</tr>
<tr>
<td>Well</td>
<td>12</td>
<td>5.9</td>
<td>13,297</td>
<td>5.8</td>
<td>1.9-9.8</td>
</tr>
<tr>
<td>Public/Municipal</td>
<td>91</td>
<td>44.8</td>
<td>97,391</td>
<td>45.3</td>
<td>32.1-52.6</td>
</tr>
<tr>
<td>Not treating water</td>
<td>33</td>
<td>36.3</td>
<td>35,317</td>
<td>37.0</td>
<td>29.1-44.8</td>
</tr>
</tbody>
</table>
Example: Results

- ≈43,000 households (19%) reported poor mental health
- ≈13,000 households (6%) are not getting the medication they need
  - ≈6,500 (3%) are not getting the oxygen supply they need
- ≈67,000 households (31%) claimed that owning a pet prevented them from seeking shelter
- Of those using well or municipal water, 37% were not treating
- Of those using a generator, ≈7,500 households (6%) were indoors
  - An additional ≈6,000 (6%) of those using a generator outdoors were outdoor near an open window.
- 37% of households had CO detectors, of which, only 65% were working
ACTIVITY: What Recommendations can be made?

- Deliver risk communication messages about carbon monoxide poisoning
  - Emphasize safe generator and safe kerosene/propane heater use
  - Employ early communication of prevention messages using appropriate media in future
- Respond to the needs of supplemental oxygen-dependent people
- Communicate about available mental health resources
- Develop strategies to address community prescription medication needs
- Consider establishing pet-friendly shelters
- Conduct a follow-up CASPER in three weeks to determine if needs have been met and/or changed
Report Writing Considerations

- Who will draft the written report?
- How will you report the data?
- What are your deadlines?
- Who is your audience?
- How will you present your data?
- What action will be taken based up on the results?
- Who should implement the recommendations?
Who will draft the written report?

- Individual who drafts the report should be involved in all aspects of the CASPER
  - Including preparation phase so understands key objectives
- Can begin to draft the report early
  - Background and methods are known prior to fieldwork
  - Table shells can be created to save time
    - During analysis only need to “plug in” numbers
How will you report the data? What are your deadlines?

- **Recommend two reports: preliminary presentation and final report**
  - **Preliminary presentation**
    - Conducted within 36 hours of data collection
    - Include select preliminary key data
    - Presented to stakeholders for immediate action
  - **Final report**
    - Full report structure and include all data tables
    - More accurate and detailed; time for data cleaning
    - Widely distributed, potentially via publication
Who is your audience? How will you present your data?

- May have more than one audience
  - Emergency managers
  - Epidemiologists
  - Politicians
  - Media

- Data presentation
  - Simple, easy-to-read format
  - Tables or graphically

- Link to original objectives
What action will be taken based up on the results? Who should implement them?

- Stakeholders that will play a key role in implementing any recommendations based on CASPER data should be involved beginning in the preparedness phase.
- During the preliminary report presentation, encourage conversation on how best to implement action:
  - Assign roles, when possible, for actionable items.
CASPER Review

- Quick, inexpensive, and flexible household assessment
- Valid and reliable methodology
  - Designed to provide population estimates
- May be used throughout disaster cycle or in non-emergent situations
Common CASPER Questions
Common CASPER Questions

- What type of information can CASPER collect?
- How is CASPER different from other epi investigations?
- How is CASPER different from other rapid needs assessments?
- Can I replace a cluster?
- Can I replace a cluster if it is in a bad neighborhood or I know I won’t have access to it?
- What do I do with a cluster with accessibility issues (e.g., gated community, apartments)?
What type of information can CASPER collect?

CASPER collected *household-based* information. It is designed to give a general estimate of the needs of the community. A CASPER may collect information on household status; physical and behavioral health; knowledge, opinions, and beliefs at the household level; and other household-level topics.
How is CASPER different from other epi investigations? How is CASPER different from other rapid needs assessments?

CASPER uses an epidemiologic technique – cluster sampling. A CASPER is a type of Rapid Needs Assessment (RNA). An RNA is a systematic process of information collection and analysis regarding the type, depth, and scope of a problem. Information is collected and generated ideally within 5 days (~1 day to few weeks).

There are many forms of RNAs used in disaster response. Some examples include:

- International Federation of Red Cross and Red Crescent Societies (IFRC) Rapid Assessment
- Federal Emergency Management Association (FEMA) Preliminary Damage Assessment or “windshield” survey
- United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA) Multi-sectoral Initial Rapid Assessment (MIRA)
- Inter-Agency Standing Committee (IASC) Initial Rapid Assessment (IRA)
Can I replace a cluster? Can I replace a cluster if it is in a bad neighborhood or I know I won’t have access to it?

One clusters are selected, you *can not* replace them; replacement will negatively affect the representativeness of the data.

If you are concerned that entire clusters may be inaccessible due to storm damage or restricted entries, you may consider increasing the number of clusters selected *a priori*. If this is chosen, it is essential that teams then visit ALL selected census blocks and treat the design as a modified CASPER (e.g., 35x7 = goal of 245 interviews).
What do I do with a cluster with accessibility issues (e.g., gated community, apartments)?

As clusters as selected prior to going into the field, you will have an idea of potential accessibility issues. You may attempt to contact the homeowners association (HOA) or property managers of gated communities and apartments beforehand to let them know of the upcoming CASPER and to gain access.
CASPER Modifications
Modified CASPER methodology

- Some situations where traditional 30x7 cluster design may not be feasible or ideal
  - Clusters with destroyed households
  - Low number of households within sampling frame
  - Sampling frame that is both urban and rural
  - Need for individual-level questions

- Modified CASPERs are allowed, but *must be recognized as modified*
Modified CASPER: Clusters with destroyed households

- If a sampling frame potentially has many destroyed households (e.g., fire, tornado), you may want to increase the number of clusters **PRIOR to going into the field**
  - For example, 35x7 or 40x7 design
  - **MUST GO TO ALL CLUSTERS!**
    - Goal will be 245 or 280, respectively

- This *will* help with the power of your data, but *will not* increase your response rates
“Modified CASPER”: Low number of households

- Some situations where a sampling frame is very small or within a rural area with limited number of households

- Cluster methodology may not be appropriate in these situations
  - Not enough clusters with 10+ households

- Contact HSB for help with a new sampling methodology
  - Options include stratified sampling, simple random sampling, systematic sampling, etc.

- A change in methodology from cluster sampling means this is no longer considered a CASPER or modified CASPER!
  - However, you can use the same principals for implementation (e.g., JIT training, team composition, tracking form)
Modified CASPER: Urban and rural area

- Some counties are both urban and rural
  - Traditional design may oversample the urban, leaving limited/no clusters in the rural area

- Modified CASPER to a three-stage sampling design
  - Stage 1: stratify area into “urban” and “rural”
  - Stage 2: select clusters from strata (e.g., 23 from urban, 7 from rural)
  - Stage 3: systematically select households within clusters
  - Analysis: weight calculation takes into account the number of households and number of clusters selected in the two strata

- This is considered a “modified CASPER” as it still retains the cluster sampling methodology
Modified CASPER: Urban and rural area analysis

- X county USA is conducting a CASPER but wants to ensure representation from the large town as well as the rural areas

- **Stage 1: Divide X county into 2 strata**
  - Strata 1: Urban – defined as Y city limits. 23,000 households
  - Strata 2: Rural – defined as outside of Y city limits. 2,500 households

- **Stage 2: Select clusters from each strata probability proportional to size**
  - Strata 1: selected 20 clusters, probability proportional to size
  - Strata 2: selected 10 clusters, probability proportional to size

- **Stage 3: Select 7 households systematically in each cluster**
  - Urban: Cluster 1 had 7 total surveys completed
  - Rural: Cluster 23 had 6 total surveys completed

- What is the weight?
Modified CASPER: Urban and rural area analysis, cont.

- **Example Summary**
  - Strata 1: Urban – 23,000 households, 20 clusters, Cluster 1 = 7 surveys
  - Strata 2: Rural – 2,500 households, 10 clusters, Cluster 23 = 6 surveys

- **Weight formula**
  
  \[
  \text{Weight} = \frac{(\text{Total number of households in Strata})}{(\text{number of households interviewed within cluster}) \times (\text{number of clusters in strata})}
  \]

- **Example weight:**
  - Urban: \( \frac{23,000}{20 \times 7} = 164.29 \)
  - Rural: \( \frac{2,500}{10 \times 6} = 41.67 \)
Modified CASPER: Individual-level questions

- Can you ask individual level questions in a CASPER?

Yes! HOWEVER, you **MUST** modify the analysis for these questions
Modifying CASPER for Individual Questions

- **Planning: Questionnaire development**
  - Must ask how many people are in the household
  - Majority of questionnaire (~90%) should be at the household level
  - Only do individual level questions when absolutely needed
    - If can modify to household, use household!

- **Conducting: Interview in the field**
  - Must select the individual in a systematic way (e.g., adult in household with the next birthday)

- **Analyzing: Weighted data analysis**
  - Must create a second weight for individual data
Individual Data Weight

- Probability that the individual is selected from the household
  - MUST have how many individuals live in the selected household!

\[
\frac{\text{(Total number of households in sampling frame)} \times \text{(Total number of individuals in household)}}{\text{(number of households interviewed within cluster)} \times \text{(number of clusters surveyed)}}
\]

- Numerator will be the DIFFERENT for every interview within the cluster
- Denominator will be the SAME as for household weight
Example: Individual Data Weight

- Traditional CASPER (30x7 design) conducted in Austin CASPER
  - 211,939 total households
  - 203 interviews completed

- Cluster 1 had 6 interviews completed

- Household 1 within Cluster 1 had 5 household members

- What is the HOUSEHOLD weight? \( = \frac{211,939}{30 \times 6} \) or 1,177.44

- What is the INDIVIDUAL weight? \( = \frac{211,939 \times 5}{30 \times 6} \) or 5,887.2
Individual Data: FAQs

- How many individual questions can I use during a CASPER?
- What is more important – using exact wording of previous CASPER questions or asking household level questions?
- When are individual level questions permissible/recommended?
Developing Questionnaires in EpiInfo 7
Create a New Project

Name your project, select the desired save location, name the form, and click OK.
Creating the Title and Instructions

Right click on the form and select “New Field” to bring up field options. Select **Label/Title**
Creating the Title and Instructions

Type your text and provide a Field Name. Use **Label/Title** for writing text only (not for data entry).
Creating the Title and Instructions

Click **Font** if you would like to change the font style/size.
Variables: Date

Right click on the form and select "New Field" to bring up field options. Select **Date**
Variables: Date

Type the question in the “Question or Prompt” box.

Click “Range” to set specific data range “allowable” to prevent data entry error.

Select date format
Variables: “Check All That Apply”

Right click on the form and select Label/Title
Variables: “Check All That Apply”

Type your question prompt in the box and give a field name (we recommend the format question number then descriptor. For example, Q2_Language)
Variables: “Check All That Apply”

Use **Checkbox** for questions that specify “check all that apply”
Variables: “Check All That Apply”

Example Questionnaire

Q1. Date: MM-DD-YYYY

Q2. What languages does your household speak?

Write the first response option in the Question or Prompt section.
Variables: “Check All That Apply”

Repeat steps until all options are listed. In this example, Q2 would have 3 response options (variables): “English”, “Spanish”, and “Other”
Variables: Check One Response

Use Legal Values for questions that ask for one response only
Variables: Check One Response

Click on the “…” to create drop-down menu of response options.
Variables: Check One Response

Select “Do not sort” to keep the options in the order written

Type all response options

Click “Create New” to create response options
Variables: Check One Response

Example Questionnaire

Q1. Date: [MM/DD/YYYY]

Q2. What languages does your household speak?
   - [ ] English
   - [ ] Spanish
   - [ ] Other

Q3. Type of structure:
   - [ ] Single family
   - [ ] Multiple unit
   - [ ] Mobile home
   - [ ] Other

Your options will appear in a drop-down box
Variables: Open-Ended

Use **Text** for open-ended questions such as specifying an “other” option.
Variables: Open-Ended

Write your prompt and field name (e.g., Q3_OthSpecify) then click OK
Select the Template you would like to use under the Templates list. **DRAG and DROP** in the form.
Using Templates

You can modify the template by selecting variables and moving them or deleting them.
Checking the Tab Order

Right click on the form and select “Tabs” then Show Tab Order
Checking the Tab Order

If something is out of place, right click on the form, select "Tabs" then Start New Tab Order.
Completing the Questionnaire

Click on “Tools” and select “Create Data Table” when your form is complete.
Completing the Questionnaire

Example Questionnaire

Q1. Date

Q2. What languages does your household speak?

English

Q3. Type of structure

Other, specify:

Does your household have any of the following emergency plans?

Emergency communication plan such as a list of numbers and designated out of town contacts?

Designated meeting place immediately outside your home or close by in your neighborhood?

Designated meeting place outside your neighborhood in case you cannot return home?

A data table has not been created for this form. Would you like to create the data table?

Click Yes
Completing the Questionnaire

Click OK
Form Creation Tips

- Title/label (text only, not for data entry)
- Legal values (check one)
- Check boxes (check all that apply)
- Dates (can restrict to specific date range)
- Numbers (can restrict to # digits)
- Text (open-ended answers)
- Check tab order at the end
- Create data table before entering data