


**Survey Basics**  
***Designing and Administering***  
***Useful Surveys***

Sponsored by:  
Illinois Public Health Institute (IPHI)  
Illinois Department of Public Health (IDPH)



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**Trainer**

Chris Giangreco, PhD

*If you have questions for the trainer,  
please email Laurie Call at  
laurie.call@iphionline.org*



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**Training Objectives**

1. Understand the basic components of developing a survey
2. Learn how to test a survey for cultural appropriateness
3. Assess the use of survey questions for gathering appropriate data
4. Explore the importance of collection, analysis, and reporting survey results
5. Apply the use of an online, web-based survey tool



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### Training Layout:

- Introduction & Basic Definitions
- Preparing
- Writing
- Testing
- Administering
- Analyzing & Presenting Findings
- Using Web-based Survey Tools




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### What is survey research?

- A method of gathering information from a sample of individuals by a standardized procedure so that every individual is asked the same question in more or less the same way.
- Surveys are used to obtain a composite profile of a population through the use of a representative sample of said population.
- Surveys can be self-administered or administered by a researcher.




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### General Benefits & Barriers of Using a Survey

Benefits	Barriers
Relatively inexpensive	Relies on common knowledge
Reach large population	Inflexible
Reach remote populations	Appropriate sample
Standardized responses	Limited chances for clarification
Privacy can be assured	Cannot deal with context




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## Types of Surveys

- Written Surveys
  - Mail survey
  - Face-to-face surveys
- Oral Surveys
- Electronic Surveys



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## Written Surveys

- Written surveys are self-administered by the respondent after the document has been transmitted in some fashion from the researcher to the respondent. One example is the Census Bureau's decennial general survey (SF1).
- They are considered to be less personal, and can be used to collect more sensitive information, especially if collected confidentially or anonymously.



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## Written Surveys

- Mail
  - Benefits: cost, convenience, bias, sample size
  - Barrier: response rate, ability for respondents to answer correctly
- Group administered
  - Benefits: response rate, sample specificity
  - Barrier: small sample, scheduling



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## Oral Surveys

- Oral surveys are administered by a researcher, where the questions and answer options are read out loud to the respondent. Some examples are phone surveys and in-person questionnaires.




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## Oral Surveys



- Benefits:
  - Personal Contact
  - Response Rate
- Barriers:
  - Cost
  - Bias
  - Limited question responses
  - Attitude




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## Electronic Surveys

- Electronic surveys are a relatively new form of survey research using email or web-postings to collect respondents' feedback.
- Research is still being developed on the use of electronic surveys. Some emerging findings:
  - Electronic surveys are best used on specific populations that have easy access to the technology needed to conduct surveys.
  - Because of "spam" problems, it is important to notify respondents of the survey before it is administered.
  - Electronic surveys are not useful for conducting surveys on "strangers" or those unfamiliar with the researcher or organization administering the survey.




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## Electronic Surveys

- Benefits:
  - Cost
  - Ease of Analysis
  - Faster Transmission
  - Ease of respondent preparation
  - Higher response rate
  - More candid responses
  - Quicker response time
  - Wider magnitude of coverage
- Barriers:
  - Sample limitations
  - Lower level of confidentiality
  - Layout & presentation limitations
  - Additional orientation/ instructions needed
  - Response rates plummet as time expands
  - Technical problems interfere



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## Exercise

- Let's look at some scenarios to review what type of surveys would work best for the situation:
  - Written
  - Oral
  - Electronic



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## Exercise

1. You want to examine the exercise habits of women over 65 years old in your community.
2. You need to determine the average household expenditure on fruits and vegetables in your community.
3. You wish to understand the reasons why staff at the local health department go to the doctor.
4. You need to examine the incidence of diabetes in your community.



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## Preparing the Survey

- Define your research question:
  - What is the purpose of the survey? What do you want to know from your respondents?
- Assess the Cost:
  - How much money, staff time, and materials are available to conduct the survey?
- Determine the use of existing resources:
  - Assess the relationships and networks available that can help administer the survey, especially for non-traditional groups.
- Understand your respondents:
  - How would the target population respond to the survey? Do you have access to the appropriate respondents?
- Look at other surveys – borrow



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## Reliability & Validity

- Reliability - instrument and procedures yield the same results in repeated trials
  - Measurement and process quality
- Validity – degree to which the study accurately reflects the specific concept measures
  - External validity: generalizable results
  - Internal validity: rigor, conduct, and relationship of findings



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## Writing the Survey:

- Question Types
- Format
- Wording
- Content
- Order
- Pretesting



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### Question Types

- Open-ended questions:
  - “What do you think is the most important public health issue facing our nation?”
- Closed-ended questions
  - “Rank the following public health issues in order of impact on our nation”
    - Access to health care
    - Quality of providers
    - Cost of care
    - Racial & ethnic make-up of providers



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### Question Types

- Ranking (e.g. Likert-scale)
  - How important is exercise to a healthy lifestyle?  
1) Very important; 2) Important 3) Not important
  - Rank from 1-3 the impact of the following on your eating habits:
    - Cost
    - Availability at local store
    - Health impact
- Numerical
  - How many times in a week do you go to the grocery store?



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### Question Types

- Multiple Choice
  - Why do you eat fruits and vegetables?
    - They are good for my health.
    - I enjoy their taste.
    - They are the only food I can afford.
- Categorical (Nominal)
  - Chose the following that best describes your gender:
    - Male
    - Female
    - Transgendered



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### Question Format

- Split or unfolding questions
- Funneling questions
- Factorial questions



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### Wording

- Direct
- Simple
- Specific
- Discrete
- Culturally appropriate



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### Content

- Elicit response you desire?
- Necessary?
- Topic need multiple questions?
- Need context for appropriate answers?
- Succinct, but robust?
- Would you answer the survey?
- Would the respondents answer the survey?



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### Order

- Warm-up questions at the beginning
- Avoid starting with open-ended questions
- Create question “sets”
- Ease into sensitive questions
- Use transition questions
- Put the most important questions near the middle.



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### Review & Exercise

1. Do you smoke cigarettes or chew tobacco when you play sports?
  1. Yes
  2. No
2. How many times a week do you see advertisements for tobacco?
3. Most athletes do not smoke cigarettes. What sports do you play?
  1. Tennis
  2. Golf
  3. Soccer
  4. Volleyball



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### Pretesting

- Giving the survey to a “stranger”
- Conducting informal interviews
- Holding a focus group
  - Test language & concepts



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### Assuring Cultural Appropriateness

- Translation needed?
  - Done by a certified (medical) translator
- Gender & race neutral questions
- Steer clear of judgments and assumptions
  - If in doubt, use open-ended questions
- Avoid questions that could lead to social desirability bias




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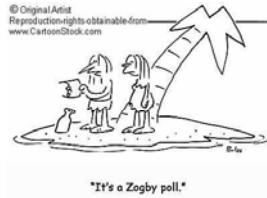
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### Sampling

- Nonprobability
  - Purposive
  - Volunteer
  - Quota
- Probability
  - Simple random




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### Administering the Survey

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| <ul style="list-style-type: none"> <li>• Written:           <ul style="list-style-type: none"> <li>– Introductory letter</li> <li>– "Reward"</li> <li>– Self-addressed, stamped envelope for collection</li> <li>– Follow-up mailings with the survey to improve response rate</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>• Oral           <ul style="list-style-type: none"> <li>– Appearance: dress, voice, approach for the target population</li> <li>– Avoid wasting time</li> <li>– Professional &amp; serious</li> <li>– Time and location suitable for target population</li> </ul> </li> </ul> |
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## Survey Responses

- Nonresponse errors
- Response errors

*Savage Chickens* by Doug Savage



EMPLOYEE SATISFACTION SURVEY


1. I LOVE MY JOB.  DISAGREE  AGREE

2. MY COMPANY ROCKS.

3. I BELIEVE THIS SURVEY IS AN IMPORTANT.

4. I AM COMPLETELY STUNNED.

©2004 by Doug Savage



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## Analyzing the Results:

- Choose a database
- Create a codebook
- Clean the data
- Run statistics
  - Charts/ graphs
  - Aggregates
  - Averages

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87% OF THE 56% WHO COMPLETED MORE THAN 23% OF THE SURVEY THOUGHT IT WAS A WASTE OF TIME



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## Reporting the Results:

- Introduce the research question
- Explain the use of the survey method
  - Justify the sample
  - Describe how the survey helps answer the research question
  - State any limitations
- Present the data



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## Reporting Examples

- Explain the context/issue that justifies the finding: Fruits and vegetables are expensive in our community, keeping people from eating them.
- 57% of people surveyed said they don't buy fruits and vegetables because they are too expensive.
- 78% of people reported that they would buy more fruits and vegetables if they were less expensive.
- State the finding: The reduction in the cost of fruits and vegetables in our community would likely increase residents consumption of them.




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## Using an Electronic Survey

- Sample representative-ness
- Data analysis
- Confidentiality vs. Anonymity
- Responsible quotation




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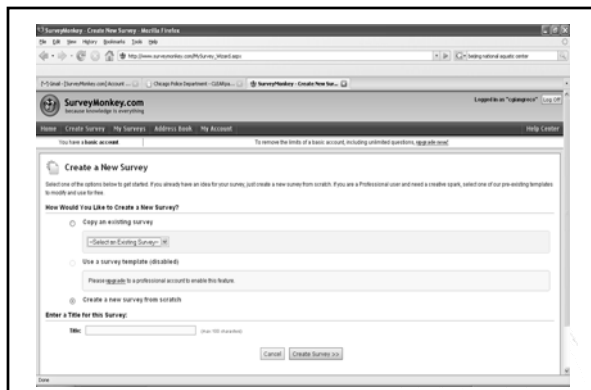
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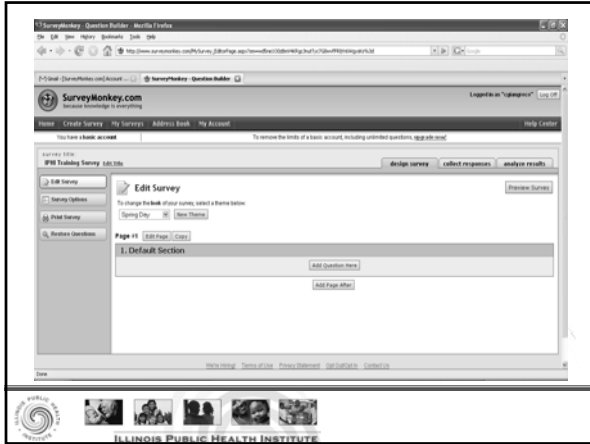
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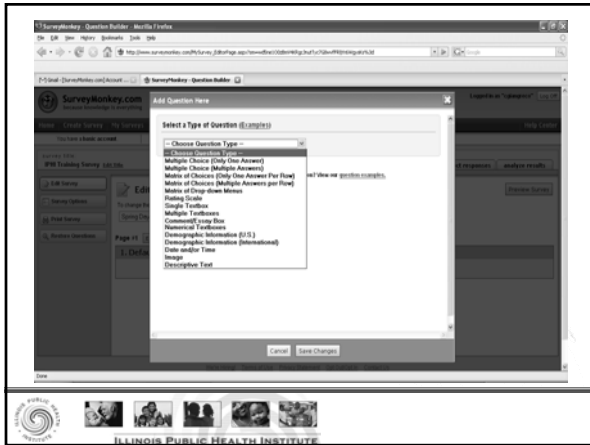
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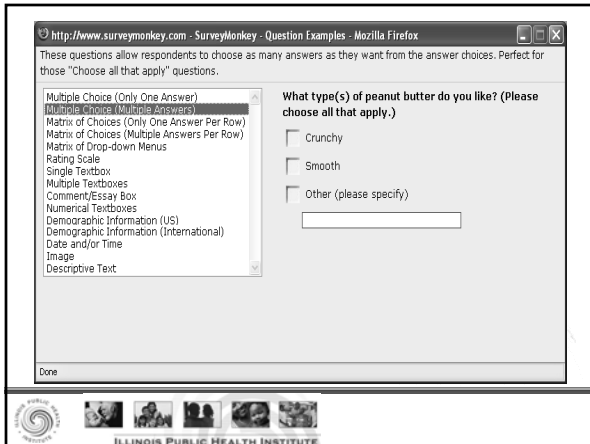
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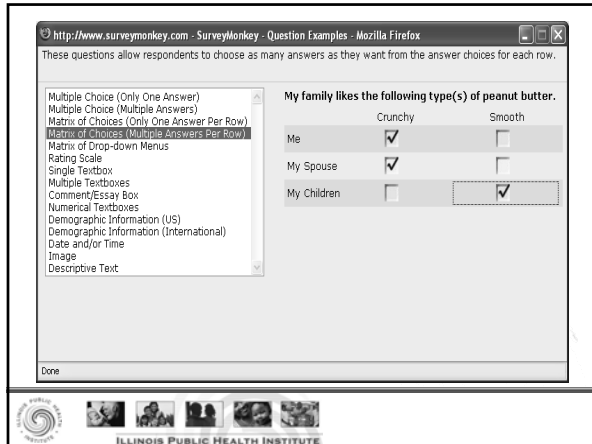
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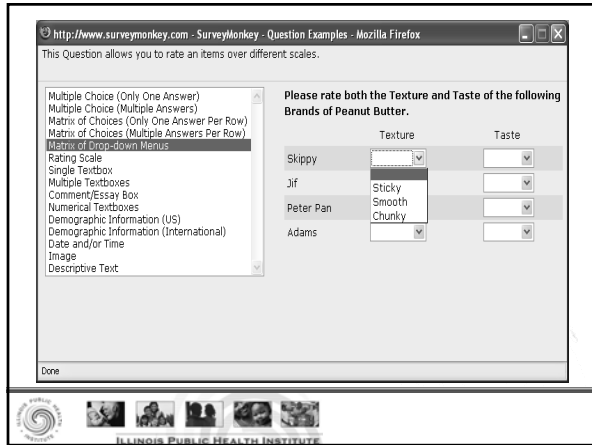
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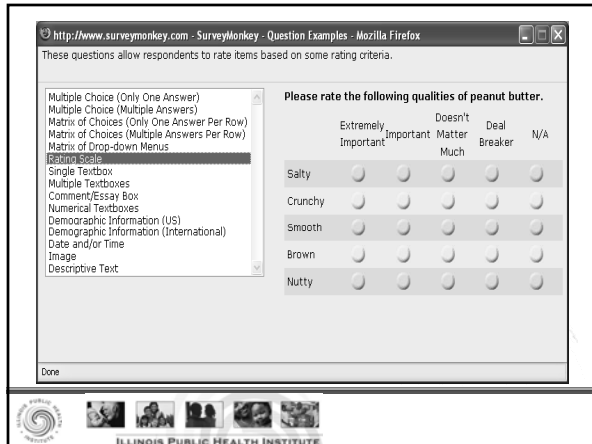
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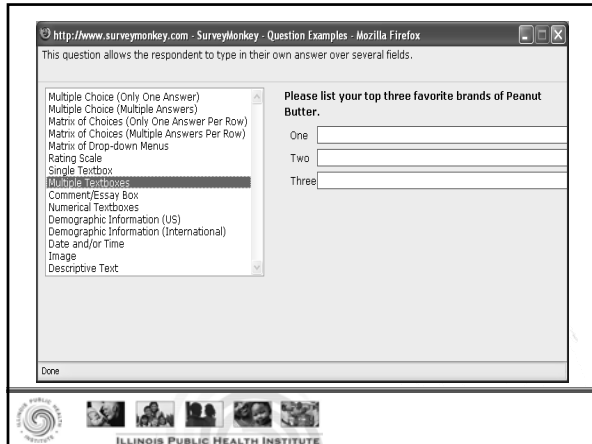
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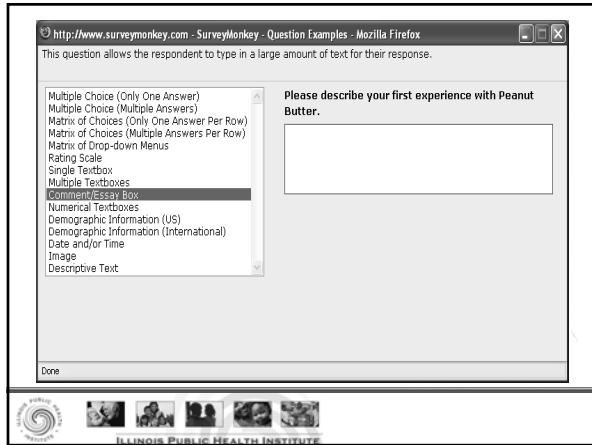
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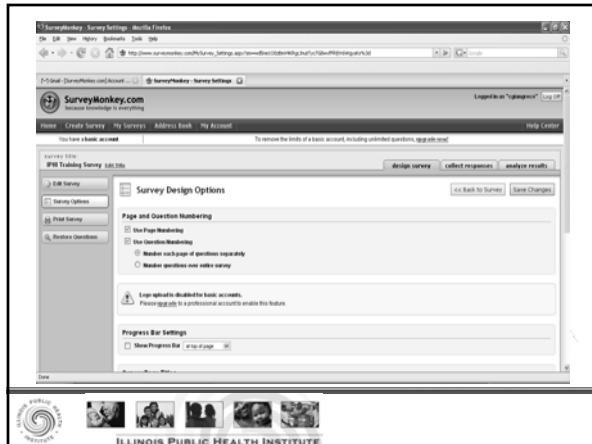
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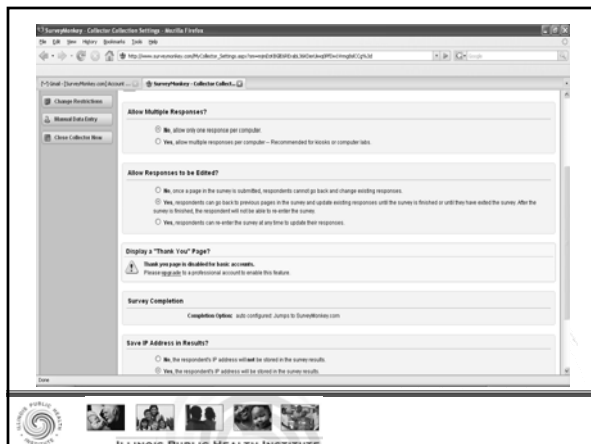
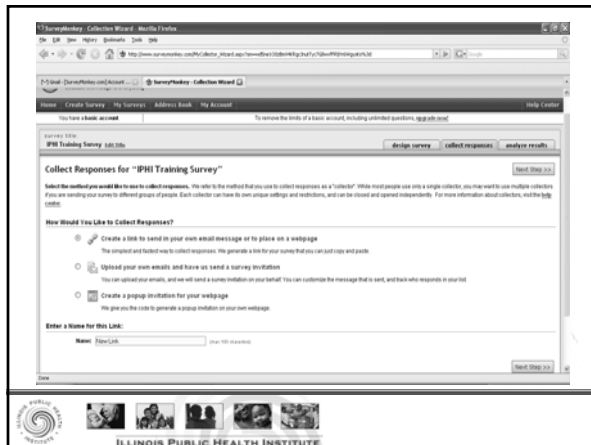
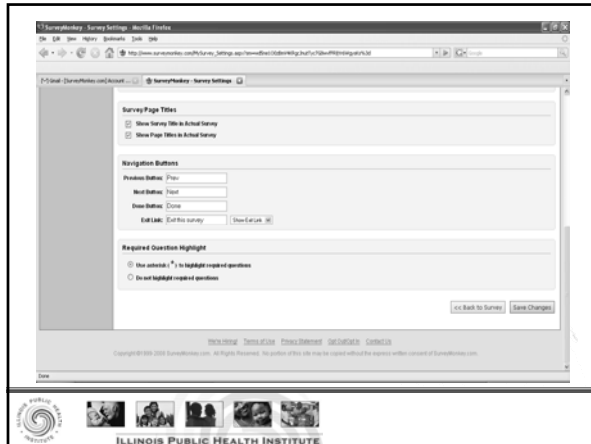
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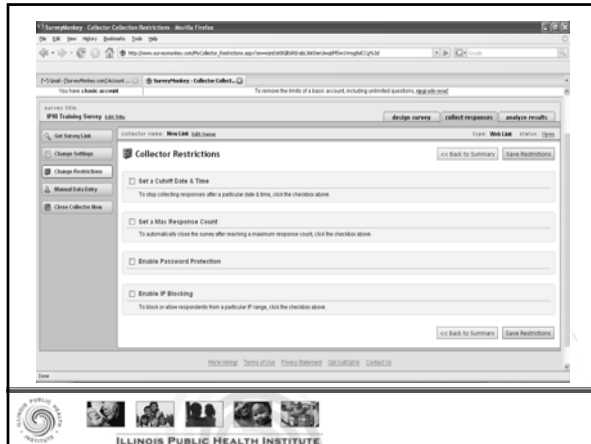
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### Online Resources:

- [www.communitydevelopment.uiuc.edu/commsurvey](http://www.communitydevelopment.uiuc.edu/commsurvey)
- [www.whatisasurvey.info/](http://www.whatisasurvey.info/)
- [www.managementhelp.org/evaluatn/questnrs.htm](http://www.managementhelp.org/evaluatn/questnrs.htm)
- [www.statpac.com/surveys/](http://www.statpac.com/surveys/)
- [writing.colostate.edu/guides/research/survey/index.cfm](http://writing.colostate.edu/guides/research/survey/index.cfm)
- [members.tripod.com/~frede\\_dast/conseil1\\_a.html](http://members.tripod.com/~frede_dast/conseil1_a.html)

*All links will be provided on the IPHI web-site.*




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### Feedback

- Your feedback is VERY important. Please complete the online evaluation survey. The link was provided in your confirmation email and can be found on the next slide.
- If you registered for a group, please ask all participants to complete the evaluation also.
- We will use this information to plan future sessions and continually improve.




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### Evaluation Link

[http://www.surveymonkey.com/s.aspx?sm=51aXqtg0NwQy\\_2fzasY2sP\\_2bA\\_3d\\_3d](http://www.surveymonkey.com/s.aspx?sm=51aXqtg0NwQy_2fzasY2sP_2bA_3d_3d)



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### Question and Answer Session

- Please join us now for a LIVE Q & A session with the presenter:
  - Dial 1(877) 411-9748
  - Enter the access code: 3467868#
  - Mute your phone (\*6 to mute or un-mute).
- If you have a question that is not addressed on the call, please email the question to [laurie.call@iphionline.org](mailto:laurie.call@iphionline.org).



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**THANK YOU**



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