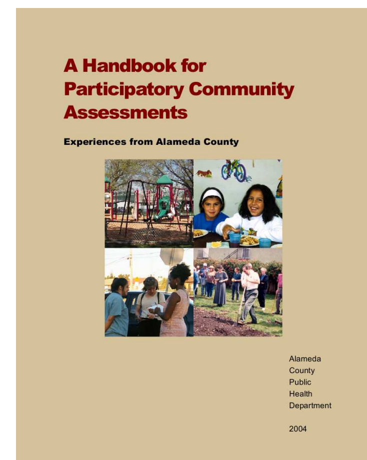
2

Community Assessments for Public Health Preparedness

A community assessment is an important tool to improve public health emergency preparedness, surveillance, response, and recovery capabilities. Communities are diverse and constantly changing. Health departments can use community assessments to assess needs and assets; to measure attitudes, beliefs, and behaviors; and to improve and target services. Information collected in multiple ways informs the strategies for developing mass vaccination campaigns and enhancing preparedness.



“A Handbook for Participatory Community Assessments: Experiences from Alameda County.” This publication from the Alameda County Public Health Department is an excellent resource to build and expand upon the core concepts presented in this toolkit.

2.1 Community Assessments

Understanding where our own vaccination assessment activities fit into a larger framework helps ensure that our data collection methods are consistent and that we use information properly (Figure 2.1).

The goal of the assessment, the type of data being collected (quantitative vs. qualitative), and the intended audience for the results guide which method to use. We use community surveys for collecting descriptive data about opinions, attitudes, and feedback. Surveys can be geared towards an internal audience and do not require formal statistical analysis. In contrast, academic research is often focused on testing a specific hypothesis and requires significant statistical knowledge to interpret and present results to an external audience, such as a peer-reviewed journal. In this toolkit we cover three data collection methods (key informant interviews, focus groups, and surveys) with the goal of understanding trends and attitudes and using this information to improve vaccination campaigns and public health preparedness.

2.2 Key Informant Interviews

A key informant interview is an in-depth conversation with an expert on a particular topic. When we focus our key informant in-

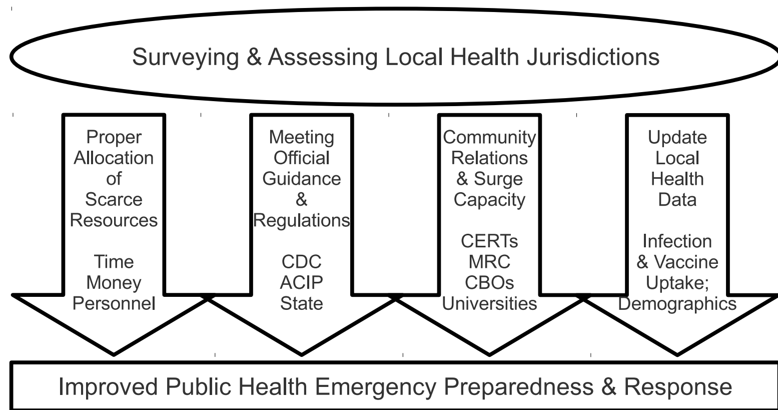


Fig. 2.1. Community assessments and public health preparedness

terviews on the topic of vaccination our "experts" can range from public health nurses to local religious and community leaders. The interviews we conduct can inform our decisions about vaccination campaigns by providing background information about past vaccination efforts, opinions from community leaders about how to effectively communicate with community members, and advice from experts in the field of immunization.

Learning Objectives

By the end of this section of the SPIVA Toolkit, you should be able to:

- Discuss key informant interviews as a viable data-collection method in community assessment;
- Identify how key informant interviews may be used in planning for seasonal and pandemic influenza campaigns; and
- Discuss how local health department staff may use key informant interviews for infectious disease emergency preparedness.

Key informant interviews are an efficient method for collecting reliable data that we can use to directly inform our public health programs, as well as improve the design of other data collection methods such as focus groups and surveys. While interviews are generally the simplest of these three data collection methods, a hastily conducted interview will not yield the quality information needed to improve a vaccination program.

A key informant interview is distinctive from another type of interview in that it is semi-structured. The interviewer conducts the interview to satisfy the pursuit of information. The interviewee is someone deemed to have expertise acquired formally or informally. The interviewee is "expert" and "key" in providing information. There is

generally pre-planned use of the expert's input, opinions, and recommendations to guide the development of additional data collection and assessment procedures.

Helpful Tips for Identifying "Key Informants"

- Who are the newsmakers? Peruse community papers, reports by community-based organizations; scan e-newsletters for names of those "in the know."
- Who is repeatedly named when your topic of interest comes up in discussions? Trust others to pinpoint prospective key informants.
- Who has established name recognition and is immersed in your topic of interest? Ask colleagues, community residents, and those acquainted with your subject of inquiry.

An example of using members from community-based organizations as key informants is the work of the Old North State Medical Society in North Carolina. This group convened the "Disparity Prevention Team"—a team of diverse leaders of communities of color to advise public health and emergency preparedness officials on necessary steps that assure every reasonable level of preparedness in the event of a pandemic flu outbreak or other natural or manmade disaster.[1]

The key informant interviews, with members of the Disparity Prevention Team, were the first of a two step process to collect primary data from African Americans, American Indians, and Hispanic/Latinos about communication needs during an influenza pandemic. The goal was to interview key individuals in leadership roles about their opinions concerning best practices in communicating with hard to reach racial minorities—African Americans, American Indians, and Hispanics/Latinos. It was very important to solicit their views about possible strategies, and concerns about reaching the hardiest to reach in each ethnic group.

2.2.1 Purposes of Key Informant Interviews

Among the purposes are:

- To gauge the level of familiarity of an issue or topic within a community

[1] Sources: Old North State Medical Society (nd).Overview of Key Informant Process. http://www.cidrappractices.org/files/174/174_keyinformant_process.doc and Promising Practices, Pandemic Influenza Disparities Prevention Initiative (NC). http://www.cidrappractices.org/practices/education-resiliency/community/resource/174;jsessionid=48F2A92CF1ABAF0201ACFFA586C3AE90 Accessed 9/27/10

- To identify who else among a community ought to be included in an assessment
- To gain insights culled from others' experience
- To evaluate products or practices prior to general dissemination

One should identify the goals for conducting key informant interviews, develop a protocol that includes their purpose, pertinent questions, and a follow-up procedure.

Steps for Planning Key Informant Interviews

- Schedule the interview at a time that is convenient for the interviewee.
- Determine the duration of the interview after pre-testing the questions and anticipated length of time for interviewee responses.
- Make explicit the purpose of the interview.
- Follow a set policy on confidentiality and data use.
- Be open to making available the interview questions in advance of the scheduled interview to allow the interviewee to research or prepare his or her responses.

We should remember to consider the following questions when planning our key informant interviews:

- Who will we interview and how many interviews will we conduct?
- How will we structure the interview? Will it be formal or informal?
- What questions will we ask in the interview? Questions can be related to experiences, feelings, opinions, or knowledge.
- Will we conduct the interview in-person, over the phone, or via a web-conference?
- How will we analyze the information we collect? Conversations can be reviewed for patterns, key words, recommendations, the tone and intensity of the interviewee, emphasis placed on specific topics or subtopics, and the absence of particular language or expressions
- How will we use the results? Were new questions raised through the information that was collected and analyzed?

Considering the number of ways that we could answer these questions, it becomes clear that conducting two separate interviews with the same person about the same topic could still yield very different results depending on the structure of the interview and the wording of the questions. When we interview a number of individuals about the same topic we want to standardize our interview format and list of questions to ensure that we are collecting information in the

same manner each time. Therefore, planning to include key informant interviews as a data collection method for community assessment requires a written protocol. This protocol ordinarily describes the eligibility criteria for inclusion of key informants in an assessment. The protocol also lists the open-ended, introductory, general, and probing questions for more in-depth inquiry. In order to ensure the integrity of the information we collect we should consider the following:

- Keep interview formats the same for all interviews in terms of formality, method of communication, and questions asked.
- Pilot-test questions beforehand with co-workers or others with knowledge of the subject matter to ensure that questions are clear and free of bias.
- Always keep in mind the goals and objectives of the interview. Stay focused on the answers being sought from the interviewee.
- Take thorough notes, and if possible, make an audio recording of the interview (with the subject's permission). It may help to have a second interviewer present to assist with these functions.
- Be courteous, encouraging, and attentive during the interview. Always be sure to express your thanks and appreciation for the person's contribution to your work.
- Obtain permission to contact the individual with follow-up questions, or to clarify answers to questions asked during the interview.

Typically, key informant interviews are structured to some extent. A means for structuring the interview entails drafting an interview protocol. A sample outline of a protocol for key informant interviews appears below:[2]

1. Introduce your self as the interviewer.

> Example: Hello, my name is ____. I will be interviewing you today.

2. Reconfirm the availability of the interviewee's uninterrupted time.

> Example: Is this still a good time for this interview? I estimate it will take at least a half-hour.

3. Begin the interview with a brief statement of the sponsor and purpose of the interview.

> Example: This interview is sponsored by SPONSOR NAME. The purpose of the interview is to better understand the viewpoints of vaccination clinic supervisors, with at least three

[2] In the sample outline the eligibility criteria for key informants have been subsumed in the example purpose statement.

years of public health experience, about encouraging clinic staff to get vaccinated.

4. Request permission to audio-record the interview or otherwise record responses.

Example: I will be taking notes, but would also like to audio-record this interview to make sure I don't miss any of your responses. May I have your permission to record this interview?

5. State how the interview findings will be used.

Example: Your responses will not be matched to your name. We will group your answers and comments with those by others who will also be interviewed.

6. Based on prior research and defined goal of the interview, include open-ended questions followed by probing questions.

Examples of open-ended questions followed by probing questions (hypothetically asked of a vaccine clinic supervisor as a key informant):

Q: What do you believe are the three main reasons your staff get vaccinated during the flu season?
- PQ1: Do you believe it is necessary to encourage clinic staff to get vaccinated?
- PQ2: Can you think of how best clinic staff might be encouraged to get vaccinated?

Q: In what ways does your local health department encourage staff to get the seasonal flu vaccine?
- PQ1: Are there specific messages given to staff to encourage them to get vaccinated for seasonal flu?
- PQ2: Are there any staff concerns about being encouraged to get the seasonal flu vaccine?

Q: What were some of the challenge you faced as a vaccination clinic supervisor last season?
- PQ1: Do you anticipate facing the same challenge(s) this season?
- PQ2: What specific challenges do you anticipate you will face this season?

7. Thank the interviewee and ask for additional comments.

Examples: Now that I have finished asking you my set of questions, are there any comments you would like to add to your earlier responses? Do you have any other comments?

8. Request an opportunity to follow-up if needed.

Example: How may I contact you if, when I review my notes, I need to get some more detail about your responses?

Advantages of Key Informant Interviews

- Built-in level of accessibility to community provided to the interviewer;
- Information stems from credible community sources; and
- Accumulated information spans the range of perspectives within a particular community group.

Disadvantages of Key Informant Interviews

- Selection of who is "key" requires a relationship broker;
- Interview time competes with key informant's commitments and priorities; and
- Use of information may be restricted due to confidentiality agreement(s).

2.2.2 Interviewer Skills and Knowledge

Interviewer skills for conducting key informant interviews include: verbal communication skills to match the language of the interviewee; active listening skills and possibly observational skills; ability to follow an interview guide; interpersonal skills to conduct the interview in a respectful and professional manner; and ability to recognize usual manners of speech that will yield usable data. The interviewer has to be able to moderate the ebb and flow of a personal interview (i.e., when to encourage further response, how to request further clarification, how to dissuade off-topic remarks) without introducing personal opinion that could influence the interviewee's reactions or responses to the questions posed during the interview.

Knowledge about the content area or interview subject is helpful. Having some subject matter experience allows the interviewer to further probe so the interviewee clarifies a response. Or, when an interviewee gets off point, the interviewer's knowledge on the subject of inquiry provides some background to help discern what is a pertinent response or simply extraneous information.

Although key informant interviews may be done in person, communication technology allows one to interview others by telephone, and increasingly, by using computer-assisted technologies or two-way video cameras mounted on computers. Regardless of technology use,

the interview should have a conversational, non-judgmental tone; interviewees should be made aware of the interview purpose; and flexibility by the interviewer should allow for issues raised that are "out of order" and that may require gently redirecting the interview to the questions at hand.

2.2.3 Analyzing Data from Key Informant Interviews

Earlier we noted it worthwhile to remember to ask about data use before embarking on data collection. Let's consider some answers to the questions, How will we use the results? Were new questions raised through the information that was collected and analyzed? [2]

After being transcribed, aggregated responses from key interviews will have to be analyzed and coded for common themes and categories. This thematic, qualitative content analysis is highly interpretive. The interviewer and/or data analyst will have to group similar responses by categories. For the example questions in Table 2.1 above, the response categories might be labeled under headers abbreviated as "reasons for vaccination," "ways of encouragement," "challenges faced by supervisors" or other headers that are meaningful to the analyst and reflect the interview questions. Responses for each question would be grouped into obvious response categories. When it is not immediately obvious how individual responses "fit" within response categories, it may be necessary to create other categories. When there are new questions raised in a single interview or as a series of interviews progresses, those questions create new headers and responses to those questions may require new response categories.

Here are example response categories for thematic analysis:

- Q1: reasons for vaccination
  - Response category 1a. beliefs in prevention
  - Response category 1b. boost immunity
  - Response category 1c. professional responsibility
- Q2: ways of encouragement
  - Response category 2a. announcements in internal newsletter
  - Response category 2b. web-based reminders
- Q3: challenges faced by supervisors
  - Response category 3a. late vaccine availability
  - Response category 3b. insufficient vaccine
  - Response category 3c. untrained volunteers
  - Response category 4d. lack of coordination with private providers

Note: Response categories should encompass all the individual responses provided by interviewees. One can then quantify responses by noting the number of responses within categories. That allows one to "weigh" the frequency of similar responses and describe trends in

knowledge, attitudes, beliefs, or circumstances among interviewees selected as key informants.

Exhibit 2.1 Key Informant Uses in Public Health

- Assessing attitudes and practice of clinicians on influenza triage—University of California, Los Angeles (Source: Rottman SJ, Shoaf KI, Schlesinger J. et al. Pandemic influenza triage in the clinical setting. Prehosp Disaster Med. 2010 Mar-Apr; 25(2):99-104)
- Audience testing for development of educational messages among immigrant communities (African American, Hispanic, Vietnamese)—Seattle-King County Advanced Practice Center (Source: Vulnerable Population Segment Audience Research http://www.vulnerablepopulation.com/knowing/vulnerable_population_segment_audience_research/, Accessed 9/10/10.)
- Understanding the nature of communications among racial ethnic groups (African American, Native American, Hispanic)—Old North State Medical Society, North Carolina (Source: North Carolina Pandemic Flu Program. http://www.rand.org/health/projects/special-needs-populations-mapping/promising-practices/resource-poor/practices.html, Accessed 9/13/10.)

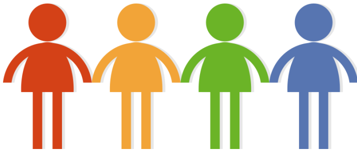
Statement that we can make about this data after grouping it into categories and reviewing the themes that surfaced are applicable to the people from whom the information was collected. Our written reports of data interpretation must qualify it as such. Qualitative data is particular to the group from which it is derived. One cannot make inferences or generalizations to a larger population given the specific recruitment techniques used to identify and recruit the key informants. Furthermore, one must compare the findings derived from key informant interviews with those from other sources of data (e.g., program or agency documents about the community represented by the key informants, other data collection methods such as focus groups or community surveys.) To confirm qualitative findings, one must be willing to check out rival explanations and get concurrence on the input obtained from key informants [2].

2.2.4 Summary

Conducting successful key informant interviews is an acquired skill. Staff members at local health departments can use this method alone or to inform future phases in the design of a community assessment.

At a minimum, we have highlighted some considerations for planning and conducting key informant interviews. Our expectation is that future vaccination campaigns at the local level are data-driven and informed by community member input and participation. Key informant interviews are a tool for that.

2.3 Focus Groups



A focus group is a method for obtaining input from a small group of individuals in an interactive setting. Focus group discussions must be managed by a trained facilitator and require planning. The qualitative information gained from the group's discussion and participant observation can yield valuable insight about a specified topic.

Learning Objectives

By the end of this section of the SPIVA Toolkit, you should be able to:

- Discuss focus groups as a viable data-collection method in community assessment;
- Identify how focus groups may be used in planning for seasonal and pandemic influenza campaigns; and
- Discuss how local health department staff may use focus groups for infectious disease emergency preparedness.

Generally Speaking, A Focus Group Will Be . . .

- A group of people gathered to provide input and reaction to *planned activities*.
- A moderated discussion group that aims to yield information about the perceptions, knowledge, beliefs, attitudes, and language used by *service* recipients.

2.3.1 Purposes of Focus Groups

In community assessment, focus groups may serve single or multiple purposes. Among the purposes are:

- To identify a group's level of interest in a topic area;
- To identify perceptions of a public health intervention;
- To identify best means of reaching selected audiences; and
- To test promotional and educational messages.

Among the many questions we should consider during our focus group planning are:

- Who will we recruit for our focus group (or groups)?
- Who will moderate and record our focus group(s)?
- How large will our focus group(s) be?
- How long will our focus group(s) last?
- What questions will we ask? How will we ensure that these are the right questions?
- How will we synthesize and analyze the results?
- What will we do with the information we have collected?

2.3.2 Planning and Conducting Focus Groups

Planning and conducting a focus group is likely to be a more involved method of data collection than conducting key informant interviews because of the multiple parties that could participate in planning and implementing focus groups. The following briefly describe tasks associated with various roles that may or may be conducted by the same staff member.

Administrator: This person coordinates the logistics for the focus group. This entails site location, acquisition of participant incentives, and follow-up assistance as needed. The administrator will often be a member of the study team that determines the purpose and desired composition of focus groups.

Focus group recruiter: This person follows the coordinator's guidance on the eligibility criteria for focus group inclusion. The focus group recruiter will ensure advance distribution of an invitation to participate or provide notice of recruitment. This person may also screen for participant eligibility and make reminder calls to heighten the likelihood that participants show at the right location and time.

Focus group moderator: This person will have skills in managing small-group dynamics, conducting purposeful inquiry, and will display flexibility for empathetic and active listening. To help minimize individual and group response bias, the focus group moderator must balance neutrality with a predetermined study purpose.

Graphic recorder or note taker: This person actively listens to the focus group members' responses, comments, and questions while the focus group is conducted. The note taker records such qualitative data for later analysis, synthesis, and interpretation by designated study team member(s).

Transcribers, translators, or other specialists: These specialists could be needed for the accurate and complete transfer of the audio data that is digitally recorded and requires analysis for report writing.

Often times in a local health department, a staff member plays multiple roles and performs the various tasks required to coordinate and moderate a focus group. Additional to local health department staff may be "relationship brokers." These relationship brokers may be staff members not directly involved in the study, staff from community-based organizations, or vendors with access to people who would be invited to participate in a focus group.

Other times, specific tasks are contracted to independent vendors with particular expertise (e.g., focus group recruitment services, moderators, transcribers, or qualitative data analysts). When vendors are used, they can be contracted for a menu of services that extend the conduct of focus groups. These contractors' services, based on established expertise, might include the development of a focus group protocol, focus group facilitation, data analysis, data use for design of educational messages for an influenza campaign, and report writing.

Table 2.1 is abstracted from an independent consultant's plan document that was prepared for the Alameda County Public Health Department's Health Worker Immunization (HWI) Project, an informal qualitative assessment of health worker beliefs and attitudes regarding immunization.[3] Appendix A is a focus group discussion guide prepared by the same independent consultant for the HWI Project.

Advantages of Focus Groups

- Face-to-face time with future consumers/recipients of planned services;
- Provide a link between sponsoring organization and program recipients; and
- Offer opportunity to test assumptions in real time.

[3] Source: Applied Creative Training, Inc. (Summer 2010). *Health Worker Immunization Project: Development of a Communication Strategy to Improve Influenza Vaccination Rates Among Health Workers.* Focus Group Discussions Plan prepared for Alameda County Public Health Department. URL: http://www.appliedcreativetraining.com

Table 2.1. Sample Focus Group Requirements: Parameter and Participant Requirements for Focus Groups in Health Worker Immunization Project.

Parameters	Participants
Recruitment:	Male and female health workers will be recruited through the institution database as determined by the director of the institution's immunization program.
Number of Participants	30 focus group sessions will be conducted at 15–25 sites with 6–12 participants in each focus group:
Health Worker Inclusion Criteria	(1) At least 18 years of age; (2) Has worked at the institution for at least 1 year; (3) Able to speak and read English; (4) Willing to confirm their consent prior to study entry; and (5) Represent any level of health worker status including: support, maintenance, volunteer, temporary, etc.
Health Worker Exclusion Criteria	(1) Having any concurrent medical or psychiatric condition that, in the investigator's opinion, may preclude participation in this study; or (2) Cognitive or other impairment (e.g., visual) that would interfere with completing a self-administered questionnaire.
Instruments	(1) Sign-In Questionnaire; (2) Focus group discussion guide; (3) Flip Chart; and (4) Exit Questionnaire.
Administration of Instruments	Focus group moderator will conduct 30 focus groups at various healthcare sites with health workers who have experience with immunization campaigns. The assessment will be conducted anonymously — first names only. Informed consent will be obtained when participants arrive and fill out the Sign-In Form and confirmed verbally at the start of the focus group session.
Recording	Focus group sessions will be digital voice recorded for subsequent transcription.
Compensation	Participants will be compensated for their time upon completion of the focus group session in one of two ways: (1) Small Groups: each participant will receive a $25 gift certificate; or (2) Large Groups: will raffle off 2 iPods
Analysis:	Qualitative content analysis will be used to evaluate the information gathered during the focus groups. Descriptive statistics will be used to characterize the demographics of the sample population.

Disadvantages of Focus Groups

- May yield insufficient information for a comprehensive community assessment;
- Discussion triggers used might not be sufficient to yield data of interest; and
- Require sufficient resources for facilitation, site access, and participant incentives.

Exhibit 2.2 From The Field—Choosing a vendor to conduct focus groups

Speaking on the use of vendors to moderate focus groups of childcare workers, one local health department staff member acknowledged the valued use of vendors with a caveat. Local health departments need to have established community ties to help inform their H1N1 vaccination campaign:

"Choosing a vendor with a proven track record in health communications can assist local health departments develop effective influenza vaccination campaigns. No matter how skilled a vendor may be, however, having the right community partners and stake holders at the table is critical to getting the message right."

Kim Cox, M.P.H., Emergency Services Manager, Contra Costa Health Services, Contra Costa County, CA

Conducting focus groups will provide some, but not all information about a particular community's behavioral trends or its residents' perceptions, beliefs, knowledge, or attitudes. Depending on participant level of comprehension, literacy, and interest in the topic at hand, discussion triggers—the question or items used to elicit information—may require modifying the protocol to include alternatives to dialogue. Consider visual cues or tangible objects as initial conversation pieces to open up required discussion.

Helpfup Tips for Planning Focus Groups

- Approach the pursuit of information as an exchange: Anticipate providing appropriate incentives in exchange for the focus group participants' time.
- Have a convenient and accessible site location: Prevent late arrival by "lost" participants whose tardiness can interfere with introductions or instructions to the group;
- Create a welcoming and open atmosphere: Appropriate, theme related snacks are symbolic of a shared experience;
- Clarify the purpose: Focus groups are not educational sessions, they require active, two-way communication rather than one-way information;
- Listen for needed follow-up activities: The level of response and type of language used among participants can clue the facilitator about needed educational activities (e.g., myths about vaccine effects)

Consider future educational opportunities:

When focus group participants provide responses that are technically or factually inaccurate (e.g., myths about vaccine risk), explore the possibility of follow-up activities as a prelude to a full-fledged vaccination campaign. Doing so would not interfere with the genuine openness and honesty of focus group participants.

Successful focus groups have an element of exchange: the facilitator (and sponsor) obtains information; the focus group participants are compensated somehow for their time and input. There are associated costs of coordination and scheduling time, hiring a facilitator, use of adequate space, and, increasingly in public health programs, monetary or gift-card incentives.

Facilitation of focus groups is an acquired skill. Training on the conduct of focus groups is generally obtainable through workshops offered by trade organizations whose members are involved in qualitative data collection for various purposes.

A effective focus group facilitator is usually someone with a curiosity in human behavior, an interest in the subject matter, flexibility with group management, good organizational skills, and a sense of humor. The success of a focus group is as much about the facilitator's ability to intrigue the group about the topic at hand, as it is to be willing to have them inform the direction and flow of the session.

Listening skills are a must! The facilitator has to be prepared to listen for key issues, the central point in someone's response, and

Exhibit 2.3 Focus Group Uses in Public Health

- The Broome County Health Department, NY used focus groups to inform after action activities and an online community survey on H1N1 (see "Tips from the Field"). (Source: Leigh Ann Scheider, Public Health Emergency Preparedness Program Director, Broome County Health Department (September 2010). Personal communications.)
- The Immigrant, Refugee, and Migrant Health Branch, Centers for Disease Control and Prevention in partnership with the Oak Ridge Institute for Science and Education identified key educational messages regarding H1N1 influenza and translated them into seven languages commonly spoken by resettled refugees (Karen, Somali, Burmese, Amharic, Kirundi, Farsi, and Arabic). Focus groups were conducted among resettled refugees in three states (Minnesota, Texas, and California) to test educational messages and illustrations related to H1N1 influenza.
  (Source: Willacy, E., Guterbock, M., Tayman, A, and Martin, K., (2010). Educating Refugees During an Outbreak: Lessons Learned from the 2009 H1N1 Influenza Response. Abstract submitted to the American Public Health Association for presentation at the 138th Annual Meeting and Exposition.)
- The Centers for Disease Control and Prevention used focus groups to inform an educational campaign for the U.S. population about universal seasonal flu vaccination in 2010. (Source: Sheedy, K., (May 2010). CDC Messages and Influenza Vaccination Communication Plans for the 2010-11 Season. Presentation at the Annual Meeting of the National Influenza Vaccine Summit, May 17-19, 2010. Retrieved from http://www.preventinfluenza.org/NIVS_2010/3_Sheedy.pdf, Accessed 9/17/10)

sort through language that may be particular to a group (e.g., slang, colloquialisms, or story-telling style).

As with key informant interviews, there are many variables in the design of a focus group, and each choice can affect the type of information we receive from focus group participants. The following recommendations can help guide us through the process of designing an effective focus group:

- Focus groups can include a range of six to ten participants, plus a moderator and a recorder.

Exhibit 2.4 From the Field—13 points for facilitating community focus groups that produced successful results:

1. Have the right people at the table—those with firsthand knowledge.
2. Include a cross section of individuals to help generate dialogue and diverse opinions.
3. Prepare discussion questions ahead of time and, if possible, test in a smaller group setting.
4. If possible, combine focus group/ after action with recognition.
5. Always provide refreshments.
6. Create an agenda so that participants can follow along and stay focused. Have an introduction and conclusion.
7. Explain what the goal of the focus group is—validate its importance and explain how information obtained will be used.
8. Create a comfortable welcoming environment for people to share their opinions in an organized manner without bias.
9. Make sure people can hear what is being said.
10. Avoid hierarchy, have a moderator who is familiar with the topic, but is not at the top of the food chain.
11. Involve state directors to audit or participate.
12. Take notes and record the discussion.

Contributed by Leigh Ann Scheider, Public Health Emergency Preparedness Program Director and Diane O'Hora, Supervising Public Health Educator, Broome County Health Department, New York

- Focus group participants must be representative of the target population you seek to study, but must also be compatible with one another in a conversational setting.
- Focus groups should not last longer than two hours. Allow time for participants to arrive and settle in.
- Questions for focus group participants should be simple, clear, and direct. Be sure to pilot-test questions as often as possible before conducting the focus group. Questions can also be "pretested" in a mock focus group with participants similar to those being recruited.
- Open-ended questions will yield more information from participants than simple yes-or-no questions.
- Develop a plan for recruiting participants. Invite more people than you will need and consider the use of incentives to encourage participation.
- Analyze notes and recordings for common key words, themes, and intensity of conversation. It is best for those analyzing information

from the focus group to do so independently prior to comparing results.

By following these recommendations we can increase the possibility of obtaining a clearer picture of how individual participants and the focus group as a whole think and feel about our chosen subject.

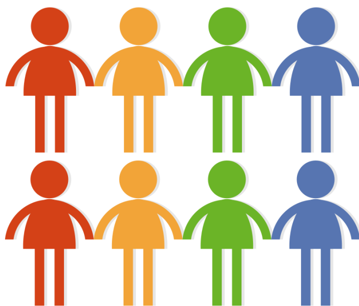
Exhibit 2.5 From the Field—More on Tip No. 9 from the Broome County Health Department:

"Establish 'ground rules' and objectives ahead of time; explain how speakers can obtain the floor to offer feedback and contribute to the dialogue; and clearly state appreciation for participatory dialogue. . . Allotting a specific amount of time to each discussion topic helps to avoid participants from feeling like they were ignored if they were not given a chance to speak due to time constraints.

"Having our Regional Emergency Preparedness State Representative helped to validate the need for feedback and to assist in explaining objectives. Community members recognized the state authority and were at ease providing their opinion through a more formal After Action review."

Leigh Ann Scheider, Public Health Emergency Preparedness Program Director, Broome County Health Department, New York

2.4 Surveys



Surveys provide a systematic method for collecting important data at a population level. From a population of interest, we collect data on a representative sample to develop quantitative measurements. In public health we work to improve population-level health indicators, and surveys are an important tool we can leverage to achieve our population health goals.

Learning Objectives

By the end of this section of the SPIVA Toolkit, you should be able to:

- Describe where to conduct vaccination surveys;
- Describe when to conduct vaccination surveys;
- Describe how to identify and engage target populations; and
- Describe how to use community assessments to improve vaccination programs.

2.4.1 Where to conduct vaccination program surveys

Within the context of this toolkit we divide surveys in two types:

- Location-based surveys: Surveys that are administered to the population of interest at a certain site, such as a vaccination clinic, where desired respondents will already be present.
- Community-sampling surveys: Surveys requiring surveyors to seek out and engage a desired population in a particular setting.

Location-based surveys are already employed by many health departments and health care providers to gain valuable input from the communities they serve. This type of survey can assist planners in understanding the public's attitudes regarding vaccination (e.g., a person's motivation for receiving a vaccine) as well as gathering practical data (e.g., how far people must travel to attend a vaccine clinic). We can use a location-based survey to gather input at a location such as a vaccine clinic from individuals participating in a vaccination campaign. We can administer location-based surveys in paper form or electronically. Users of this toolkit will find a question bank in English and Spanish in Appendix B.

Community-sampling surveys can take many forms. Your health department may already be engaged in some form of community sampling to help inform decisions about your vaccination campaigns. Often, the availability of resources (personnel, time, money, etc.) will determine if conducting a community-sampling survey is feasible, and, if so, what approach will be most effective. Potential approaches to community-sampling include, but are not limited to:

- Surveying subsets of schoolchildren enrolled in public schools;
- Performing door-to-door interviews in targeted areas of a community (such as neighborhoods with historically low vaccination rates);
- Targeting electronic surveys or telephone interviews towards certain communities (perhaps through a partnership with a community-based organization who may keep contact information on file);
- Conducting surveys at or near polling places on election day;
- Targeting individuals at community events such as festivals, fairs, and other public gatherings; and
- Partnering with a range of community-based and religious organizations to engage their constituents or congregations.

2.4.2 When to conduct vaccination program surveys

When to collect new data for planning a vaccination campaign depends largely on LHD priorities, a community's needs, available resources, and vaccination schedules. We can consider three approaches

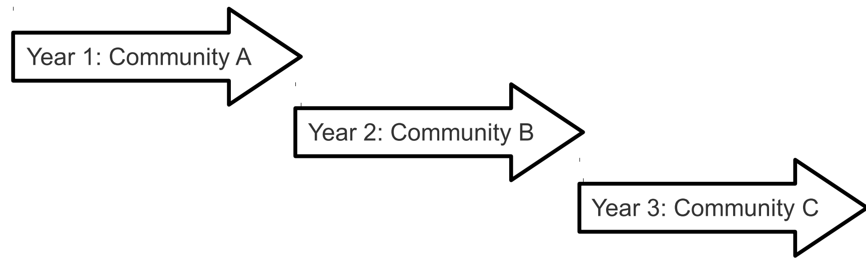


Fig. 2.2. Community assessments can rotate to cover different communities and priorities.

that may be used individually, or in conjunction, to design an effective vaccination survey. These include:

Pre-vaccination community sampling

A pre-vaccination community survey gives us baseline information about the community that we are targeting. Understanding beliefs and attitudes towards vaccines is crucial to crafting successful public health messages and risk communications.

Location-based surveys during vaccination

Vaccine recipient surveys are perhaps the easiest type of information-gathering tool we can implement. The target population is generally restricted to those persons choosing to receive the vaccine and can therefore inform us about the characteristics and motivations of individuals choosing vaccination. They can help us improve clinics and vaccination programs based on participant feedback.

Post-vaccination community sampling

Findings from a post-vaccination survey allow us to identify who was not vaccinated during the campaign and why. This can reveal important information regarding the effectiveness of clinic locations, timing, and communication methods that can inform our planning for subsequent years.

While some survey approaches are restricted to certain time periods as outlined above, other approaches can be utilized at any point during the year. For example, we could administer a survey to vaccine recipients at a doctor's office during influenza season, but we could expand this effort to surveying patients at any point during the year. This allows us to reach a wider audience and assess attitudes regarding vaccination and other matters of interest throughout the year.

We recommend using these approaches in the context of focusing on specific communities and demographic groups. It is unlikely that

a LHD will have the time and resources to conduct a comprehensive survey representative of their entire jurisdiction each year. Rather, we should focus on one group at a time, with vulnerable populations or those with low uptake rates being obvious candidates. Users of this toolkit can build upon their community data by examining one or more subpopulations each influenza season (Figure 2.2).

Exhibit 2.6 Community Sampling: 2009 California Kindergarten Survey

This is an example of conducting a sampling assessment to gain information about vaccination coverage rates.

Methods and Participants: This year's Kindergarten Retrospective Survey was conducted in a sample of approximately 3% of California's kindergartens in concurrence with selective review. Local health departments visited 256 schools with kindergartens and collected copies of every sixth student immunization record (blue card). Demographic information and immunization history were extracted from each record. Data were analyzed using birth dates and immunization dates to retrospectively estimate immunization coverage at various age checkpoints. Age checkpoints are defined according to whether or not children are up-to-date for DTaP, Polio, MMR, Hep B, and Varicella vaccines at 3, 5, 7, 13, 19 and 24 months. To read the full report and learn more about the sample design, visit the following Web site:
http://www.cdph.ca.gov/programs/immunize/Documents/2009KindergartenRetrospectiveSurveyResults.pdf

2.5 Identifying and Engaging Target Populations

To determine why (or why not) a particular group has good participation in a vaccination campaign, public health practitioners have to keep in mind that there may be many communities in a given population. Key questions to ask before conducting a survey may include:

- What is a minimum acceptable level of vaccination in community?
- Are there levels of vaccination among certain communities which are deemed unacceptable by LHD standards?
- Which of those communities is of most interest to the LHD in order to raise uptake rates?

Specific sub-populations that may require a special focus may include:

- The elderly (65 years and older)
- Pregnant women
- College students
- Minority groups as defined by ethnicity, race, gender, socio-economic status, physical disability, etc.
- Parents of young children
- Neighborhoods with particularly low (or high) uptake rates

Sub-populations that may be regarded as "hard to reach," "vulnerable," or at particularly higher risk of infection, but seemingly not engaged in customary public health approaches, can be invited to participate. Cultural sensitivity and creativity will be required to engage, establish trust, and maintain participation levels. Actively involving community representatives in advance survey notification, training, and on-site clinic participation demonstrates a long-term commitment to integrate community members into public health efforts.

Government intervention can have positive or negative connotations to community residents in light of personal experiences with their own or the U.S. government. Keep in mind the barriers and inconveniences that typically turn away participation in data collection approaches. Public health practitioners are oriented to data collection as a basis for informed decision-making. But our need for data from community residents needs to be balanced with the feasibility of actually using the data collected. Follow the principle of parsimony: *collect only what you will use.*

Consider cultural aspects of vaccination implementation in determining what data you will collect. Cultural sensitivity goes beyond collecting data in a common language, it is about recognizing the leadership and communication dynamics that underpin community life.

Listed below are several strategies that may contribute to increased community participation in surveys and assessments. Note that some require the involvement of community leaders to act as liaisons between health department staff and the target population.

Negotiations with key community leaders

An advance discussion about procedures, the intent of mass vaccination and related surveys, and follow-up activities possibly requiring community member involvement serve to inform community residents about their role in public health efforts. People regarded as community "gate keepers," or who are particularly knowledgeable about access to community residents, play a facilitative role to

help integrate LHD staff into community activities. One may identify key community leaders through community-based organizations, city council member recommendations, or places of worship. Word-of-mouth may help identify the community member(s) in a leadership role. Such leadership roles could be due to a personal or professional stance in the community, longevity in it, or through active civic participation.

Identification of sites for vaccine clinics where residents congregate and that are convenient to community members

Some of these sites include community centers, businesses that are amenable to onsite vaccination clinics and with whom matters of liability have been pre-negotiated with LHD officials, and school auditoriums or multipurpose rooms familiar to community residents. These data collection opportunity sites are likely locations for vaccine PODs (Points of Dispensing) and concurrent survey implementation.

Linguistic expertise

Identify individuals to translate clinic forms in advance and/or to function as clinic interpreters. This also applies to forms of communication by community residents with visual or hearing impairments that might require specialized equipment. Some of those specialized resources may be document text magnification devices, Braille readers, or clinic personnel with sign language capabilities.

Crowd management and direction

In just about any community, there will be people with training, experience, or a natural ability to handle crowds in a controlled, orderly, and tactful manner. Provide those individuals with a role in crowd control to either maintain the clinic flow or to identify potential bottlenecks in processing clinic visitors.

Data collection

With some training on the use of forms and data collection, community residents who are gregarious can adhere to rules of confidentiality, be consistent when asking questions on data collection forms, and function as helpful resources to collect information. Make certain that data collection monitors understand the basis for each survey item. This minimizes the potential for inconsistent data obtained in response to improvised on-the-spot explanations or major deviations from the wording of each item.

Table 2.2. Putting data to use when vaccine uptake is low

Considerations	Potential Actions
Lack of trust in public health?	Develop relationships with faith-based and community-based organizations.
Lack of interest in receiving vaccine?	Develop better messaging regarding benefits of vaccination.
Poor communication with intended population?	Shift communication to appropriate channels. Conduct messaging through trusted community entities.
Vaccine inaccessible due to time, location, or cost?	Further surveying to assess convenient time and locations for free vaccine clinics.
Is uptake high in similar populations elsewhere?	Research best practices for reaching intended population in other areas.
Are ambivalent or negative attitudes towards vaccination possible to change in this demographic? Are uptake rates consistently low despite attempts at intervention?	Consider that some populations may necessitate an impractical level of intervention to increase uptake rates. Scarce resources should be targeted towards those populations most apt to be influenced towards receiving vaccine.

Health promotion and education

Some community residents have basic and possibly advanced familiarity and knowledge about mass vaccination based on their personal or professional backgrounds. Make the time to identify community residents willing to combine their expertise with the promotional and educational messages the LHD advocates and endorses. These persons may be willing to create mini-educational campaigns in advance of the data-collection phase of a community assessment to further extend the reach into neighborhoods that have been unresponsive in prior vaccination campaigns.

2.6 Putting Community Assessment Data to Use

Once data from an interview, focus group, or survey is analyzed, it begs the question, "what do we do now?" Of course, any steps taken depend entirely on the results and validity of the data collected. The table below outlines some very basic considerations and potential actions after data analysis and interpretation. Keep in mind that every community will have its unique characteristics and that improving vaccine uptake in any jurisdiction will require community-oriented, specific approaches.

Table 2.3. Putting data to use when vaccine uptake is acceptable

Considerations	Potential Actions
What influenced those who received vaccine?	Highlight these factors in future communications to this population.
What are some best practices for reaching this population?	Apply best practices to populations with lower uptake rates, if applicable.
Is improving uptake rate further a realistic goal in this population?	Only focus additional resources on this population if cost-benefit is reasonable.

Table 2.4. Putting data to use when vaccine uptake is high

Considerations	Potential Actions
What influenced those who received vaccine?	Highlight these factors in future communications to this population.
What are some best practices for reaching this population?	Apply best practices to populations with lower uptake rates, if applicable.
Is vaccine uptake in this population high in other areas?	Make methods and best practices available to other public health entities with lower uptake rates.
Would shifting resources focused on this population to populations with lower uptake rates reduce uptake in this population?	Shift resources to improve rates in other populations if good uptake rates can be maintained in this population.