STATE ASTHMA CONTROL PROGRAM EVALUATION

Reference materials for designing and implementing evaluations

MODULE 2: SURVEILLANCE

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INTRODUCTION & ACKNOWLEDGEMENTS

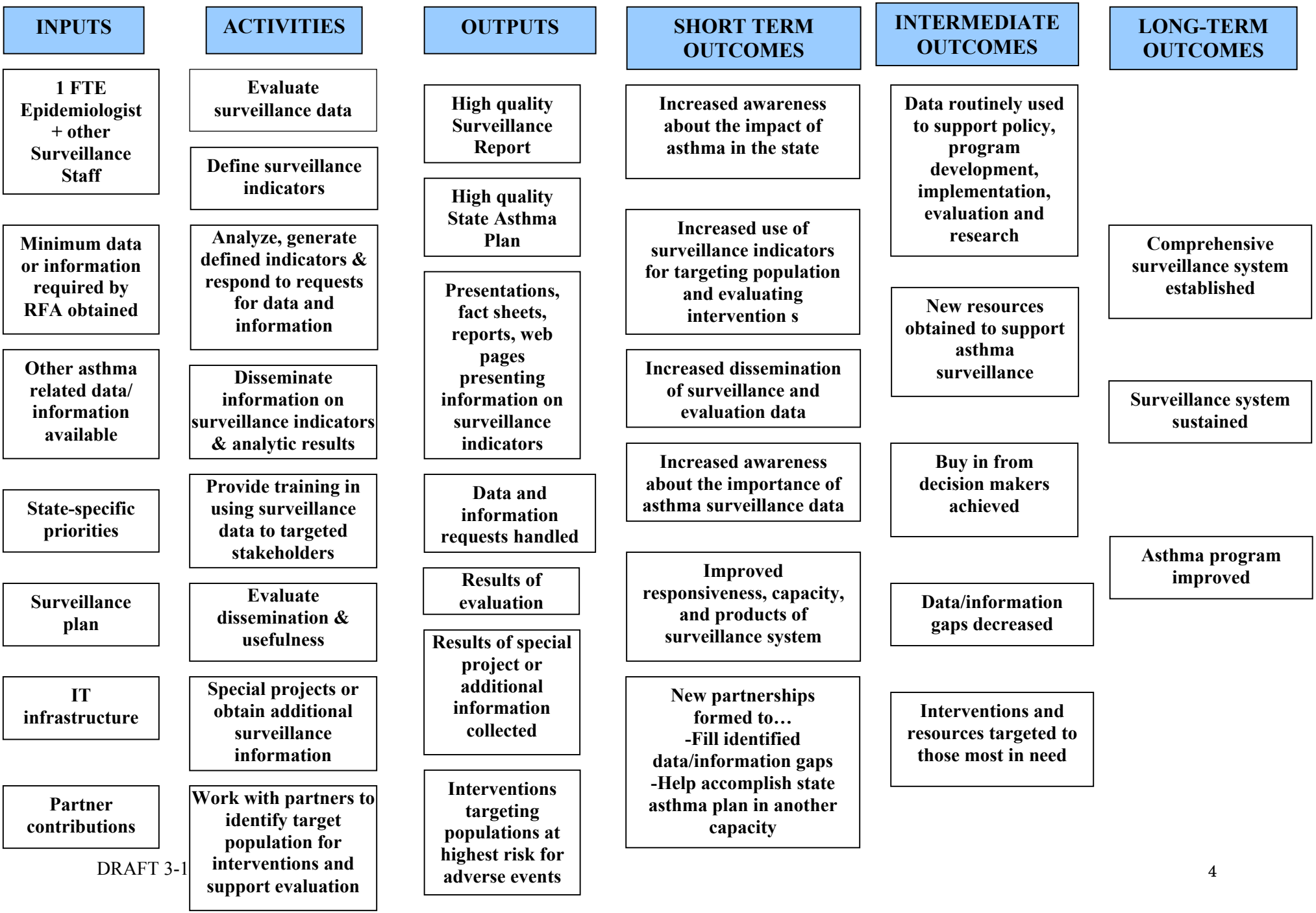
The reference materials in this module are the result of extensive work conducted by the APRHB-State Asthma Control Program Surveillance Evaluation Workgroup. This workgroup was convened in October 2006 and finalized activities in March, 2008. Workgroup members included CDC staff (project officers, epidemiologists, and team management), and representatives from 11 funded state asthma programs. The Battelle Centers for Public Health Research and Evaluation were contracted to assist in facilitating workgroup discussions and in developing reference documents. Individuals who participated on the workgroup at any point in time are listed in the table below.

The reference items included in this module are meant to be used in alignment with CDC's Framework for Program Evaluation in Public Health (referred to as the "CDC Framework" for the remainder of this document) and in conjunction with the Introduction to Program Evaluation for Public Health Programs: A Self-Study Guide (referred to as the "Self Study Guide" for the remainder of this document). Both of these documents can be downloaded at: www.cdc.gov/eval or http://www.cdc.gov/eval/whatsnew.htm.

Workgroup Member	Affiliation
Carlyn Orians, Shyanika Rose, Linda Winges	Battelle
Leslie Fierro, Elizabeth Herman, Liane Hostler, Meredith Lucas, Jeanne Moorman, Viji Potula, Marissa Scalia, Kathryn Sunnarborg	CDC
Arthur McFarlane	Colorado
Angela Blackwell	Georgia
Betsy Wasilevich	Michigan
Laurie Moore	Mississippi
Liz Traore	New Hampshire
Michael Medvesky, Trang Nguyen	New York
Kelly Jensen	North Carolina
Michael Emerson	Oregon
José Bartolomei Díaz	Puerto Rico
Deborah Pearlman	Rhode Island
Linda Gunnells, Ron Maynard	Washington

REFERENCE ITEM #1:

Logic Model of State Asthma Program Surveillance



REFERENCE ITEM #2: Example Monitoring & Evaluation Questions

Concept #1: State asthma surveillance infrastructure	
Does the state have access to, and do they analyze, the minimum datasets that CDC believes they need to inform program planning and adequately assess trends in asthma over time?	Core
What data (beyond the minimum) are collected within the state and analyzed for asthma surveillance?	Core
What are the reasons for not analyzing the minimum datasets within the state asthma program?	Core
Are the minimum staffing criteria required by CDC satisfied?	Core
Who else, beyond the lead asthma epidemiologist, is part of the asthma surveillance staff?	Core
Has a surveillance plan been developed? Updated? Is this plan of good quality? (e.g. Aligns with state priorities, CDC FOA, clear goals, objectives activities)	Non core
Have the minimum datasets been evaluated prior to use in surveillance?	Non core
Are data sharing agreements in place to access minimum datasets?	Non core
If minimum datasets cannot be accessed, are there MOU's or MOA's in place with appropriate agencies or departments to conduct analyses of minimum asthma surveillance data?	Non core
Has an assessment of the adequacy of software and hardware for storing, maintaining, cleaning (if necessary), and analyzing data been performed?	Non core
Concept #2: Enhancing Asthma Surveillance	
What is the quality of the minimum data used for asthma surveillance?	Core
Are states evaluating the quality and content of the surveillance system?	Core
Are states evaluating the communications materials used to disseminate analytic findings with respect to their usefulness for intended stakeholders?	Core
How is feedback from evaluations of required communications materials being used to improve surveillance?	Core
Are gaps in surveillance data being evaluated and filled?	Non core
Concept #3: Dissemination, Use, and Early Outcomes of Analytic Findings	
When was the most recent state surveillance report published?	Core
How is the state surveillance report disseminated? How many copies have been disseminated?	Core

What other communications materials (beyond the surveillance report) are used to disseminate analytic findings to stakeholders?	Core
How have findings from analyses of surveillance data been used by stakeholders?	Core
How well does the information provided meet the target groups' needs for planning and evaluation?	Non core
How are communication materials distributed? Are there other modes of distribution that would enhance the sharing of results with the intended audience?	Non core
How do stakeholders inform what products are produced, or what analyses are presented?	Non core
Are results of analyses being used to identify target populations for interventions?	Non core
Are changes in the target groups' awareness about the impact of asthma in the state occurring?	Non core
Are changes in target groups' awareness about the importance of asthma surveillance data occurring?	Non core
Are new resources being provided to support and sustain asthma surveillance?	Non core

REFERENCE ITEM #3:

Examples of surveillance evaluation tools used to date by states and contacts

Name of tool/instrument or evaluation			
Type of tool(s) used	Concept(s) to which it aligns	Purpose or description	Contact person
Michigan Available Data Grid			
Matrix checklist	1 & 2	The Available Data Grid for Asthma Surveillance summarizes the data types, indicators, sources, and availability of data for use in general asthma surveillance activities. The structure of the grid is based on data categories considered important aspects of understanding asthma burden: causal factors, incidence, prevalence, triggers, severity, management, quality of life, access, pharmacy, office visits, emergency department visits, hospitalizations, and mortality. This grid is used to inform asthma partners of the surveillance indicators the system typically measures, the populations for which the data can be used to measure the indicators, and the data sources. Importantly, the grid highlights the both the capacity and deficiencies of the surveillance system in the context of what an "ideal" surveillance system would encompass.	Betsy Wasilevich, Epidemiologist wasileviche@michigan.gov
New Hampshire Summary Table of Available Data Sources			
Inventory	1 & 2	Lists and describes qualities/characteristics of core data, new data, and potential/future data sources	Elizabeth Traore Elizabeth.A.Traore@dhhs.state.nh.us
Maine Asthma Surveillance Plan			

Inventory/checklist	1 & 2	Used to identify what they would like to include in the surveillance system based on what questions they would like answered.	Katie Meyer Katie.Meyer@Maine.gov
Washington State Evaluation of Work-Related Asthma System			
Multiple Methods	2	Evaluation of SHARP program's work related asthma surveillance system- assessed the usefulness of the system and efficiency & effectiveness of provider reporting & case follow-up.http://www.lni.wa.gov/Safety/Research/Files/OccHealth/EvaluationReport.pdf	Refer to report contents
Minnesota Mortality Review			
Interview Expert Panel	2	Review of asthma deaths among older Minnesotans to determine the accuracy of the coding of asthma as underlying cause of death in this age group. Over a one-year period, we obtained death certificates for individuals who were 55 and older when they died and whose underlying cause of death was coded as asthma. We then conducted interviews with the next-of-kin and obtained medical records for the decedents. A panel of pulmonologists reviewed summaries of the interviews and records to determine the likelihood that the death was due to asthma.	Wendy Brunner Wendy.Brunner@state.mn.us
New Jersey Electronic Survey of Surveillance Report			
Online survey	2 & 3	Electronic feedback form for the surveillance report. This questionnaire collects information such as whether individuals feel more informed about surveillance data and how they plan to use surveillance data after reading the report.	Melissa Vezina melissa.vezina@doh.state.nj.us
North Carolina Survey of Surveillance Report			

Online Survey	3	Evaluation of the clarity and usefulness of information provided in the report as well as suggestions for additional content for future, and contact information about other organizations that may benefit from the report. http://www.asthma.ncdhhs.gov/burdenReportEvaluation.asp	Winston Liao Winston.Liao@ncmail.net
2006 Pennsylvania Asthma Burden Report Survey			
Survey of members of state asthma partnership	2 & 3	Evaluate, identify, determine, and prioritize factors affecting the following considerations: 1. Usefulness and value of the report, 2. Recommendations to improve the future reports, 3. Findings on additional asthma data sources to enhance the existing surveillance system The survey includes questions concerning: the organization and structure of the 2006 PA Asthma Burden Report, the usefulness of the asthma data incorporated in the report, the ease of understanding that data, the organizations' preferences, suggestions and recommendations for accessing or using asthma data for future reports by preferred statistical methods, geographical areas, formats and types of data, additional asthma data sources respondents would like to shared, and possibility of incorporating them in future reports.	Vadim Drobin, Epidemiologist vdrobin@state.pa.us
Asthma in Virginia, Comprehensive Data Report, 2006 Evaluation Form			
Survey of individuals who receive surveillance report	2 & 3	In order to help the Virginia Department of Health (VDH) evaluate the usefulness of the 2006 data report on asthma, Virginia Asthma Control Project (VACP) used this evaluation form. The report includes the evaluation form. The evaluation form has used to identify opportunities for improvement for future comprehensive	Rebecca Sultana, Epidemiologist Rebeka.Sultana@vdh.virginia.gov

		data reports on the burden of asthma in Virginia.	
Michigan Data Needs Assessment			
Telephone interview of random selection of local asthma coalition leaders. Conducted by external contractor.	2 & 3	Interview primarily directed at coalition leadership. Seeking feedback and insight regarding the value, access, and types of surveillance data made available to local asthma coalition leaders by MDCH's Bureau of Epidemiology and other sources of asthma related data. Also seeking to understand the ways the local coalition organize and use the surveillance data and how the information is integrated into the programming and overall objectives. Approximate length of interview: 30 minutes	Betsy Wasilevich, Epidemiologist wasileviche@michigan.gov
Minnesota Evaluation of Surveillance Report			
Survey of individuals who receive report	3	Evaluation card included with the surveillance report when it is mailed out. The recipients have the option of mailing or faxing it back to the epidemiologist.	Wendy Brunner Wendy.Brunner@state.mn.us
New Jersey's Evaluation of the LINCS Health Alert Network			
Web statistics	3	We did a formal evaluation to assess the distribution of surveillance data through the NJ LINCS Health Alert Network. In this assessment, we used web statistics to determine if LINCS was an effective mode of distribution for the surveillance report.	Melissa Vezina melissa.vezina@doh.state.nj.us
CDC's Framework for Evaluating Public Health Surveillance Systems			
N/A	All	Uses CDC's Framework for Evaluating Public Health Programs to create a framework for evaluating public health surveillance systems.	http://www.cdc.gov/mmwr/PDF/rr/rr5013.pdf

*** Do you have another instrument or evaluation you would like to add? Please contact Leslie Fierro at: Let6@cdc.gov**

REFERENCE ITEM #4
Draft core data collection instrument

STATE ASTHMA SURVEILLANCE

In this module, you will be asked to respond to a series of general questions about the state asthma program surveillance activities.

Purpose:
The questions in this module have been developed to gather information about state asthma program activities in a systematic manner. In particular, CDC is interested in gathering information on a regular basis about who is involved in asthma surveillance at the state, what type of data is available and used as part of asthma surveillance, how information is distributed to and used by stakeholders, and methods used for and results from evaluation of surveillance activities.

The data collected will provide us with general information that will be helpful when answering common stakeholder questions such as: How many states use hospital discharge data for asthma surveillance? How is asthma surveillance data used? How many states with asthma control programs have access to Medicare data?

Furthermore, answers to these questions will provide us with information valuable to program planning at the national and state levels. For example, we may find that over time more states are gaining access to emergency department visit data. As a result of this, CDC may form a working group with states to examine the strengths and weaknesses of these data and/or develop some standard methods for producing indicators from this dataset. Additionally, answers provided will be shared in aggregate form with all state asthma programs. This may provide valuable information to you about what other state's asthma surveillance looks like, creative approaches to evaluating surveillance reports, or other items that may be helpful to you in future state program planning efforts.

Additional important information about expectations:
When providing answers to the questions in this module, it is important to keep in mind that you are not being graded on the information you provide. This may be difficult to believe, especially since the answers being provided will be used to generate program evaluation "indicators" and one might think these are items that are indicative of "success." Rather, we do not know what makes a "successful" asthma surveillance system or what comprises "successful" asthma surveillance activities. These questions are designed to provide helpful information to CDC and the states so that we can learn from each other and work as a community to enhance the asthma program as a whole. Project officers and epidemiologists within the Air Pollution and Respiratory Health Branch will likely use this information to stimulate dialogue with you, but we are not intending to utilize this information to penalize you. Do not feel pressured into putting an "X" in a box because you are afraid we will be upset with your performance, rather we hope this information will help us to learn from each other and serve you all better.

Along similar lines, there are some questions that refer to activities which you are not necessarily *required* to conduct as part of your state asthma surveillance. For example, some questions are posed about evaluations that have been conducted on your asthma surveillance system in the past year. Although there are requirements in the Funding Opportunity Announcement (FOA) that focus on evaluating surveillance activities, your state may not have evaluated (or may not be intending to evaluate) your surveillance system (e.g. using the CDC MMWR Guidelines for Evaluating Public Health Surveillance Systems). Answering "no" to this question is perfectly fine; we are attempting to gather information about the different types of activities states are doing and anticipate there will be variety in responses.

Who should provide the answers?

Asthma program epidemiologists should provide answers to the questions that follow. When needed, the epidemiologist should consult with their colleagues, including but not limited to program managers, evaluators, health educators, and contractors, to provide answers.

Other potentially useful information:
Please note that throughout this module there are little red question marks placed next to some words/questions. Definitions for these terms, or additional information to help clarify the question, are provided in a section entitled "Definition and clarification of terms." This section begins on page 15.

Asthma Surveillance- Staffing

1. Do you currently have one epidemiologist who dedicates at least 50% time to state asthma program surveillance activities **and** is considered to be the lead for asthma surveillance?

    - ☐ Yes (please provide answers to Questions 2-7 below)
    - ☐ No (skip to Question 8)

Please provide some additional information about the epidemiologist referred to in question 1 above…

2. What percentage of time does this epidemiologist contribute to the state asthma program?

    _____

3. Where do the majority of funds come from to support this epidemiologist?

    - ☐ CDC Asthma Control Program Co-operative Agreement
    - ☐ Other (please specify): _____

4. Is this epidemiologist a…

    - ☐ Contractor
    - ☐ State employee
    - ☐ Other (please specify): _____

5. Is this epidemiologist part of an epidemiology "pool"?

    - ☐ Yes
    - ☐ No

6. What is the highest level of academic training completed by this epidemiologist?

    - ☐ High school (skip to Question 8)
    - ☐ Bachelors degree (e.g. BA, BS, other)
    - ☐ Masters degree (e.g. MA, MS, MPH, MSPH, other)
    - ☐ [illegible]

8. In the following table, please provide us with information about all individuals (except the epidemiologist referred to in Q1-7 above if applicable) whom you consider to be a part of your asthma surveillance staff. These individuals can be an FTE, contractor, or in another type of position. However, in order to list an individual below, they must be responsible for conducting routine asthma surveillance as part of their regular job duties (whether 100% time or less).

Professional Title	Division, Office, or Bureau	Percent time allocated to asthma surveillance	Primary source[?] of funding to support this position (if two sources provide 50% support, please select both)
			☐ CDC Asthma Control Program Co-operative Agreement ☐ Other CDC Funds*: ________________________________ ☐ State budget ☐ Other: ____
			☐ CDC Asthma Control Program Co-operative Agreement ☐ Other CDC Funds*: ________________________________ ☐ State budget ☐ Other: ____
			☐ CDC Asthma Control Program Co-operative Agreement ☐ Other CDC Funds*: ________________________________ ☐ State budget ☐ Other: ____
			☐ CDC Asthma Control Program Co-operative Agreement ☐ Other CDC Funds*: ________________________________ ☐ State budget ☐ Other: ____
			☐ CDC Asthma Control Program Co-operative Agreement ☐ Other CDC Funds*: ________________________________ ☐ State budget ☐ Other: ____
			☐ CDC Asthma Control Program Co-operative Agreement ☐ Other CDC Funds*: ________________________________ ☐ State budget ☐ Other: ____

*Other CDC Funds refers to funds provided by CDC that are not a part of the State Asthma Control Program Co-operative Agreement.

Asthma Surveillance- Data collection, availability, and analysis

9. Please indicate the years for which each type of data listed has been collected or is currently being collected for your state. You should indicate all data that is collected for your state regardless of the entity collecting the data. The collection does not need to be supported or conducted by the state asthma program staff in order to be "counted." Additionally, the data does **not** have to be accessible to the state asthma program in order to be "counted." Please be sure to include years for which data has already been collected as well as years for which data is currently actively being collected. Please click on the red question mark to obtain a description of the data (refer to definition and clarification of terms section, beginning on p.15).

Data	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**
Vital Statistics- Mortality	0	0	0	0	0	0	0	0	0	0
Hospital Discharge- Statewide?	0	0	0	0	0	0	0	0	0	0
Emergency Department Visits- Statewide?	0	0	0	0	0	0	0	0	0	0
Private insurance data?	0	0	0	0	0	0	0	0	0	0
Medicare	0	0	0	0	0	0	0	0	0	0
Medicaid	0	0	0	0	0	0	0	0	0	0
SCHIP?	0	0	0	0	0	0	0	0	0	0
Youth Risk Behavior Survey (YRBS) ? – Asthma questions	0	0	0	0	0	0	0	0	0	0
Youth Tobacco Survey (YTS) ?– Asthma questions	0	0	0	0	0	0	0	0	0	0
BRFSS- Core (Adult Prevalence)		0	0	0	0	0	0	0	0	0
BRFSS- Child Prevalence Optional Module				0	0	0	0	0	0	0
BRFSS- Adult History Optional Module				0	0	0	0	0	0	0
BRFSS- Child Call Back Survey								0	0	0
BRFSS Adult Call Back Survey								0	0	0
National Asthma Survey?						0				
National Survey of Children's Health?						0				0
Worker's Compensation Claims?	0	0	0	0	0	0	0	0	0	0
Mandatory Occupational Reporting?	0	0	0	0	0	0	0	0	0	0
Air Quality Monitoring?	0	0	0	0	0	0	0	0	0	0
Air Quality Modeling?	0	0	0	0	0	0	0	0	0	0

10. For the datasets listed in question 9 above, are there any for which you are unaware whether the data was/is collected? (please list both the name of the data and the years) [text based answer]

11. In the following table, please indicate which years of data have been analyzed? to date for asthma surveillance and who analyzed the data (please note you can select more than one- if the asthma surveillance staff and someone outside of the asthma surveillance staff analyzed the data please select "asthma surveillance staff" and "other"). [*Populate table with datasets that we know the state has from our records & previous table on data collection*]

Data	**Analyzed by…**	**For the following year(s)…**									
		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Vital Statistics- Mortality	Asthma surveillance staff?	0	0	0	0	0	0	0	0	0	0
	Other?	0	0	0	0	0	0	0	0	0	0
	Don't know	0	0	0	0	0	0	0	0	0	0
Hospital Discharge-Statewide?	Asthma surveillance staff	0	0	0	0	0	0	0	0	0	0
	Other	0	0	0	0	0	0	0	0	0	0
	Don't know	0	0	0	0	0	0	0	0	0	0
Emergency Department Visits-Statewide?	Asthma surveillance staff	0	0	0	0	0	0	0	0	0	0
	Other	0	0	0	0	0	0	0	0	0	0
	Don't know	0	0	0	0	0	0	0	0	0	0
Private insurance data?	Asthma surveillance staff	0	0	0	0	0	0	0	0	0	0
	Other	0	0	0	0	0	0	0	0	0	0
	Don't know	0	0	0	0	0	0	0	0	0	0
Medicare	Asthma surveillance staff	0	0	0	0	0	0	0	0	0	0
	Other	0	0	0	0	0	0	0	0	0	0
	Don't know	0	0	0	0	0	0	0	0	0	0
Medicaid	Asthma surveillance staff	0	0	0	0	0	0	0	0	0	0
	Other	0	0	0	0	0	0	0	0	0	0
	Don't know	0	0	0	0	0	0	0	0	0	0
SCHIP?	Asthma surveillance staff	0	0	0	0	0	0	0	0	0	0
	Other	0	0	0	0	0	0	0	0	0	0
	Don't know	0	0	0	0	0	0	0	0	0	0
Youth Risk Behavior Survey (YRBS) ?- Asthma questions	Asthma surveillance staff	0	0	0	0	0	0	0	0	0	0
	Other	0	0	0	0	0	0	0	0	0	0
	Don't know	0	0	0	0	0	0	0	0	0	0
Youth Tobacco Survey (YTS) ?- Asthma questions	Asthma surveillance staff	0	0	0	0	0	0	0	0	0	0
	Other	0	0	0	0	0	0	0	0	0	0
	Don't know	0	0	0	0	0	0	0	0	0	0

Data		Analyzed by…	For the following year(s)…									
			1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
BRFSS	Core: Adult prevalence	Asthma surveillance staff		0	0	0	0	0	0	0	0	0
		Other		0	0	0	0	0	0	0	0	0
		Don't know		0	0	0	0	0	0	0	0	0
	Child Prevalence Module	Asthma surveillance staff				0	0	0	0	0	0	0
		Other				0	0	0	0	0	0	0
		Don't know				0	0	0	0	0	0	0
	Adult History Module	Asthma surveillance staff				0	0	0	0	0	0	0
		Other				0	0	0	0	0	0	0
		Don't know				0	0	0	0	0	0	0
	Adult Call Back	Asthma surveillance staff								0	0	0
		Other								0	0	0
		Don't know								0	0	0
	Child Call Back	Asthma surveillance staff								0	0	0
		Other								0	0	0
		Don't know								0	0	0
National Asthma Survey[?]		Asthma surveillance staff						0				
		Other						0				
		Don't know						0				
National Survey of Children's Health[?]		Asthma surveillance staff						0				0
		Other						0				0
		Don't know						0				0
Worker's Compensation Claims[?]		Asthma surveillance staff	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0	0	0
		Don't know	0	0	0	0	0	0	0	0	0	0
Mandatory Occupational Reporting[?]		Asthma surveillance staff	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0	0	0
		Don't know	0	0	0	0	0	0	0	0	0	0
Air Quality Monitoring[?]		Asthma surveillance staff	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0	0	0
		Don't know	0	0	0	0	0	0	0	0	0	0
Air Quality Modeling[?]		Asthma surveillance staff	0	0	0	0	0	0	0	0	0	0
		Other	0	0	0	0	0	0	0	0	0	0
		Don't know	0	0	0	0	0	0	0	0	0	0

12. Answers to previous questions in this module indicate that the minimum data listed in the table below have not been analyzed for at least one of the past three years in your state (by the state asthma program or by another group). In the following table, please select the barriers that have been encountered in analyzing these data (select all that apply).

Data		Cleanliness of data or quality of data analyses provided is questionable	Issue with data sharing	Asthma surveillance staff' time	Asthma surveillance staff' knowledge of dataset	Data are not yet available for analysis	Other- Please describe in space below
Vital Statistics- Mortality		0	0	0	0	0	
Hospital Discharge-Statewide'		0	0	0	0	0	
BRFSS	Core: Adult prevalence	0	0	0	0	0	
	Child Prevalence Module	0	0	0	0	0	
	Adult History Module	0	0	0	0	0	
	Adult Call Back	0	0	0	0	0	
	Child Call Back	0	0	0	0	0	

13. Are there any other types of data that you are using for asthma surveillance that were not listed in the preceding tables? If so, please provide us with some information about these data in the table that follows.

Name of Data	General description of dataset

Evaluation of surveillance data

14. Have you conducted an evaluation of your surveillance data **during the past 12 months**? This could include an evaluation that you have done on individual datasets within your system (e.g. hospital discharges, mortality, YRBS, etc.) or could be an evaluation that was conducted for all databases that comprise the entire surveillance system.

- ☐ Yes
- ☐ No (skip to Q17)

15. Please provide us with some general information in the space below regarding the evaluation(s) that are referenced in Q14 above:

a. Evaluation conducted of… (e.g. hospital discharge data, mortality data, all data in the surveillance system)	b. Goal(s) or purpose of this evaluation	c. Who conducted this evaluation? (select all that apply)
		___Contractor ___Asthma surveillance staff? ___Fellow or intern ___Other: _____
		___Contractor ___Asthma surveillance staff? ___Fellow or intern ___Other: ____
		___Contractor ___Asthma surveillance staff? ___Fellow or intern ___Other: ____
		___Contractor ___Asthma surveillance staff? ___Fellow or intern ___Other: ____

16. Please upload any reports, if available, that summarize the findings from these evaluations.

Questions 17-23 ask for specific information about statewide hospital discharge data you use for conducting asthma surveillance. Provide answers based upon the most recent statewide hospital discharge file that you have which is complete (i.e. data quality and completeness checks have been finalized and all records are present). It is understood that this may not be the most recent year of data analyzed. (*only ask for those individuals who answered that statewide hospital discharge data is collected in their state*)

17. What types of hospital discharges are <u>not</u> contained in your statewide hospital discharge dataset? Discharges from…

- ☐ Veteran's Administration hospitals
- ☐ Military hospitals
- ☐ Psychiatric/mental health hospitals
- ☐ Prison hospitals
- ☐ Other (please specify): _____

18. Please provide us with a measure of the completeness of the dataset by answering the questions below. Hospitals selected in Q17 above should not be counted in the answers provided for Q18, in other words, the population of interest for Q18 includes all hospitals in your state except those you selected in Q17.

a) How many hospitals are there in your state? ____

b) How many licensed beds exist in the state? ____

c) How many hospitals provide data to the agency responsible for the statewide hospital discharge data? _____

d) How many beds are in hospitals that provide data to the agency responsible for the statewide hospital discharge data? ____

19. Does the hospital discharge data include hospital discharges for in-state residents that occurred in out of state hospitals?

- ☐ Yes (go to Q19a)
- ☐ No (skip to Q20)

If yes,

a. How many states provide you with data on hospital discharges? _____

b. Which states provide you with data (please provide name of state(s))? _____

20. If an emergency department visit results in a hospital admission, where does the data about this visit reside?

- □ Emergency department data file only
- □ Hospital discharge data file only
- □ Both the emergency department data file and the hospital discharge data file

□ None of the above
□ I don’t know

Additional information regarding statewide hospital discharge data used for conducting asthma surveillance			
Variable	21. Does the dataset include this variable?	22. If yes to Q21, what percent of asthma hospital discharges? do **not** contain a value (i.e. missing or unknown) for this variable?	23. If there is other general information you have about the quality of this variable (e.g. frequently miscoded, default value inserted could be misleading, etc.) please provide us with a text based description in the space below.?
a. Age	0 Yes 0 No		
b. Sex	0 Yes 0 No		
c. Month of admission	0 Yes 0 No		
d. Year of admission	0 Yes 0 No		
e. Month of discharge	0 Yes 0 No		
f. Year of discharge	0 Yes 0 No		
g. County of residence	0 Yes 0 No		
h. Zip code of residence	0 Yes 0 No		
i. Race (as one variable)	0 Yes 0 No		
j. Ethnicity (as one variable)	0 Yes 0 No		
k. Race/Ethnicity (as one variable)	0 Yes 0 No		
l. Procedure code(s)	0 Yes 0 No		
m. Length of stay	0 Yes 0 No		
n. Charges	0 Yes 0 No		
o. Expected payer (or primary payer)	0 Yes 0 No		
p. Second listed diagnosis (secondary diagnosis)	0 Yes 0 No		
q. How many diagnosis categories are included in your statewide hospital discharge dataset beyond the primary diagnosis? _____			

24. Are there any questions above (Q17-22) for which you had to estimate or use your best guess?
    - □ Yes (Which questions were estimated/best guess? _____)
    - □ No

Dissemination & evaluation of information from analyses of asthma surveillance data

Surveillance Report?

25. In what year was your most recent state surveillance report? published? _____

26. In what format(s) was your surveillance report made available? (please select all that apply)

- ☐ Hard copy
- ☐ Electronic version available on the internet (e.g. pdf, word document, html)
- ☐ Electronic version available via CD
- ☐ Electronic version distributed via email
- ☐ Other (please specify): _____

27. Has an evaluation? of the usefulness of the surveillance report for stakeholders been conducted within the past 12 months?

- ☐ Yes (proceed to Q27a)
- ☐ No (skip to Q28)

a. Which of the following methods were used to conduct this evaluation? (please check all that apply)

- ☐ Survey of users
- ☐ Focus groups with users
- ☐ Interviews with users
- ☐ Other (please specify): _____

b. Please provide a general description of the major findings from this evaluation:

c. How are findings from this evaluation being used to improve upon current surveillance efforts?

Other methods of distributing findings from analyses of surveillance data

28. Beyond the state surveillance report, what other types of materials have you produced and disseminated (**within the past 12 months**) to share findings from analyses of your surveillance data? (please check all that apply)

- ☐ Fact sheets, newsletters, or quarterly reports
- ☐ Presentations
- ☐ Reports on special topics (answer Q28a)
- ☐ Data tables on website
- ☐ Scientific publications (answer Q28b)
- ☐ Other (Please specify): _____

a. Please provide the title and a brief description of the special report(s) in the space below:

b. Please provide the reference to the scientific publication(s) produced in the space below:

29. Which of the following surveillance products have been evaluated to assess their utility for intended stakeholders within the past 12 months? (please select all that apply)

Note: Only include those selected in Q28 in this list

- ☐ Fact sheets, newsletters, or quarterly reports
- ☐ Presentations
- ☐ Reports on special topics
- ☐ Data tables on website
- ☐ Other (Please specify): _____

Use of information from analyses of asthma surveillance data

30. To your knowledge, have your partners/stakeholders used information from the state asthma surveillance documents (those documents regularly produced and disseminated, **or** documents that result from data analyses that were a special request) to do any of the following in the past 12 months?

		If "yes" please provide some examples of how these data have been used in the space provided below.
Inform asthma related legislation or policies? (*e.g. drafting, providing testimony, proposing new, etc.)*	0 Yes 0 No 0 Unknown	
Revise the goals, objectives, or activities of their program or organization?	0 Yes 0 No 0 Unknown	
Apply for new or additional funding?	0 Yes 0 No 0 Unknown	
Secondary distribution of data provided by state asthma program?	0 Yes 0 No 0 Unknown	
Other: _____		
Other:_____		

Definition and clarification of terms:

Q5- Epidemiology pool: A number of states have created a structure in which epidemiologists that perform activities for the state health department are centralized. When a state health department program (e.g. asthma, cancer, etc.) requires the assistance of an epidemiologist they are assigned one from this centralized group. The epidemiologists in this "pool" typically perform activities for multiple programs. In some instances the state health department program (e.g. asthma, cancer, etc.) will have the same epidemiologist from this centralized group working with them all the time; however there are other instances in which the program will not be consistently assigned to the same epidemiologist. In this data collection instrument, epidemiology pools are any centralized group from which epidemiologists are assigned to a program.

Q8- Primary source of funding: Funding sources that provide 50% or more of the funds used to support the associated position. If funds used to support the position are provided by two sources, with each contributing 50% please provide information for both of the sources (i.e. check the two relevant boxes under "primary source of funding to support this position").

Q9, Q11, Q12 -Hospital Discharge- Statewide: Data provided about hospital inpatient (and in some cases outpatient) visits. These data are frequently based upon administrative claims data and for the majority of states are collected through voluntary or mandated reporting. For this category, CDC is only interested in hospital discharge data that are collected for the majority of the state's population through a centralized system such as the State Hospital Association or the State Health Department. If your state or territory collects data for a small subset of hospitals throughout the state (e.g. two largest hospitals in one metropolitan city) then these data are not considered to be "statewide hospital discharge" data.

Q9, Q11-Emergency Department Visits-Statewide: Data provided about visits to the state's acute care hospital emergency departments. As with hospital discharge data, these data are frequently based upon administrative claims data and can be collected on a voluntary or mandated basis. For this category, CDC is only interested in data about emergency department visits that are collected for the majority of the state's population through a centralized system such as the State Hospital Association or the State Health Department. If your state or territory collects data for a small subset of emergency departments throughout the state or territory (e.g. two largest emergency departments in one metropolitan city) then these data are not considered to be "statewide emergency department visit" data.

Q9, Q11 - Private insurance data: Private insurance data includes information from health maintenance organizations (HMOs), preferred provider organizations (PPOs), and other health insurers that are **not** supported through public funds (e.g. Medicare coverage, Medicaid coverage, other specialized insurance plans funded through state dollars to cover the uninsured or underinsured). This category includes private insurance data collected at any scale (e.g. statewide, one private insurer covering 20% of the state population, etc.).

Q9, Q11 -SCHIP: SCHIP stands for the State Child Health Insurance Program (some states have alternate names for SCHIP). The following definition of SCHIP is provided by the Centers for

Medicare and Medicaid: "This is Title XXI of the Social Security Act and is jointly financed by the Federal and State governments and administered by the States. Within broad Federal guidelines, each State determines the design of its program, eligibility groups, benefit packages, payment levels for coverage, and administrative and operating procedures. SCHIP provides a capped amount of funds to States on a matching basis for Federal fiscal years (FY) 1998 through 2007. Federal payments under title XXI to States are based on State expenditures under approved plans effective on or after October 1, 1997."
(http://www.cms.hhs.gov/LowCostHealthInsFamChild/; Retrieved on 8-28-07) Please use this definition when providing answers to the tables in this module.

Q9, Q11 -Youth Risk Behavior Survey (YRBS)- Asthma questions

The Youth Risk Behavior Survey (YRBS) is part of a larger surveillance system known as the Youth Risk Behavior Surveillance System operated through the National Center for Chronic Disease Prevention and Health Promotion at the CDC. The YRBS is a school-based survey that is administered to students enrolled in grades 9-12. It is noted on the CDC website that, "YRBS includes a national school-based survey conducted by CDC, and state and local school-based surveys conducted by state and local education and health agencies." Therefore, data can be generalized to multiple geographic levels depending upon data collection/availability. For some (but not all) survey years, the YRBS has included questions specific to asthma. When filling out the data collection, availability, and analysis tables the respondent should note the years for which YRBS data specific to asthma were collected, available or analyzed. If you have a state survey that is like the YRBS please provide information on that survey under question 13, do not "count" this survey as the YRBS.
If you have additional interest in the YRBS or the Youth Risk Behavior Surveillance System (YRBSS), more information can be found at: http://www.cdc.gov/HealthyYouth/yrbs/index.htm. In addition, a query system for the YRBS is available at**:** http://apps.nccd.cdc.gov/yrbss/. Results for surveys conducted at the National, State/Territory, and Local levels as well as the Navajo nation can be obtained from this website (includes responses to asthma questions where available).

Q9, Q11 -Youth Tobacco Survey (YTS)- Asthma questions

The Youth Tobacco Survey is a "school based survey of students in grades 6-12" which is administered by states. The design and administration of the YTS is coordinated by the Office of Smoking and Health at the CDC. The content of the YTS includes a set of core survey questions which the states are required to administer. However, states can choose to include supplemental questions as well as state-specific questions. In 2006, a new supplemental question regarding asthma was included in the questionnaire circulated to states (Question 26 of the 2006 questionnaire- see http://www.cdc.gov/tobacco/data_statistics/surveys/YTS/index.htm for more information). As noted previously, states have had the option of adding their own questions over time and may therefore have included questions specific to asthma. When filling out the data collection, availability, and analysis tables the respondent should note the years for which YTS data specific to asthma were collected, available or analyzed. If you have a state survey that is like the YTS please provide information on that survey under question 13, do not "count" this survey as the YTS.
If you have additional interest in the YTS, more information can be found at the following website: http://www.cdc.gov/tobacco/data_statistics/surveys/YTS/index.htm

Q10, Q11-National Asthma Survey

The National Asthma Survey was conducted in 2003. A national sample, and four state samples were included. As described on the National Center for Health Statistics (NCHS) website: "This survey, sponsored by the National Center for Environmental Health (NCEH), Centers for Disease Control and Prevention, examines the health, socioeconomic, behavioral, and environmental predictors that relate to better control of asthma. This study explores the content of care and health care experiences of persons with asthma." Additional information about this survey can be found at: http://www.cdc.gov/nchs/about/major/slaits/nas.htm.

Q10, Q11 -National Survey of Children's Health

This survey is sponsored by the Maternal and Child Health Bureau of the Health Resources and Services Administration (HRSA). Specifically this telephone survey examines the health of children ages 0-17 years of age utilizing a sample selection procedure that allows for generalization of results to the nation, all 50 states, and some metropolitan areas. On occasion, this survey includes questions specific to asthma (e.g. the last year these questions were included was 2003). Additional information about this survey can be obtained at: http://www.cdc.gov/nchs/about/major/slaits/nsch.htm.

Q9, Q11-Worker's Compensation Claims:

When responding to questions regarding data collection, availability, and analysis please use the following definition of worker's compensation claims as provided by the Council of State and Territorial Epidemiologist's (CSTE) Occupational Health Indicators workgroup. Data falling in line with the following description should be counted by the respondent as "Worker's Compensation Claims". Respondents should **not** indicate that their state collects worker's compensation claims data if these datasets do not have asthma cases as part of their inclusion criteria (i.e. Worker's Compensation Claims data is collected in the state but collection of claims specific to asthma are not part of the data collected).

"Workers' compensation is a no-fault insurance system designed to provide compensation to workers who sustain work-related injuries or illnesses while limiting the legal liability of employers. All states and the District of Columbia have workers' compensation systems, and all employers, except those in Texas, are required to have this form of insurance for their employees. Several federal workers' compensation systems exist for the protection of select groups of workers, such as federal workers, and longshore, and harbor workers, and are outside of state governance.

State workers' compensation systems are the result of individual state legislation and regulation.[39] States may allow employers to self-insure, group self-insure, insure through private carriers, or insure through a state fund. Coverage exemptions differ between states; common exemptions include employment in the public and private sector, specified occupations, and the size of the employer. Marked state-to-state differences exist in the statute of limitations for filing a work-related injury or illness claim, the procedures for filing a claim, and the requirements governing claim adjudication. State laws governing benefits for disability, waiting periods for wage replacement, wage replacement amounts, medical payments, and vocational rehabilitation make comparisons of benefits across states difficult. In addition, there may be considerable variability in the types of data collected, the data coding systems used, and the availability of

data for research purposes. The variability in workers' compensation laws across states represents a significant limitation of using these data to make state-to-state comparisons." http://www.cste.org/pdffiles/newpdffiles/CSTE_OHI.pdf (Retrieved on 8-28-07)

Q9, Q11 -Mandatory Occupational Reporting:
Similar to infectious disease reporting, some states have legislation that mandates reporting of specific occupational health conditions by physicians. If your state has such legislation for asthma, this should be included under "Mandatory Occupational Reporting." Please indicate that your state has "Mandatory Occupational Reporting" even if the mandate applies only to a subset of your state (e.g. not mandated statewide- only for certain geographic areas, not all occupations- only a subset of occupations).

Q9, Q11- Air Quality Monitoring
Physical monitoring systems are located throughout the United States to measure the concentration of ambient air pollutants on a regular basis. These monitors collect information on a variety of pollutants including criteria air pollutants (e.g. ozone, particulate matter, NO2, SOx, CO, and lead) and hazardous (toxic) air pollutants (e.g. benzene, toluene). Additional information about these monitors can be found on the Environmental Protection Agencies' website as well as websites specific to your Regional EPA and state environmental protection agency. To access information via the U.S. EPA please see: http://www.epa.gov/air/data/aqsdb.html. Links to your Regional EPA office can be found at: http://www.epa.gov/epahome/whereyoulive.htm#regiontext.

Q9, Q11 - Air Quality Modeling
Air monitoring data is one source of information regarding concentrations of ambient air pollutants. Environmental protection agencies also frequently produce estimates of ambient air pollutant concentrations utilizing a wide variety of models. The data used in the model vary based upon the type of model used (e.g. may combine data from many sources including but not limited to monitoring data, meteorological data, emissions estimates, satellite data). You should consult with your state environmental agency air quality office if you have questions regarding whether or not this information is produced within your state. These estimates do not have to be produced for your entire state in order to be counted as "collected" within your state (i.e. can be produced for a subset of your state).

Q11- Asthma surveillance staff: Asthma surveillance staff includes the individual noted in Question 1 and all individuals listed under Question 8.

Q11- Analyzed by…Other: Other includes everyone that is not considered to be asthma surveillance staff as defined above. This may include individuals within or outside of the health department. Many states request data analyses of other departments or agencies for the purpose of asthma surveillance. This can be for a variety of reasons including but not limited to availability of data to the asthma surveillance staff, time/resource constraints of the asthma surveillance staff, and comfort level of asthma surveillance staff in analyzing the particular database. Individuals outside of the asthma program staff who may be classified as "other" include (but are not limited to): Medicaid staff that conducts analyses for the asthma program on an annual basis or a BRFSS coordinator who analyzes data from the adult asthma history module

and provides a report to the asthma program. The "other" category also includes instances in which surveillance information used by the state was obtained from data analyses posted to the Internet (e.g. CDC asthma program site, State Medicare office, EPA).

Q11: Definition of "analyzed"

There are many different types and levels of data analysis. The minimum criteria for counting a dataset as having been "analyzed" under question 11 is the presence of basic frequency tables that can be used to answer general stakeholder questions. These analyses do not have to be published or disseminated in order to count the data as having been analyzed.

Q15- Asthma surveillance staff

Asthma surveillance staff consists of those individuals listed in questions 1 and 8 of this module.

Q22- Asthma hospital discharge

Please use the case definition typically used for asthma surveillance in your state to determine what qualifies as an asthma hospital discharge in question 22. Please provide us with the percentage of asthma hospital discharges (out of all asthma hospital discharges) that did NOT include a value for each variable that is present in the dataset- this includes values that are coded as "missing" or "unknown" or left blank. Please base these calculations on the most recent statewide hospital discharge file that you have which is complete (i.e. data quality and completeness checks have been finalized and all records are present). It is understood that this may not be the most recent year of data analyzed.

Q23- General information

General information can include information that you have from previous formal evaluations to anecdotal information. We do not anticipate that respondents will conduct special analyses or inquiries to provide the information requested in Q23, rather we anticipate that this information will most likely be anecdotal in nature (and will treat it as such).

Q25- Surveillance Report

This is the report required as part of the FOA. This is also frequently called the "Burden Report."

Q27, Q29- Evaluation

In the context of questions 27 and 29, an evaluation constitutes any type of assessment that goes beyond informal feedback from stakeholders. This may be a survey of users, focus groups with users, interviews with users, or other similar methodology that is systematic in nature.