

Birth Certificate and Hospital Discharge Linkage—State Survey

Thank you for your agreement to participate in this survey.

Please note that due to software requirements, the survey must be completed and submitted online in one session. If you are not ready to complete the entire survey, please wait until you have all your responses prepared before you begin.

If you have any questions, please contact [NAME] at [Email].

As was noted in the email you received, the purpose of this survey is to understand the status of birth certificate and hospital discharge linkages in the United States and to improve surveillance, research policy, and programs around maternal, infant, and child health.

The data collected from this survey will be used to understand whether a state has a birth certificate and hospital discharge linkage, the process and quality of the linkage, the resources related to linking, and barriers and limitations to linkages.

Your feedback will also be used for improvements in data linkages that inform public health surveillance, research, policy, and programs around pregnancy conditions, risk behaviors, and neonatal outcomes.

The survey is being conducted through collaboration with AMCHP, NAPHSIS, and the Centers for Disease Control and Prevention.

Public reporting burden of this collection of information is estimated to average 25 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to CDC/ATSDR Information Collection Review Office, 1600 Clifton Road NE, MS D-74, Atlanta, Georgia 30333; ATTN: PRA (0920-0879).

<p>1. Has any organization, including your state health department, or another organization or university, linked your state's birth records and hospital discharge records (maternal and/or infant discharges) in the last 4 years?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know</p>	<p>If no or don't know, go to question 22</p>
<p>2. Which inpatient hospital discharge records are linked to the birth record, in the last 4 years?</p>	<p><input type="checkbox"/> Maternal <input type="checkbox"/> Infant <input type="checkbox"/> Both</p>	
<p>3. Does your state health department currently have access to this linked file for analysis?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know</p>	
<p>4. How often is the linked file updated?</p>	<p><input type="checkbox"/> Less than once every two years <input type="checkbox"/> Every other year <input type="checkbox"/> Annually <input type="checkbox"/> More frequently than annually <input type="checkbox"/> Have only done the linkage once <input type="checkbox"/> Other (specify) <input type="checkbox"/> Don't know</p>	
<p>5. Is your linkage automated (i.e. when data are received, there is already code developed to clean and merge into full dataset)?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know</p>	<p>If no, go to question 7 If don't know, go to question 9</p>
<p>6. If yes, what percentage of records can be linked electronically without manual judgment or intervention?</p>	<p>About _____%</p>	<p>Go to question 8</p>
<p>7. If no, why not?</p>	<p><input type="checkbox"/> Lack of experience <input type="checkbox"/> Lack of software <input type="checkbox"/> Data not provided in an electronic format <input type="checkbox"/> Data files are sent in different format <input type="checkbox"/> Other (specify) <input type="checkbox"/> Don't know</p>	
<p>8. What data software is used to automate the linkage?</p>	<p>--By Hand --SAS --Stata --SPSS --Microsoft Access --SQL Server --Oracle --Fril --LinkPlus</p>	

	--Link Pro --Link King --Other (specify)	
9. Would you be interested in collaborating with other states in sharing linkage processes, including lessons learned, challenges encountered, and codes?	__Yes __No Not Sure	If yes, go to question 12 (if no, proceed to Q10) If not sure, go to question 11
10. If no, why not? (check all that apply)	__Lack of staff time __Confidentiality of data __Other (specify)	Go to question 12
11. If not sure, what are your concerns? (check all that apply)	__Time commitment __Cost __Confidentiality of data __Other (specify)	Go to question 12
12. You stated that an organization conducts a linkage in your state, more specifically, has your state health department conducted this linkage, either maternal or infant, in the last 4 years?	__Yes __No __Don't know	If no or don't know, go to question 14
13. Which organizational unit or program in the state health department was responsible for doing the linkage? (Check all that apply)	__Vital Records/Health Statistics Office __Epidemiology Office __MCH Program Office __Office responsible for collecting hospital discharge abstracts __Other (specify)	
14. What data elements are used to link the data sources? (Check all that apply)	__Maternal social security number __Child's Date of birth __Child's name __Race __Gender of child __Mother's first name __Mother's last name __Mother's surname prior to first marriage __Hospital medical record __Birth Facility/Hospital Name __Discharge Date __Patient Address (City, state,	

	house number, zip code) <input type="checkbox"/> Other patient identifier (specify) <input type="checkbox"/> Other (specify) <input type="checkbox"/> Don't know	
15. What is the methodology used for linking the records? (Check all that apply)	<input type="checkbox"/> Deterministic (specify %) <input type="checkbox"/> Probabalistic (specify %) <input type="checkbox"/> Other (specify and %)	
16. Has the quality of the birth-hospital record linkage been evaluated?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know	If no or don't know, go to question 18
17. How has the quality of the linkage been evaluated? (Check all that apply)	<input type="checkbox"/> Review sample of records <input type="checkbox"/> Chart review <input type="checkbox"/> Other (specify)	
18. Does your state utilize the linked birth and hospital record dataset for research, policy, surveillance or programs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know	If no or don't know, go to question 20
19. If yes, how does your state currently use your birth-hospital record linked dataset? (Check all that apply)	<input type="checkbox"/> Statistical reports (regular published or unpublished written reports) <input type="checkbox"/> Surveillance (understand trends and prevalence estimates) <input type="checkbox"/> Special studies <input type="checkbox"/> Policy evaluation (pass legislation, provide legal support) <input type="checkbox"/> Program or quality improvement <input type="checkbox"/> Other (specify)	
20. What other ways would you like to use your birth-hospital record linked dataset? (Check all that apply)	<input type="checkbox"/> Statistical reports (regular published or unpublished written reports) <input type="checkbox"/> Surveillance (understand trends and prevalence estimates) <input type="checkbox"/> Special studies <input type="checkbox"/> Policy evaluation (pass legislation, provide legal support) <input type="checkbox"/> Program or quality improvement <input type="checkbox"/> Other (specify)	
21. What prevents your states from using the birth-hospital record linked dataset the way you	<input type="checkbox"/> Cost <input type="checkbox"/> Lack of staff time available	Skip to Q25

would like to use it?	<input type="checkbox"/> Lack of interest in utilizing the linkage <input type="checkbox"/> Most people are not aware of the availability of linkage <input type="checkbox"/> Access to linkage too difficult to obtain <input type="checkbox"/> Other (specify) <input type="checkbox"/> Don't know	
22. In your organization or state, what prevents birth-hospital discharge linkages from occurring? (check all that apply)	<input type="checkbox"/> Cost <input type="checkbox"/> Lack of staff time available for linkage <input type="checkbox"/> Data linkage is not a priority <input type="checkbox"/> Cannot access raw hospital discharge data <input type="checkbox"/> Cannot access raw birth certificate data <input type="checkbox"/> No statewide hospital discharge data collected <input type="checkbox"/> Linkage fields (e.g. name, SSN, or other identifiers) not collected or not available <input type="checkbox"/> Lack of effective matching/linkage software <input type="checkbox"/> Lack of interest in obtaining/using these data <input type="checkbox"/> Other (specify) <input type="checkbox"/> Don't know	
23. Does your organization or state want to have a linkage of birth and hospital discharge records?	<input type="checkbox"/> Yes, definitely <input type="checkbox"/> Yes, no rush <input type="checkbox"/> Undetermined <input type="checkbox"/> No, not right now <input type="checkbox"/> No, never <input type="checkbox"/> Don't know	
24. Would you be interested in collaborating with other states to learn about the linkage process?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know	
The following questions are to get an understanding of the quality of each individual data source. Please answer to the best of your ability.		
25. Has the quality of the data items from the birth record only been evaluated?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know	If no or don't know, go to question 27
26. How has the quality of the data items from the birth record been evaluated? (Check all that apply)	<input type="checkbox"/> Medical chart validation <input type="checkbox"/> Linkage with other data sets <input type="checkbox"/> Other (specify) <input type="checkbox"/> Don't know	
27. Has the quality of the data items from the	<input type="checkbox"/> Yes	If no or don't

hospital discharge abstract only been evaluated?	<input type="checkbox"/> No <input type="checkbox"/> Don't know	know, go to question 29
28. How has the quality of the data items from the hospital discharge abstract been evaluated? (Check all that apply)	<input type="checkbox"/> Medical chart validation <input type="checkbox"/> Linkage with other data sets <input type="checkbox"/> Other (specify) <input type="checkbox"/> Don't know	
29. Is there a state developed instruction manual for completing the birth record for the birth clerk?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know	
30. Are there training programs available for hospital and birthing center staff on how to fill out the birth record?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know	If no or don't know, go to question 32
31. If yes, who provides the trainings on procedures for completing the birth record?	<input type="checkbox"/> Online (if online, offered by whom?) <input type="checkbox"/> Someone in the health department (specify) <input type="checkbox"/> Someone from a hospital (specify) <input type="checkbox"/> Other (specify) <input type="checkbox"/> Don't know	
32. Are personnel completing the birth record provided any guidance (written, training, consultation) on how to prioritize different sources of information and make decisions when there are conflicting values?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know	If no or don't know, go to question 34
33. How often is training to complete the birth record offered?	<input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Annually <input type="checkbox"/> Less frequently than once a year <input type="checkbox"/> As needed or on demand <input type="checkbox"/> Available online at anytime <input type="checkbox"/> Other (specify) <input type="checkbox"/> Don't know	
34. Is there an instruction manual for abstracting hospital discharge data?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know	
35. Are there training programs available for hospital and birthing center staff on how to abstract data from hospital discharge data records?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know	If no or don't know, go to question 37
36. If yes, who provides the trainings on procedures for abstracting the hospital discharge data?	<input type="checkbox"/> Online (if online, who is offering the training) <input type="checkbox"/> Hospital Association <input type="checkbox"/> Someone in the health department (specify) <input type="checkbox"/> Someone from a hospital	

	(specify __Other (specify) __Don't know	
37. Are personnel abstracting data from discharge records given guidance on how to prioritize different sources of information and make decisions when there are conflicting values?	__Yes __No __Don't know	If no or don't know, go to 39
38. How often is training to abstract hospital discharge records offered?	__Monthly __Quarterly __Annually __Less frequently than once a year __As needed or on demand __Available online at anytime __Other (specify)	Go to 39
39. What other data do you link to the birth record? (Check all that apply)	__No other linkages __WIC __Medicaid __Infant deaths __Death certificate of women of reproductive age __PRAMS __Birth defects registry __Newborn blood spot screening __Newborn hearing screening __Immunizations __Family planning (Title X) __Health department client data __Public health program data (Healthy Start, home visiting, etc.) __Education data __Child maltreatment data __Children's special healthcare program __Health insurance other than Medicaid __Outpatient Records __ER/Ambulatory Data __EMS Registry __Other (specify)	
40. Is there any other information you think we should know regarding hospital discharge and birth record linkages?		

41. Please state your jurisdiction and any additional comments on this survey?		
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