

**Attachment 7c. ABLES Changes in Data |**

CURRENTLY APPROVED

Table 7. Format for Adults with blood lead te

Variable name	Length	Type
1. StateRep	2	Text
2. StateRes	2	Text
3. CountyRes	3	Text
4. StateExp	2	Text
5. CountyExp	3	Text
6. ID	15	Text
7. Status	1	Text

8. BLLDate	10	Date
9. DateType	1	Text
10. BLL	3	Numeric
11a. DOB	10	Date
11b. Age	3	Numeric
12. Sex	1	Text
13. Ethnicity	1	Text

14. Race	1	Text
15. WorkRel	1	Text
16. NAICS	6	Text
17. COC	4	Text

18. Process	50	Text
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Note: Variable formats may change to meet

NOTE: The following website is most useful

## Elements

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## REQUEST

ABLES standardiz

Description, instructions, and valid codes
<p>2-letter Postal State abbreviation for the State making this report.</p> <p>[Note: This should be a constant and must be present]</p> <p>2-letter Postal State abbreviation for State in which the adult resides.</p> <p>99 = Unknown. CN = Canada, MX = Mexico.</p>
<p>3-digit county Federal Information Process Standards (FIPS) code for county of residence of the adult.</p> <p>999 = Unknown.</p> <p>99 = Unknown. CN = Canada, MX = Mexico.</p>
<p>3-digit county FIPS code for county where exposure occurred.</p> <p>999 = Unknown.</p>
<p>State-assigned unique ID number for adult (ID must remain constant from year to year) with 15 characters maximum. If all characters are not used, leave the missing ones blank, and left justify. Do not fill with zeros.</p> <p>[Note: Do not use any personal identifier such as an SSN or name for ID.]</p>
<p><b>For adults with BLLs <math>\geq 10</math> <math>\mu\text{g}/\text{dL}</math>:</b></p> <p><b>1 = New case.</b></p> <p>An adult whose highest BLL was <math>\geq 10</math> <math>\mu\text{g}/\text{dL}</math> in the current calendar year who was not in the State lead registry in the immediately preceding calendar year with a BLL <math>\geq 10</math> <math>\mu\text{g}/\text{dL}</math>. This adult may have been in the registry with a BLL <math>\geq 10</math> <math>\mu\text{g}/\text{dL}</math> in earlier calendar years or with a BLL <math>&lt; 10</math> <math>\mu\text{g}/\text{dL}</math> in the immediately preceding calendar year.</p> <p><b>[Note: A new case should remain coded 1 for all other BLL tests for the adult done in the same calendar year.]</b></p> <p><b>2 = Existing case.</b></p> <p>An adult whose highest BLL was <math>\geq 10</math> <math>\mu\text{g}/\text{dL}</math> in the current calendar year who was in the registry in the immediate preceding calendar year with a BLL <math>\geq 10</math> <math>\mu\text{g}/\text{dL}</math>.</p> <p><b>9 = Unknown</b></p> <p><b>For adults with BLLs <math>&lt; 10</math> <math>\mu\text{g}/\text{dL}</math>:</b></p> <p><b>3 = Unclassified Adult.</b></p> <p>An adult whose highest BLL was <math>&lt; 10</math> <math>\mu\text{g}/\text{dL}</math> about whom you have collected insufficient information to determine whether he/she is a new or existing adult in the State registry.</p>

Variable name
1. StateRep
2. StateRes
3. CountyRes
4. StateExp
5. CountyExp
6. ID
7. Status

**4 = New adult.**

An adult whose highest BLL was <10 µg/dL who was not in the State lead registry in the preceding calendar year with a BLL either less than or greater than 10 µg/dL. This adult may have been in the registry in earlier years.

**5 = Existing adult.**

An adult whose highest BLL was <10 µg /dL who was in the registry in the preceding calendar year with a BLL either less than or greater than 10 µg/dL.

**[Note: Codes 3-5 are provided to facilitate the reporting of the lower BLLS. The use of Code 3 should be rare as should the use of Code 9.]**

[Note: Change short date under control panel/regional options to reflect

- 1 = Date of blood draw (preferred)
- 2 = Date of laboratory test (acceptable)
- 3 = Date of health department ascertainment (acceptable)
- 9 = Unknown

Blood lead level, 3 digits no decimal, leave blanks, right justify.

Date of Birth (MM/DD/YYYY)

**[Note: If DOB unavailable, you may leave blank and code Age]**

Age in years, right justify, no decimal.

999 = Unknown

**[Note: If DOB provided, you may leave Age blank]**

- 1 = Male
- 2 = Female
- 3 = Other
- 9 = Unknown / not stated

- 1 = Yes (Hispanic/Latino)
- 0 = No (Not Hispanic/Latino)

**(More than one can be marked)**

American Indian or Alaskan Native

Asian

8. BLLDate

9. DateType

10a. BLL

10b. BLL2

11a. DOB

11b. Age

12. Sex

13. Ethnicity

Black or African American  
Native Hawaiian or Other Pacific Islander  
White

14. Race

**This is your determination on whether the exposure was work related.**

- 1 = Work related
- 2 = Not work related
- 3 = Both
- 9 = Unknown

15. WorkRel

**[Note: Code 1, 2 or 3 only if you are sure of the exposure source.**

**Code 9 if you do not know — do not make assumptions.]**

North American Industry Classification System 2002

16a. NAICS Year

999 = Unknown

**[Note: If WorkRel is coded 1 or 3, NAICS should have a valid code or 999.**

**If WorkRel is coded 2 or 9, NAICS should be blank.]**

<http://www.naics.com/search.htm>

16b. NAICS

Census Occupation Codes 2002

17a. COC Year

990 = Unknown

**[Note: If WorkRel is coded 1 or 3, COC should have a valid code or 990 If WorkRel is coded 2 or 9, COC should be blank]**

<http://www.census.gov/hhes/www/ioindex/ioindex02/view02.html>

17b. COC

Process is defined as a narrative of the non-occupational avocation or activity from which the adult was exposed to lead.

NA = Non-applicable.

**[Note: If WorkRel is coded 2 or 3, Process should have a narrative entry, a code, or 999.]**

**[Note: If WorkRel is coded 1 or 9, Process should be coded NA.]**

**[Note: While it is acceptable to use the following codes for the most frequent process categories, we prefer that you include text descriptions so that the need for new categories or new exposures can be assessed.]**

- 1 = Shooting firearms (target shooting)
- 2 = Remodeling/renovation/painting
- 3 = Casting (e.g., bullets, fishing weights)
- 4 = Ceramics
- 5 = Stained glass
- 6 = Retained bullets (gunshot wounds)
- 7 = Pica (the eating of non-food items)
- 8 = Eating from leaded cookware
- 9 = Eating food containing lead (e.g., imported candy)
- 10 = Drinking liquids containing lead (e.g., moonshine)
- 11 = Taking nontraditional medicines (e.g., Ayurvedic medications)
- 12 = Retired (This could be a former lead worker; try to get SIC, NAICS)
- 13 = Other--please provide text descriptions for sources not listed above.
- 999 = Unknown

emerging CDC guidelines for surveillance systems.

in finding help in coding industry: (1) Search by a keyword in the line of business the adult is in and i

18. Process

Note: Variable fo

NOTE: The follow

[NIOSH Industry](#)

[For more inform](#)

04/03/2017: Link:

zed variables

Length	Type
2	Text
2	Text
3	Text
2	Text
3	Text
15	Text
1	Text

10	Date
1	Text
3	Numeric
5	Text
10	Date
3	Numeric
1	Text
1	Text

1	Text
1	Text
4	Numeric
6	Text
4	Numeric
4	Text

100	Text
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formats may change to meet em  
ving website is most useful in fir  
[and Occupation Computeriz  
ation or questions on Indus  
s to NAICS were updated.](#)

Changes are reflected in RED

Description, instructions, and valid codes
<p><b>Identifier for the reporting state or Territory.</b> Use the 2-letter Postal State abbreviation for the State or Territory making this report.</p> <p>[Note: The code should be kept consistent and must be present]</p>
<p>2-letter Postal State abbreviation for State or Territory in which the adult resides <b>at the time when the BLL sample was collected.</b></p> <p>99 = Unknown; CN = Canada.; MX = Mexico.</p>
<p>3-digit county Federal Information Process Standards (FIPS) code for county of residence of the adult.</p> <p>999 = Unknown.</p>
<p>99 = Unknown. CN = Canada, MX = Mexico.</p>
<p>3-digit county FIPS code for county where exposure occurred.</p> <p>999 = Unknown.</p>
<p>State-assigned unique ID number for adult (ID must remain constant from year to year) with 15 characters maximum. If all characters are not used, leave the missing ones blank, and left justify. Do not fill with zeros.</p> <p>[Note: Do not use any personal identifier such as an SSN or name for ID.]</p>
<p><b>NIOSH will code this variable and send back coded data to State ABLES programs. When BLL data <math>\geq 5</math> <math>\mu\text{g}/\text{dL}</math> are not available, status will be calculated using <math>\text{BLL} \geq 10</math> <math>\mu\text{g}/\text{dL}</math>.</b></p>
<p><b>Variable to identify new and old cases of elevated BLLs. Used in prevalence and incidence rates calculations.</b></p>
<p><b>For adults with BLLs <math>\geq 5</math> <math>\mu\text{g}/\text{dL}</math>:</b></p> <p><b>1 = New case.</b></p> <p>An adult whose highest BLL was <math>\geq 5</math> <math>\mu\text{g}/\text{dL}</math> in the current calendar year who was not in the State lead registry in the immediately preceding calendar year with a BLL <math>\geq 5</math> <math>\mu\text{g}/\text{dL}</math>.</p> <p>This adult may have been in the registry with a BLL <math>\geq 5</math> <math>\mu\text{g}/\text{dL}</math> in earlier calendar years or with a BLL <math>&lt; 5</math> <math>\mu\text{g}/\text{dL}</math> in the immediately preceding calendar year.</p> <p><b>[Note: A new case should remain coded 1 for all other BLL tests for the adult done in the same calendar year.]</b></p> <p><b>2 = Existing case.</b></p> <p>An adult whose highest BLL was <math>\geq 5</math> <math>\mu\text{g}/\text{dL}</math> in the current calendar year, and who was in the State lead registry in the immediate preceding calendar year with a BLL <math>\geq 5</math> <math>\mu\text{g}/\text{dL}</math>.</p> <p><b>For adults with BLLs <math>&lt; 5</math> <math>\mu\text{g}/\text{dL}</math>:</b></p> <p><b>3 = Unclassified Adult.</b></p> <p>An adult whose highest BLL was <math>&lt; 5</math> <math>\mu\text{g}/\text{dL}</math> about whom you have collected insufficient information to determine whether he/she is a new or existing adult in the State registry.</p>

**4 = New adult.**

An adult whose highest BLL was <5 µg/dL who was not in the State lead registry in the preceding calendar year with a BLL either less than or greater than 5 µg/dL. This adult may have been in the registry in earlier years.

**5 = Existing adult.**

An adult whose highest BLL was <5 µg /dL who was in the registry in the preceding calendar year with a BLL either less than or greater than 5 µg/dL.

**9 = Unknown**

**[Note: Codes 3,4, and 5 are provided to facilitate the reporting of the lower BLLS. The use of Code 3 should be rare as should the use of Code 9.]**

Date blood drawn or date of lab BLL test. MM/DD/YYYY

1 = Date of blood draw (preferred)

2 = Date of laboratory test (acceptable)

3 = Date of health department ascertainment (acceptable)

9 = Unknown

Blood lead level (BLL) in µg/dL, one decimal, or as supplied by the laboratory. The value supplied by the laboratory may be rounded off to one decimal, but this is not necessary. E.g. Enter 9.5 or 10; or enter 9.4 or 9

Only BLLs from venous samples are acceptable for blood lead surveillance for adults. Due to the high potential for external contamination, blood lead analysis on capillary samples are not acceptable for blood lead surveillance for workers.

When no numerical value reported, but BLL are provided as "<" (less than) or ">" (greater than) format.

Examples: If less than 5, put down "<5"; If less than 4, put down "<4 "; If less than 1, put down "<1" and etc.

If greater than 10, put down ">10"; If greater than 25, put down ">25" and etc.

**[Note: Please also state the Limit of Detection (LOD) for your state]**

Date of Birth (MM/DD/YYYY)

**[Note: If DOB unavailable, you may leave blank and code Age]**

Age in years, right justify, no decimal.

999 = Unknown

**[Note: If DOB provided, you may leave Age blank]**

1 = Male

2 = Female

3 = Other

9 = Unknown / not stated

**Self-identified Hispanic ethnicity:**

0 = No (Not Hispanic or Latino)

1 = Yes (Hispanic or Latino)

9 = Unknown

**[Note: This is the person's self-identified ethnicity, not the ethnicity of the lastname]**

**Self-described race of adult:**

1 = American Indian & Alaskan Native

2 = Asian

3 = Black  
4 = White  
5 = Hawaiian/Pacific Islander

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**Work-relatedness. This is your determination on whether the exposure was work related or not.**

1 = Work related (Occupational)  
2 = Not work related (Non-occupational)  
3 = Both (Work-related and not work-related)  
9 = Unknown

*Work-relatedness can be coded "1" if results are reported by laboratories processing occupational samples only, if the BLL test is ordered by occupational health providers, if the BLL is from an adult working in an industry known to process lead, if the company is listed in your Lead Registry, or if the employer is paying for the BLL test. Other criteria may only apply for some states. For example, if the SIC code is fee-paying, or if the employer tested 5 or more workers in 12 months.*

*Please share with us the criteria you use to assign work-relatedness in your program*

**[Note: Code 1, 2 or 3 only if you are sure of the exposure source.**

**Code 9 if you do not know]**

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North American Industry Classification System year version: 2002, 2007, or 2012. Leave blank if unknown

North American Industry Classification System (NAICS) code. Describes the kind of business conducted by a person's employing organization. NAICS is the standard used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy.

If all 6 digits NAICS codes are unavailable, complete with as many as possible, leave the missing ones blank. Do not fill with zeros.

999 = Unknown

If WorkRel is coded 1 or 3, NAICS should have a valid code which includes 999

NAICS codes can be found by contacting the employer; by searching in NIOSH NIOCS tool; by searching D&B, refUSA, Manta Find a Business (<http://www.manta.com/business>) or other commercial system; or by searching in your previous records

**Useful websites to find NAICS codes:**

[NIOSH Industry and Occupation Computerized Coding System \(NIOCCS\): http://wwwn.cdc.gov/niosh-nioccs/](http://wwwn.cdc.gov/niosh-nioccs/)

[U.S. Census Bureau. NAICS: http://www.census.gov/eos/www/naics/](http://www.census.gov/eos/www/naics/)

[NAICS Association: http://www.naics.com/search.htm \(CHECK THE LINK\)](http://www.naics.com/search.htm)

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Census Occupation Codes year version: 2000, 2002, or 2010. Leave blank if unknown.

Census Occupation Code. Describes the kind of work a person does on the job.

If all 4 digits COC codes are unavailable, complete with as many as possible, leave the missing ones blank, and left justify. Do not fill with zeros.

9990 = Unknown

If WorkRel is coded 1 or 3, COC should have a valid code or 990

**Useful websites to find occupation codes:**

U.S. Census Bureau. Alphabetical Indexes of Industries and Occupations

<https://www.census.gov/topics/employment/industry-occupation/guidance/indexes.html>

[NIOSH Industry and Occupation Computerized Coding System \(NIOCCS\): http://wwwn.cdc.gov/niosh-nioccs/](http://wwwn.cdc.gov/niosh-nioccs/)

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Short narrative of the non-occupational (or occupational) avocation or activity from which the adult was exposed to lead.

If WorkRel is coded 2 or 3, this variable should have a narrative entry, a code, or 999

If WorkRel is coded 1 or 9, this variable can have a narrative entry or can be blank

While it is acceptable to use the following codes for the most frequent process categories, we prefer that you include text descriptions so that the need for new categories or new exposures can be assessed.

1 = Shooting firearms (target shooting)

2 = Remodeling/renovation/painting

3 = Casting (e.g., bullets, fishing weights)

4 = Ceramics

5 = Stained glass

6 = Retained bullets (gunshot wounds)

7 = Pica (the eating of non-food items)

8 = Eating from leaded cookware

9 = Eating food containing lead (e.g., imported candy)

10 = Drinking liquids containing lead (e.g., moonshine)

11 = Taking complementary and alternative medicines (e.g., Ayurvedic medications)

12 = Retired (This could be a former lead worker; try to get NAICS and COC)

13 = Other. Please provide text descriptions for sources not listed above.

999 = Unknown

Following CDC guidelines for surveillance systems.

For coding help in coding industry: (1) Search by a keyword in the line of business the adult is in and it will find the NAICS and Occupation codes you may also contact Pamela Schumacher ([pk1@cdc.gov](mailto:pk1@cdc.gov)).

<http://www.cdc.gov/niosh-nioccs/>

code. (2) Search by SIC code and it will find the corresponding NAICS code. (3) Search by the NAICS code to receive tl

he full description. <http://www.naics.com/search.htm>