Welcome to CDC’s *National Report on Human Exposure to Environmental Chemicals*. This user guide provides detailed instructions for how to navigate and view the data tables.

**Step 1:**

The tables are organized into three categories of sample type: samples from individual participants, pooled serum samples, and a special sample of U.S. adults.

To view data tables for your category of interest, select the corresponding radio button:

- Analysis of Whole Blood, Serum, and Urine Samples, NHANES 1999-2018
- Analysis of Pooled Serum Samples for Select Chemicals, NHANES 2005-2016
- Analysis of Chemicals Found in Cigarette Smoke in a Special Sample of U.S. Adults NHANES 2011-2016

**Step 2:**

Once you’ve selected a category of sample type, you can search for data tables in two different ways:

*Option 1:* Select the **Show Chemical List** button to display a list of chemical groups.

![Show Chemical List button]

Clicking a chemical group opens all the chemicals contained in that group. Clicking a chemical opens all the data tables available for that chemical.

- **Adducts of Hemoglobin**
  - Acrylamide
    - Acrylamide (2003 - 2006)
    - Acrylamide (2013 - 2016)
  - Formaldehyde
  - Glycidamide

Clicking a data table results in that table appearing in a **Table Viewer** tab near the bottom of the page.

As an example, selecting: NHANES 1999-2018 → Adducts of Hemoglobin → Acrylamide → Acrylamide (2003-2006) will result in the data table appearing as shown below.
Option 2: You can use the **Search** box to find tables by typing in the chemical name, chemical group name (e.g., aldehydes, aromatic amines, etc.), specimen type (blood, serum, urine), or survey year. The data table you select will appear in a **Table Viewer** tab below.

Each data table contains blue hyperlinks that allow you to download PDF versions of the data table, or the entire chemical group section to which the chemical belongs. Some data tables also contain blue hyperlinks to a biomonitoring summary and a chemical factsheet.

- [Download this table in PDF format](#) [PDF 35KB]
- [Download the Adducts of Hemoglobin section in PDF format](#) [PDF 102KB]

**Biomonitoring Summary**: [https://www.cdc.gov/biomonitoring/Acrylamide_BiomonitoringSummary.html](https://www.cdc.gov/biomonitoring/Acrylamide_BiomonitoringSummary.html)

**Factsheet**: [https://www.cdc.gov/biomonitoring/Acrylamide_FactSheet.html](https://www.cdc.gov/biomonitoring/Acrylamide_FactSheet.html)

To view another table, simply repeat one of the two options listed in Step 2. Please proceed to Step 3 if you would like to open more than one data tables at the same time.

**Step 3:**

Up to six data tables can be loaded at the same time by using the six **Table Viewer** tabs. Each Table Viewer can house one data table at a time. Once a data table is loaded into a Table Viewer, the corresponding tab is shaded grey.

By selecting a different Table Viewer prior to selecting a new data table, multiple tables can be loaded into the Table Viewer tabs. The Table Viewer currently selected is highlighted in yellow.

For example, if you wish to compare the acrylamide data from NHANES 2003-2006 to that from 2013-2016, start by selecting the **Table Viewer 2** tab. Then, navigate to the **Acrylamide (2013-2016)** data table using either of the two options described in Step 2 and click on the table. The newly selected table will load into **Table Viewer 2** while **Table Viewer 1** retains the first data table selected. Click on the Table Viewer tabs to navigate between the data tables.
### Acrylamide (2013 - 2016)

CAS Number 79-05-1

Geometric mean and selected percentiles of hemoglobin adduct concentrations (in pmoI/g hemoglobin) for the U.S. population from the National Health and Nutrition Examination Survey.

<table>
<thead>
<tr>
<th>Demographic Categories</th>
<th>Survey (years)</th>
<th>Geometric mean (99% CI)</th>
<th>50th Percentile (99% CI)</th>
<th>75th Percentile (99% CI)</th>
<th>90th Percentile (99% CI)</th>
<th>95th Percentile (99% CI)</th>
<th>Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population</td>
<td>13-14</td>
<td>48.4 (45.1-50.7)</td>
<td>42.5 (41.1-43.7)</td>
<td>58.2 (55.9-61.7)</td>
<td>113 (95.9-127)</td>
<td>157 (142-203)</td>
<td>2348</td>
</tr>
<tr>
<td>Total population</td>
<td>15-16</td>
<td>47.7 (45.0-50.5)</td>
<td>42.3 (40.5-44.6)</td>
<td>59.6 (54.9-63.7)</td>
<td>107 (87.7-125)</td>
<td>148 (125-188)</td>
<td>2413</td>
</tr>
<tr>
<td>Age 6-11 years</td>
<td>13-14</td>
<td>43.6 (42.4-44.7)</td>
<td>43.7 (42.7-44.6)</td>
<td>50.6 (47.9-53.3)</td>
<td>62.2 (55.6-68.1)</td>
<td>70.8 (63.6-81.1)</td>
<td>312</td>
</tr>
<tr>
<td>Age 6-11 years</td>
<td>15-16</td>
<td>43.2 (41.8-44.6)</td>
<td>43.0 (41.8-44.0)</td>
<td>50.2 (47.4-53.2)</td>
<td>59.8 (54.7-65.2)</td>
<td>66.4 (60.9-74.0)</td>
<td>323</td>
</tr>
<tr>
<td>Age 12-19 years</td>
<td>13-14</td>
<td>43.3 (40.4-46.4)</td>
<td>38.5 (34.9-40.7)</td>
<td>51.1 (46.4-55.9)</td>
<td>72.6 (59.2-101)</td>
<td>147 (74.9-248)</td>
<td>307</td>
</tr>
</tbody>
</table>

Please note that only data tables within each of the three categories of sample types can be loaded at the same time.