### Overview of the National Chemical & Radiological Surveillance Program

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<th>Poison Centers (PCs)</th>
<th>The National Poison Data System (NPDS)</th>
<th>CDC Use of NPDS</th>
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<tr>
<td>• There are 55 poison centers (PCs) in the United States that provide 24-hour coverage using a toll free number, 1-800-222-1222</td>
<td>• The National Poison Data System (NPDS) is a national web-based repository of data from calls to PCs</td>
<td>CDC collaborates with America’s Poison Centers to use NPDS for public health surveillance activities including the following:</td>
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<td>• PC staff remotely <strong>assess, triage, manage,</strong> and <strong>follow-up</strong> with people who are exposed to harmful substances</td>
<td>• PC data are uploaded into NPDS in near real-time, every 8 minutes</td>
<td>• <strong>Improving</strong> national surveillance capacity for public health threats</td>
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<td>• PCs are staffed by pharmacists and poison information providers who are toxicology specialists</td>
<td>• NPDS is owned and operated by America’s Poison Centers</td>
<td>• <strong>Identifying</strong> early markers of incidents of potential public health significance</td>
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### How Incidents of Potential Public Health Significance are Identified from Public Health Surveillance of PC Data

1. **Calls to the national poison center (PC) number (1-800-222-1222) are routed to the local PC where staff**
   - Assess call
   - Recommend therapy (as needed)
   - Collect information (such as demographic information, signs, symptoms, and exposure)

2. **Data are uploaded into NPDS in near real time, approximately every 8 minutes**

3. **Automated algorithms** in NPDS identify anomalies in call volume, clinical effect (adverse health effects) volume, or by identifying calls that meet prespecified criteria (case-based)**
   - **Call Volume:** Algorithm identifies increases in call volume to a PC compared to a threshold based on historical data
   - **Clinical Effect Volume:** Algorithm identifies increased reports of specific signs and symptoms compared to a threshold based on historical data
   - **Case-Based:** Algorithm identifies calls meeting prespecified criteria

4. **Toxicologists and epidemiologists** from America’s Poison Centers and CDC review the data anomaly to determine if it meets prespecified criteria for an incident of potential public health significance

5. **Email Notification**
   - If the data anomaly meets criteria for an incident of public health significance, CDC determines if an email notification to the state health department and corresponding PC is warranted
   - Email contains information about incident that may be needed for public health response

6. **State health department responds to the incident as necessary**

Criteria for Incidents of Potential Public Health Significance

- A call or calls involving a reported exposure or illness with **at least one** of the following:
  - An obvious interest to the appropriate state or national public health entity (e.g., a reportable disease, occupational setting)
  - Unusual severity of magnitude, involving **more than 1 household** (or exposure site outside the home), and with clinical effects reported
  - Association with a known or suspected terrorism event
  - Part of a state or national public health investigation
  - A pattern not normally attributable to the implicated exposure
  - An obvious geographic or spatial pattern
  - A **high index of suspicion**, credible threat, or other rationale in the judgment of the NPDS Surveillance Team member