Review of National Electronic Injury Surveillance System Data
**Vision Statement**

We are agents of positive change striving for continuous improvements in our agency’s management and program operations, as well as within the Office of Inspector General.

**Statement of Principles**

We will:

Work with the Commission and the Congress to improve program management.

Maximize the positive impact and ensure the independence and objectivity of our audits, investigations, and other reviews.

Use our investigations and other reviews to increase government integrity and recommend improved systems to prevent fraud, waste, and abuse.

Be innovative, question existing procedures, and suggest improvements.

Build relationships with program managers based on a shared commitment to improving program operations and effectiveness.

Strive to continually improve the quality and usefulness of our products.

Work together to address government-wide issues.
TO: Robert S. Adler, Acting Chairman
    Elliot F. Kaye, Commissioner
    Dana Baiocco, Commissioner
    Peter A. Feldman, Commissioner

FROM: Christopher W. Dentel, Inspector General

SUBJECT: Review of National Electronic Injury Surveillance System Data Quality and Oversight

The U.S. Consumer Product Safety Commission’s (CPSC) National Electronic Injury Surveillance System (NEISS) collects data from hospital emergency departments to fulfill the CPSC’s data needs and meet mission requirements. To assess whether the CPSC had policies and procedures in place to effectively evaluate NEISS data quality and provide adequate oversight, the CPSC Office of Inspector General retained the services of Kearney & Company (Kearney), an independent public accounting firm. The contract required that the review be performed in accordance with the Council of the Inspectors General on Integrity and Efficiency’s Quality Standards for Inspection and Evaluation (CIGIE QSIE).

Kearney determined that the NEISS program did not have an adequate data governance program in place to ensure data quality. Additionally, the CPSC could not provide documentation to establish that a legal opinion was obtained before the CPSC expanded the NEISS program to include data on injuries outside of the CPSC’s jurisdiction. Finally, the CPSC could not provide sufficient documentation to support estimated costs charged to other federal agencies as required by the Economy Act when using Interagency Agreements.

In connection with the contract, we reviewed Kearney’s report and related documentation and inquired of its representatives. Our review was not intended to enable us to express, and we do not express, an opinion on the matters contained in the report. Kearney is responsible for the attached report. However, our review disclosed no instances where Kearney did not comply, in all material respects, with CIGIE’s QSIE. Should you have any questions, please contact me.
THE U.S. CONSUMER PRODUCT SAFETY COMMISSION

Review of National Electronic Injury Surveillance System (NEISS) Data Quality and Oversight

Report Date: October 26, 2020

Kearney & Company, P.C.’s TIN is 54-1603527, DUNS is 18-657-6310, Cage Code is 1SJ14.
# TABLE OF CONTENTS

Contents

**OBJECTIVE** ................................................................................................................................. 1
**CONCLUSION** ................................................................................................................................... 1
**BACKGROUND** ............................................................................................................................... 1
**CRITERIA** ....................................................................................................................................... 3
**RESULTS** ......................................................................................................................................... 3
  - **FINDING 1: INEFFECTIVE PROCESS TO OBTAIN LEGAL OPINION PRIOR TO ENGAGING IN ACTIVITIES** ................................................................................................................................... 3
  - **FINDING 2: INEFFECTIVE PROCESS TO ENSURE IAA COSTS ARE SUPPORTED** ....................... 5
  - **FINDING 3: NEISS LACKED AN EFFECTIVE DATA GOVERNANCE PROGRAM** ............................... 7
**APPENDIX A – SCOPE AND METHODOLOGY OF THE REVIEW** .................................................. 10
  - **SCOPE** ......................................................................................................................................... 10
  - **METHODOLOGY** ........................................................................................................................ 10
**APPENDIX B – CONSOLIDATED LIST OF RECOMMENDATIONS** ................................................... 11
**APPENDIX C – MANAGEMENT’S VIEWS ON CONCLUSIONS AND FINDINGS** ....................... 12
**APPENDIX D – ACRONYMS** ........................................................................................................ 13
OBJECTIVE

The objective of the review is to determine whether the U. S. Consumer Product Safety Commission (CPSC or Commission) has policies and procedures in place to effectively evaluate National Electronic Injury Surveillance System (NEISS) data quality and provide adequate oversight of NEISS coordinators. Specifically, focusing on the data accuracy, validity, consistency, timeliness, and user needs presented in NEISS reports. As requested by the CPSC Office of Inspector General (OIG), Kearney & Company, P.C. (defined as “Kearney,” “we,” and “our” in this report) reviewed the CPSC’s oversight of the NEISS program and associated transactions between July 1, 2013 and July 31, 2019.

CONCLUSION

Kearney determined that the CPSC expended appropriated funds to collect data regarding injuries not related to consumer products and thus outside of the CPSC’s jurisdiction. The CPSC was unable to provide a legal opinion to support using the Commission’s appropriated funds to collect this data. Further, the CPSC could not provide sufficient documentation to support estimated costs charged to other Federal agencies to obtain hospital incident data, as required by the Economy Act when using Interagency Agreements (IAA). Additionally, the NEISS program did not have an adequate data governance program in place to ensure the quality of data input into the NEISS and subsequently reported.

Kearney discussed our results with the CPSC’s management (see Appendix C – Management’s Views On Conclusions And Findings).

BACKGROUND

The CPSC collects data from emergency departments to fulfill the Commission's data needs and meet mission requirements. These emergency departments are chosen to provide the CPSC with a statistically valid sample of injuries in the United States. The number of incidents treated in hospital emergency departments provides sufficient volume to statistically measure injuries associated with thousands of consumer products. The necessary data are generally already available in the hospital record without placing an undue burden on the emergency department staff. The faster the data arrives at the Commission, the faster the Commission can act to address the injury causes that fall within its jurisdiction. The NEISS program monitors consumer-related injuries and collects the associated data.

Each NEISS hospital reports information on emergency visits to the CPSC. The NEISS information is derived from information routinely collected by hospital emergency departments. Hospitals follow their normal data collection protocols during the patient visit. NEISS coders review emergency room data and transcribe the data into the required NEISS format for inclusion in the NEISS database. This information provides the basis for national estimates of the number and severity of emergency room-treated injuries associated with, although not necessarily caused by, consumer products, as well as other injuries in the U.S. The CPSC is
responsible for maintaining the system and its policies and procedures, ensuring the quality of the data, and providing training to its coders.

According to CPSC documents, the NEISS sampling frame and methodology was developed in 1996 by a contractor with expertise in sample design. The sampling methodology was updated in 1997 and is currently in use today.

**Current Sampling Methodology:** NEISS collects data from approximately 100 hospitals that are grouped into five strata, four representing emergency departments of differing sizes (e.g., small, medium, large, and very large hospitals) and a fifth representing emergency departments from children’s hospitals.

Once hospitals are identified for inclusion in NEISS, CPSC staff meet with hospital staff to encourage participation in NEISS, which is voluntary. If a hospital declines to participate, the CPSC follows a statistically valid methodology to identify a first alternate and, if necessary, a second alternate hospital. The population of participating hospitals has changed over the years as hospitals close, open, merge, or decide to discontinue participation in NEISS.

Once a hospital agrees to participate, the CPSC enters into a contractual agreement with the hospital to provide access to emergency department data. NEISS coordination and reporting may be directly via the hospital or through an independent third-party contractor.

Each contract for NEISS reporting services contains clauses regarding quality standards for coordinators. There are minimum standards of less than five days lag from treatment date to reporting, an error rate of less than 5%, and no time periods unaccounted for (e.g., communication indicated there were no applicable cases on a date). The outstanding standard requires a time lag of less than three days between treatment and reporting, an error rate of less than 3%, and unaccounted for time periods. Contractors who meet the outstanding standard are eligible for performance bonuses.

**NEISS Expansion:** In 2000, NEISS managers expanded the program to collect information on all injuries and not just those related to consumer product injuries to include:

- Incidents where no product is mentioned (e.g., fell to the ground)
- Incidents related to products outside of CPSC’s jurisdiction (e.g., motor vehicles, boats, aircraft, pesticides, food, drugs, medical devices, cosmetics, firearms, and tobacco)
- Incidents that occur during work for compensation
- Incidents that are intentionally inflicted (e.g., assaults and attempted suicides).

For data quality purposes, the CPSC primarily relies on a series of analytics: to detect data anomalies requiring correction, to assess the timeliness of the data provided, and the accuracy of the data input by each coder. Additionally, the CPSC performs periodic evaluations to assess the accuracy of the data input by each coder, as compared to the emergency room source documents.
NEISS data are publicly available and used by other government agencies, manufacturers, researchers, lawyers, and the general public. Over time, NEISS has provided the Commission and these other entities with national estimates of product-related injuries. Between Fiscal Years (FY) 2014 and 2019, the CPSC obligated about $19.1 million in support of NEISS-related contracts.

CRITERIA

Kearney used criteria established by the Federal Government set out in Exhibit 1 below for testing the CPSC NEISS program’s data quality and oversight.

**Exhibit 1: Federal Government Criteria**

<table>
<thead>
<tr>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAO-08-978SP, <em>Principles of Federal Appropriations Law</em></td>
</tr>
<tr>
<td>Consumer Product Safety Act (CPSA)</td>
</tr>
<tr>
<td>Economy Act</td>
</tr>
<tr>
<td>OMB Circular A-50, <em>Audit Follow Up</em></td>
</tr>
<tr>
<td>National Institute of Standards and Technology, <em>Federal Information Processing Standards and Special Publications</em></td>
</tr>
<tr>
<td>GAO-20-283G, <em>Assessing Data Reliability</em></td>
</tr>
<tr>
<td>Data Management Association – Data Management Body of Knowledge (DAMA – DMBOK)</td>
</tr>
</tbody>
</table>

RESULTS

**Finding 1: Ineffective Process to Obtain Legal Opinion Prior to Engaging in Activities Outside of Jurisdiction**

Kearney determined that, in support of its NEISS Expansion program (Year 2000), the CPSC expended appropriated funds to collect data regarding injuries not related to consumer products and thus outside of the CPSC’s jurisdiction. The CPSC was unable to provide a legal opinion to support using the Commission’s appropriated funds to collect this data.

For example, the CPSC collected data in support of the following types of injury and poisoning incidents:
• Incidents where no product was mentioned
• Incidents related to products that are outside of the CPSC’s jurisdiction (e.g., motor vehicles, boats, aircraft, pesticides, food, drugs, medical devices, cosmetics, firearms, tobacco, etc.)
• Incidents that occur during work for compensation
• Incidents that are intentionally inflicted (e.g., assault and suicide).

The CPSA established the CPSC in 1972. It defines the CPSC’s basic authority and jurisdiction over consumer products. It authorizes the agency to develop standards and bans. It also gives the CPSC the authority to pursue recalls and to ban products under certain circumstances.

According to the CPSA, “consumer product” means any “article, or component part thereof, produced or distributed (i) for sale to a consumer for use in or around a permanent or temporary household or residence, a school, in recreation, or otherwise, or (ii) for the personal use, consumption or enjoyment of a consumer in or around a permanent or temporary household or residence, a school, in recreation, or otherwise.” However, the CPSA specifically precludes the following from the jurisdiction of the CPSC: “(A) any article which is not customarily produced or distributed for sale to, or use or consumption by, or enjoyment of, a consumer, (B) tobacco and tobacco products, (C) motor vehicles or motor vehicle equipment …(D) pesticides…(E)…firearms and ammunition…(F) aircraft, aircraft engines, propellers, or appliances…(G) boats which could be subjected to safety regulation under the Federal Boat Safety Act of 1971…,(H) drugs, devices, or cosmetics…, or (I) food…”

GAO-14-704G, Green Book, Principle 10.03, “Management designs appropriate types of control activities for the entity’s internal control system. Control activities help management fulfill responsibilities and address identified risk responses in the internal control system.”

The IAA between the CPSC and other Federal agencies establish the terms to which the parties agree, the scope of the services, and the rights and obligations of the parties.

According to the IAA between the CPSC and the Centers for Disease Control (CDC), the IAA was established under Section 601 of the Economy Act, as amended (31 United States Code [U.S.C.] 1535). The Economy Act provides the authority for Government agencies to enter into agreements with one another to obtain supplies and services under specified requirements and procedures.

GAO-08-978SP, Principles of Federal Appropriations Law, provides additional interpretation of the Economy Act and use of IAAs. Specifically, it states the Economy Act requires four conditions to permit use of the authority:

1. **Funds Availability.** “The purpose of the transaction must be something the ordering agency is authorized to do.”
2. **Interest of the Government.** “The head of the ordering agency must determine that the order is in the best interests of the government.”
3. **Performing Agency’s Position.** “Whether an agency is in a position to do Economy Act work is primarily the agency’s own determination, one which merits substantial weight…The Economy Act does not give a performing agency any authority which it would not otherwise have.”

4. **Lower Cost.** “The ordering agency must determine that it cannot obtain the goods or services ‘as conveniently or cheaply’ from a private contractor… In making the lower cost determination, it is permissible to solicit bids and then reject all bids if they exceed the cost of dealing with another agency.”

This condition occurred because the CPSC did not have an effective process in place to obtain a legal opinion prior to performing work and awarding contracts for supplies and services outside of its jurisdiction. Instead, the CPSC personnel awarded multi-agency contracts to various hospitals to support NEISS data collection requirements and established IAAs with other Federal agencies (e.g., CDC) under the authority of the Economy Act to obtain information related to incidents explicitly outside of the Commission’s jurisdiction. Although the Economy Act provides the authority to enter into IAAs, it requires that specific conditions be met. The CPSC expended appropriated funds without first ensuring that it had the legal authority to do so. Performing work and obligating and disbursing funds to support supplies and services outside of the jurisdiction of the CPSC could lead to potential Anti-Deficiency Act (ADA) violations.

Kearney recommends that management:

1. Establish policies and procedures to obtain a legal opinion prior to performing work or obtaining supplies and services potentially outside of the jurisdiction of the CPSC. Additionally, the legal opinion should periodically be evaluated as circumstance or programmatic interests change over time.
2. Obtain a legal opinion to determine whether the CPSC is legally allowed to perform work or obtain supplies and services in support of the NEISS Expansion program and outside of its jurisdiction.
3. Report to the OIG as to whether an Anti-Deficiency Act violation occurred.

**Finding 2: Ineffective Process to Ensure IAA Costs are Supported**

Kearney determined that the CPSC could not provide sufficient documentation to support estimated costs charged to other Federal agencies to obtain hospital incident data.

The CPSC established IAAs between the CPSC and other Federal agencies in support of the NEISS Expansion program. The IAA establishes the terms to which the parties agree, the scope of the services, and the rights and obligations of the parties. Additionally, the IAAs identified the estimated cost to be paid to the CPSC in exchange for the services provided over the period of performance. For example, according to the IAA between the CPSC and the CDC, the CPSC utilized the IAA to obtain data for the National Institute for Occupational Safety and Health and other CDC programs as part of a multi-agency award. Additionally, per the agreement, the
CPSC was to perform other services in support of the CDC (i.e., automated data processed through the NEISS program, data Quality Control, etc.). In turn, the CPSC estimated the cost to the CDC at almost $2 million from FY 2014–2019.

According to GAO-14-704G, Green Book, Principle 10.03, “Management designs appropriate types of control activities for the entity’s internal control system. Control activities help management fulfill responsibilities and address identified risk responses in the internal control system.”

The IAAs between the CPSC and other Federal agencies establishes the terms to which the parties agree, the scope of the services, and the rights and obligations of the parties.

According to the IAA between the CPSC and the CDC, the IAA was established under Section 601 of the Economy Act, as amended (31 U.S.C. 1535). The Economy Act provides the authority for Government agencies to enter into agreements with one another to obtain supplies and services under specified requirements and procedures. It requires that payment, whether by advance with subsequent adjustment or by reimbursement, be based on “the actual cost of goods or services provided.” (31 U.S.C. 1535[b])

GAO-08-978SP, Principles of Federal Appropriations Law, provides additional interpretation of the Economy Act and use of IAAs. Specifically, in terms of payment, it states, “charging too much augments the appropriations of the performing agency. Charging too little augments the appropriations of the ordering agency.”

This condition occurred because the CPSC did not have an effective process to ensure that estimated costs identified in IAAs were properly supported and representative of “the actual costs of goods or services provided.”

We were unable to determine whether the estimated $2 million charged in the IAA between the CPSC and the CDC was representative of actual costs incurred. Augmenting funds by either the performing or the ordering agency could lead to a potential ADA violation.

Kearney recommends that management:

4. Report to the OIG as to whether an Anti-Deficiency Act violation occurred
5. Stop incurring costs on behalf of other federal agencies in support of the NEISS program based upon a legal determination as recommended in Finding 1, if applicable.
6. Develop and implement an effective process to ensure that estimated costs identified in Interagency Agreements are properly supported and representative of “the actual costs of goods or services provided.”
Finding 3: NEISS Lacked an Effective Data Governance Program

Kearney determined that the NEISS program did not have a sufficient data governance program in place to ensure the quality of data input into the NEISS and subsequently reported. According to DAMA - DMBOK, data quality is a component of the overall data governance program.

Based on the standards in place at the time, coders overall never managed to hit either the minimum standard or the outstanding performance standard for any year under review.

**Exhibit 2: Summary of NEISS Records with Data Quality Issues**

<table>
<thead>
<tr>
<th>FY</th>
<th>Number of Records</th>
<th>Average Coder Input Lag*</th>
<th>Total Errors Identified**</th>
<th>Total False Positives</th>
<th>Total Actual Errors**</th>
<th>Percent Errors</th>
<th>Average Time to Correct Errors</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>393,230</td>
<td>14 days</td>
<td>14,234</td>
<td>913</td>
<td>13,321</td>
<td>3.39%</td>
<td>9 days</td>
</tr>
<tr>
<td>2014</td>
<td>753,680</td>
<td>16 days</td>
<td>57,110</td>
<td>3,211</td>
<td>53,899</td>
<td>7.15%</td>
<td>8 days</td>
</tr>
<tr>
<td>2015</td>
<td>738,327</td>
<td>15 days</td>
<td>55,505</td>
<td>2,902</td>
<td>52,603</td>
<td>7.12%</td>
<td>9 days</td>
</tr>
<tr>
<td>2016</td>
<td>768,528</td>
<td>14 days</td>
<td>52,681</td>
<td>2,289</td>
<td>50,392</td>
<td>6.56%</td>
<td>11 days</td>
</tr>
<tr>
<td>2017</td>
<td>791,329</td>
<td>14 days</td>
<td>53,324</td>
<td>2,529</td>
<td>50,795</td>
<td>6.42%</td>
<td>12 days</td>
</tr>
<tr>
<td>2018</td>
<td>724,680</td>
<td>14 days</td>
<td>55,418</td>
<td>2,422</td>
<td>52,996</td>
<td>7.31%</td>
<td>9 days</td>
</tr>
<tr>
<td>2019</td>
<td>409,695</td>
<td>15 days</td>
<td>52,811</td>
<td>2,018</td>
<td>50,793</td>
<td>12.40%</td>
<td>***</td>
</tr>
<tr>
<td>Total</td>
<td>4,579,469</td>
<td></td>
<td>341,083</td>
<td>16,284</td>
<td>324,799</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*11 records were missing multiple dates used to calculate lag.

**127 records were missing dates to determine what FY the error occurred.

***Unable to determine due to missing dates and pending corrections as of the date we received the data.

**Total Errors Identified**: Total errors identified were those records with at least one error identified in NEISS error reports. Errors included input errors, as well as medical coding errors. We identified input errors and additional errors based on required fields.

**Total False Positives**: Total false positives identified were those errors identified in NEISS error reports with a status code of “O.” According to the data dictionary, a status code of “O” signifies “no error.”

**Total Actual Errors**: Total actual errors were calculated based upon total errors identified less total false positives.

According to the DAMA - DMBOK, a data governance program consists of the following elements: strategy, policy, standards and quality, oversight, compliance, issue management, data management projects, and data asset valuation. These elements together help to reduce risk (e.g., data security and privacy) and improve processes (e.g., compliance, data quality, metadata management, etc.). In short, data quality is a component of data governance.

Contracts between the CPSC and coders sets standards for coder’s performance bonuses based on speed and quality. Specific to NEISS data, contracts required coders to have no more than five days lag from treatment date to reporting, error rate of less than 5%, and no unaccounted for...
time periods to meet the acceptable standard. The outstanding standard requires a time lag of less than three days between treatment and reporting, an error rate of less than 3% and no unaccounted for treatment dates.

GAO-14-704G, Green Book, Principle 13.05 states “[m]anagement processes the obtained data into quality information that supports the internal control system. This involves processing data into information and then evaluating the processed information so that it is quality information. Quality information meets the identified information requirements when relevant data from reliable sources are used. Quality information is appropriate, current, complete, accurate, accessible, and provided on a timely basis.”

Furthermore, Principle 10.03, “Management designs appropriate types of control activities for the entity’s internal control system. Control activities help management fulfill responsibilities and address identified risk responses in the internal control system.”

Additionally, IAAs between the CPSC and other Federal agencies establishes the terms to which the parties agree, the scope of the services, and the rights and obligations of the parties. According to the IAA, the CPSC took responsibility for the quality of the data and training of medical coders even for data that was outside of the Commission’s mission. Specifically, “CPSC’s present quality assurance program provides for effective collection, processing, and analysis of high-quality surveillance data by the Commission. CPSC extends this quality assurance program for special studies of targeted injuries, exposures, and health-related conditions for other federal agencies.”

This condition occurred because the CPSC did not have a data governance framework in place designed to enhance the accuracy, integration, access, and management of data in support of the NEISS program. For example, the CPSC provided data to other organizations that was not sufficient to perform statistical injury projections although the CPSC was responsible for the quality of the data and was aware that the data would be used to produce such projections.

Nor did the CPSC have policies and procedures in place to successfully enforce contractual data quality control standards for NEISS data input by its coders.

Further, training provided to coding personnel was not sufficient to ensure data quality. Training provided required coding personnel to “accept coded products when the scenario described reasonably supports the coded product.” If the medical record stated that a patient was stabbed, the medical coder was to enter the product as knife “even if knife is not stated.”

Without an adequate data governance framework, the CPSC and public may inadvertently rely on inaccurate data as they make risk-based decisions about product safety. For example, during our review, we identified 3,101,634 additional records with at least one error that the CPSC did not identify. Most of these missing data fields were attributable to null or blank values in the date of birth data field, a data point typically required during emergency room visits and used to ensure the victim’s age is recorded correctly in the database (i.e., input control). Because the
CPSC allowed coders to bypass this automated control, the Commission has no assurance as to the accuracy of the data used to project age-sensitive safety issues (e.g., children’s products).

Further, inaccurate and untimely data entry into the NEISS program could potentially undermine the reliability of the core of the CPSC’s mission and strategic objectives. Incomplete entry of information which should be readily available in the patient record can make the data less valuable for researchers.

With the exception of FY 2013, CPSC coders did not meet their goal to correctly capture 95% of product-related injury cases in NEISS within required time parameters. Without an effective data governance framework, the CPSC will face challenges in effectively and efficiently managing NEISS program data and monitoring compliance with contract and bonus requirements for coders, and meeting the data needs of its customers.

Kearney recommends that management:

7. Develop a data governance framework to ensure that data is managed appropriately and in accordance with programmatic and regulatory requirements.
8. Provide training to medical coders on inputting data and evaluating the accuracy of the data without making assumptions as to the product or any other data that is not presented within the medical file.
9. Create additional system variables to identify values that are not present in the medical records but are required by the coding manuals.
10. Develop policies and procedures to effectively support managing automated data and quality assurance protocols, to include ensuring that errors are appropriately remediated.
11. Update and provide training on a routine basis, preferably annually, to address issues found in data entry since the last training.
12. Perform and provide a report to the Executive Director on an analysis of alternatives to determine if it is more cost effective for the CPSC to perform additional upgrades to the NEISS or switch to a more robust platform to provide user-centric design, better up-front preventative controls, and real-time oversight, while also incorporating emerging technologies, such as artificial intelligence that is consistent with the CPSC’s desire to increase the use of quality data for better decision support.
APPENDIX A – SCOPE AND METHODOLOGY OF THE REVIEW

Scope

This report contains the results of our review of the CPSC’s NEISS program’s data quality and oversight. The scope of this review consisted of 4,579,469 records recorded in the NEISS system between July 2013 and July 2019. Exhibit 2 provides a summary of records by Fiscal Year (FY). We conducted our review from June 2019 through October 2020 at CPSC’s Headquarters in Bethesda, Maryland.

Methodology

Kearney & Company, P.C. (Kearney) conducted this review in accordance with the Council of the Inspectors General on Integrity and Efficiency’s Quality Standards for Inspection and Evaluation, which requires that we obtain sufficient data to provide a reasonable basis for reaching conclusions. These standards also require Kearney to ensure that the evidence supporting findings, conclusions, and recommendations is sufficient, competent, and relevant, such that a reasonable person would be able to sustain the findings, conclusions, and recommendations. Sufficiency of the data needed and tests of evidence varied based on the review objective, findings, and conclusions. Kearney designed the review to obtain insight into CPSC’s current processes and procedures, as well as to assess compliance with NEISS program requirements, contracts, and IAAs. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our review objective.
## APPENDIX B – CONSOLIDATED LIST OF RECOMMENDATIONS

<table>
<thead>
<tr>
<th>Finding 1</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Establish policies and procedures to obtain a legal opinion prior to performing work or obtaining supplies and services potentially outside of the jurisdiction of the U. S. Consumer Product Safety Commission (CPSC or Commission). Additionally, the legal opinion should periodically be evaluated as circumstance or programmatic interests change over time.</td>
</tr>
<tr>
<td>2.</td>
<td>Obtain a legal opinion to determine whether the CPSC is legally allowed to perform work or obtain supplies and services in support of the National Electronic Injury Surveillance System (NEISS) Expansion program and outside of its jurisdiction.</td>
</tr>
<tr>
<td>3.</td>
<td>Report to the OIG as to whether an Anti-Deficiency Act violation occurred.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Finding 2</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.</td>
<td>Report to the OIG as to whether an Anti-Deficiency Act violation occurred.</td>
</tr>
<tr>
<td>5.</td>
<td>Stop incurring costs on behalf of other Federal agencies in support of the NEISS program based upon a legal determination as recommended in Finding 1, if applicable.</td>
</tr>
<tr>
<td>6.</td>
<td>Develop and implement an effective process to ensure that estimated costs identified in Interagency Agreements are properly supported and representative of “the actual costs of goods or services provided.”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Finding 3</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.</td>
<td>Develop a data governance framework to ensure that data is managed appropriately and in accordance with programmatic and regulatory requirements.</td>
</tr>
<tr>
<td>8.</td>
<td>Provide training to medical coders on inputting data and evaluating the accuracy of the data without making assumptions as to product or any other data that is not presented within the medical file.</td>
</tr>
<tr>
<td>9.</td>
<td>Create additional system variables to identify values that are not present in the medical records but are required by the coding manuals.</td>
</tr>
<tr>
<td>10.</td>
<td>Develop policies and procedures to effectively support managing automated data and quality assurance protocols to include ensuring that errors are appropriately remediated.</td>
</tr>
<tr>
<td>11.</td>
<td>Update and provide training on a routine basis, preferably annually, to address issues found in data entry since the last training.</td>
</tr>
<tr>
<td>12.</td>
<td>Perform and provide a report to the Executive Director on an analysis of alternatives to determine if it is more cost effective for the CPSC to perform additional upgrades to the NEISS or switch to a more robust platform to provide user-centric design, better up-front preventative controls, and real-time oversight while also incorporating emerging technologies, such as artificial intelligence, which is consistent with the CPSC’s desire to increase the use of quality data for better decision support.</td>
</tr>
</tbody>
</table>
APPENDIX C – MANAGEMENT’S VIEWS ON CONCLUSIONS AND FINDINGS

CPSC management generally concurred with our findings and recommendations. Management stated that “NEISS is a critical piece of CPSC’s data driven approach, providing an ability to identify emerging trends and patterns and generate national statistical estimates of consumer product injuries. Significant capabilities are in place to ensure data available for use are of high quality.” CPSC management also acknowledged the importance of continuing to improve the system and has stated that it has implemented additional controls and will continue to implement other improvements going forward.

Additionally, CPSC management raised concerns related to our assertion that they had responsibility for ensuring NEISS data quality (i.e., data characterization and use of data) for data they provided to non-CPSC organizations. We note that the IAAs state that data quality for non-CPSC organizations is the responsibility of the CPSC. Data quality typically entails ensuring that it is fit for use in general operations, decision making, and planning and thus under the IAAs is the CPSC’s responsibility.

Further, in their response, CPSC management indicated that there were differences between their calculations of the number of NEISS transactions, errors, and lag time from the numbers detailed in this report. The number calculated by the CPSC were computed using different files than those initially provided to us. Our analysis was performed on the files provided to us, the differences were not substantial, and do not change the report conclusion or findings.
## APPENDIX D – ACRONYMS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADA</td>
<td>Anti-Deficiency Act</td>
</tr>
<tr>
<td>CDC</td>
<td>Centers for Disease Control</td>
</tr>
<tr>
<td>Commission</td>
<td>U.S. Consumer Product Safety Commission</td>
</tr>
<tr>
<td>CPSA</td>
<td>Consumer Product Safety Act</td>
</tr>
<tr>
<td>CPSC</td>
<td>U.S. Consumer Product Safety Commission</td>
</tr>
<tr>
<td>DAMA – DMBOK</td>
<td>Data Management Association – Data Management Body of Knowledge</td>
</tr>
<tr>
<td>FY</td>
<td>Fiscal Year</td>
</tr>
<tr>
<td>GAO</td>
<td>U.S. Government Accountability Office</td>
</tr>
<tr>
<td>Green Book</td>
<td><em>Standards for Internal Control in the Federal Government</em></td>
</tr>
<tr>
<td>IAA</td>
<td>Interagency Agreement</td>
</tr>
<tr>
<td>Kearney</td>
<td>Kearney &amp; Company, P.C.</td>
</tr>
<tr>
<td>NEISS</td>
<td>National Electronic Injury Surveillance System</td>
</tr>
<tr>
<td>OIG</td>
<td>Office of Inspector General</td>
</tr>
<tr>
<td>OMB</td>
<td>Office of Management and Budget</td>
</tr>
</tbody>
</table>
CONTACT US

If you want to confidentially report or discuss any instance of fraud, waste, abuse, misconduct, or mismanagement involving CPSC’s programs and operations, please contact the CPSC Office of Inspector General.

Call:

301-504-7906
1-866-230-6229

On-line complaint form:

Click here for complaint form.
Click here for CPSC OIG Website.

Write:

Office of Inspector General
U.S. Consumer Product Safety Commission
4330 East-West Highway, Room 702
Bethesda MD 20814