INTRODUCTION

This is the 2019 Annual Report of the Kansas Poison Control Center (KSPCC) at The University of Kansas Health System. The KSPCC is one of 55 certified poison control centers in the United States and serves the state of Kansas 24-hours a day, 365 days a year with certified specialists in poison information and clinical and medical toxicologists. The KSPCC receives calls from the public, law enforcement, health care professionals, and public health agencies. All calls to the KSPCC are recorded electronically in the Toxicall® data management system and uploaded in near real-time to the National Poison Data System (NPDS) which is the data repository for all poison control centers in the United States.

Methods. All encounters reported to the KSPCC from January 1, 2019 through December 31, 2019 were analyzed. Data recorded for each exposure includes caller location, age, weight, gender, exposure substance, nature of exposure, route of exposure, interventions, medical outcome, disposition, and location of care. Encounters were classified as human exposure, animal exposure, confirmed non-exposure, or information call (no exposure reported).

Results. The KSPCC logged 20,589 total encounters in 2019, including 19,406 human exposure cases. The KSPCC received calls from every county in Kansas. A slim majority of human exposure cases (50.5%, n = 9,790) were female. Approximately 61% (n = 11,876) of human exposures involved a child (defined as 19 years of age or less). Most encounters occurred at a residence (91.6%, n = 17,780) and most cases (64.9%, n = 12,599) originated from a residence. The majority of human exposures (85.5%, n = 16,589) were acute cases (exposures occurring over 8 hours or less). Ingestion was the most common route of exposure documented (85.3%, n = 16,548). The most commonly reported substance in pediatric (children ≤ 5) encounters was cosmetics/personal care products (n = 959) followed closely by household cleaning products (n = 943). For adult encounters, analgesics (n = 1,296) and sedative/hypnotics/antipsychotics (n = 1,084) were the most frequently involved substances. Unintentional exposures were the most common reason for exposures (75.4%, n = 14,634). Most encounters (65.9%, n = 12,780) were managed in a non-healthcare facility (i.e., a residence). Among human exposures, 14,591 involved exposures to pharmaceutical agents while 9,439 involved exposure to non-pharmaceuticals. Medical outcomes were 26.4% (n = 5,116) no effect, 18.8% (n = 3,652) minor effect, 9.3% (n = 1,813) moderate effect, and 3.1% (n = 603) major effects. There were 14 deaths in 2019 reported to the KSPCC. Cases from healthcare facilities and cases with moderate or major medical outcomes increased in 2019 compared to 2018. The number of deaths reported to the KSPCC increased in 2019 to 14 from 7 in 2018.

Conclusions. The results of the 2019 Kansas Poison Control Center’s annual report demonstrated that cases were received from the entire state of Kansas totaling over 19,400 human exposures per year. While pediatric exposures remained the most common encounter, there continued a trend of increasing number of cases from healthcare facilities and for cases with serious outcomes. The experience of the KSPCC is comparable to national data. This report supported the continued value of the KSPCC to both public and acute health care in the state of Kansas.
unit, admitted to psychiatry unit, lost to follow-up, or treated and released) and location of care (non-health care facility or health care facility). For this analysis, a pediatric case was defined as any patient 19 years of age or less. This was consistent with NPDS methodology. Similarly, NPDS descriptions of the medical outcomes of cases were used: minor - minimally bothersome symptoms, moderate - more pronounced symptoms, usually requiring treatment, and major - life threatening signs and symptoms. Data were analyzed using Microsoft Excel (Microsoft Corp, Redmond, WA).

RESULTS

The KSPCC logged 20,589 total calls in 2019. This was a decrease of 483 calls (2.3%) compared to 2018. Among the calls in 2019 were 19,406 human exposure cases, 62 non-exposure confirmed cases, 125 animal exposure cases, and 996 information calls. For information calls, drug information (n = 327) was most common reason for calling. Table 1 describes the encounter types.

The KSPCC made 33,724 follow-up calls in 2019. Follow-up calls were done in 58.2% of human exposure cases. One follow-up call was made in 23.7% of human exposure cases and multiple follow-up calls (range 2 - 48) were made in 34.5% of cases. For human exposure cases which required a follow-up call, an average of three follow-up calls were performed per case. This was a 7% increase in the number of follow-up calls performed compared to 2018.

The KSPCC received calls from all 105 counties and every hospital in Kansas. The county with the largest number of calls was Sedgwick County with 3,115. In addition, calls were received from all 50 states, and the District of Columbia.

Table 1. Encounter type.

| Category              | Number | %  |
|-----------------------|--------|----|
| Exposure              |        |    |
| Human exposure        | 19,406 | 99.36 |
| Animal exposure       | 125    | 0.64 |
| Subtotal              | 19,531 | 94.86 |
| Non-exposure confirmed cases |        |    |
| Human non-exposure    | 62     | 100.00 |
| Subtotal              | 62     | 0.30 |
| Information call      |        |    |
| Drug information      | 327    | 32.83 |
| Drug identification   | 81     | 8.13 |
| Environmental information | 71  | 7.13 |
| Medical information   | 24     | 2.41 |
| Occupational information | 1   | 0.10 |
| Poison information    | 94     | 9.44 |
| Prevention/safety/education | 9  | 0.90 |
| Teratogenicity information | 2  | 0.20 |
| Other information     | 43     | 4.32 |
| Substance abuse       | 8      | 0.80 |
| Administrative        | 22     | 2.21 |
| Caller referred        | 314    | 31.53 |
| Subtotal              | 996    | 4.84 |
| Total                 | 20,589 | 100.00 |

Overall, a slim majority of human exposure cases (50.5%, n = 9,790) were female. In children younger than 13 years of age a majority were male, but this gender distribution was reversed in teenagers and adults. In fact, in the age group involving children 13-19 years of age, 61.3% of cases were female. Approximately 61.2% (n = 11,876) of human exposures involved a child (defined as age 19 years or less).

Table 2 illustrates distribution of human exposures by age and gender. Patients one year of age were the most common age group involved in encounters reported to the KSPCC. For adults, the age group of 20 - 29 years old was most encountered. Seventy exposures occurred in pregnant women (0.4% of all human exposures). Of these, 28.6% occurred in the first trimester, 35.7% occurred in the second trimester, and 34.2% occurred in the third trimester. Most exposures in pregnant women (68.6%) were unintentional exposures with 30% resulting from intentional exposures. There was one reported death to KSPCC in a pregnant woman in 2019.

For human exposures, 64.9% (n = 12,599) of calls originated from a residence (own or other), while 91.6% (n = 17,780) of these exposures occurred at a residence (own or other). Calls from a health care facility accounted for 25.8% (n = 5,168) of human exposure encounters. Table 3 further details the origin of human exposure cases and the site of the exposure. The majority of human exposures, 85.5% (n = 16,589) were acute cases defined as exposures occurring over 8 hours or less. Chronic exposures defined as exposures occurring over > 8 hours accounted for 2.3% (453) of all human exposures. Acute on chronic exposures defined as single exposure that was preceded by a chronic exposure over > 8 hours totaled 2,258 (11.6%). Ingestion was the most common route of exposure (85.3%, n = 16,548) documented in all cases (Table 4).

The most commonly reported substance in those less than six years of age was cosmetics/personal care products (n = 959), followed closely by household cleaning products (n = 943). Table 5 lists the substances most frequently involved in exposures for those ≤ 5 years old. For adult cases (> 19 years of age), analgesics (n = 1,296) and sedative/hypnotics/antipsychotics (n = 1,084) were the most frequently involved substances as seen in Table 6. Among all encounters, analgesics (n = 2,805, 11.6%) were the most frequently encountered substance category. Table 7 (available online only at "journals.ku.edu/kjm") is a summary log for all exposures categorized by category and sub-category of substance.

In 2019, there was a total of 331 plant exposures reported to the KSPCC. The single most common plant exposure encountered was to pokeweed (Phytolaccac Americana; n = 28). Table 8 lists the top 5 most encountered plants.
### Table 2. Distribution of human exposures by age and gender.

| Age (yrs) | Male | Female | Unknown gender | Total | Cumulative total |
|-----------|------|--------|----------------|-------|------------------|
|           | N    | % of age group total | N | % of age group total | N | % of age group total | N | % of total exposure | N | % |
| < 1 year | 525 | 55.09 | 426 | 44.70 | 2 | 0.21 | 953 | 4.91 | 953 | 4.91 |
| 1 year   | 1,479 | 53.51 | 1,282 | 46.38 | 3 | 0.11 | 2,764 | 14.24 | 3,717 | 19.15 |
| 2 years  | 1,463 | 54.94 | 1,199 | 45.02 | 1 | 0.04 | 2,663 | 13.72 | 6,380 | 32.88 |
| 3 years  | 742 | 58.94 | 517 | 41.06 | 0 | 0.00 | 1,259 | 6.49 | 7,639 | 39.36 |
| 4 years  | 385 | 58.07 | 277 | 41.72 | 1 | 0.15 | 663 | 3.42 | 8,302 | 42.78 |
| 5 years  | 202 | 55.04 | 145 | 39.51 | 20 | 0.11 | 367 | 1.89 | 8,669 | 44.67 |
| Unknown ≤ 5 years | 0 | 0.00 | 0 | 0.00 | 1 | 100.00 | 1 | 0.01 | 8,670 | 44.68 |
| Child 6 - 12 years | 637 | 49.30 | 540 | 41.80 | 115 | 8.90 | 1,292 | 6.66 | 9,962 | 51.33 |
| Teen 13 - 19 years | 736 | 38.57 | 1,169 | 61.22 | 3 | 0.16 | 1,908 | 9.83 | 11,870 | 61.17 |
| Unknown child | 3 | 50.00 | 2 | 33.33 | 1 | 16.67 | 6 | 0.03 | 11,876 | 61.20 |
| Subtotal | 6,172 | 51.97 | 5,557 | 46.79 | 147 | 1.24 | 11,876 | 61.20 | 11,876 | 61.20 |
| 20 - 29 years | 893 | 45.72 | 1,058 | 54.17 | 2 | 0.10 | 1,953 | 10.06 | 13,829 | 71.26 |
| 30 - 39 years | 791 | 47.56 | 872 | 52.44 | 0 | 0.00 | 1,663 | 8.57 | 15,492 | 79.83 |
| 40 - 49 years | 450 | 40.14 | 670 | 59.77 | 1 | 0.09 | 1,121 | 5.78 | 16,613 | 85.61 |
| 50 - 59 years | 420 | 40.15 | 624 | 59.66 | 2 | 0.19 | 1,046 | 5.39 | 17,659 | 91.00 |
| 60 - 69 years | 307 | 40.66 | 447 | 59.21 | 1 | 0.13 | 755 | 3.89 | 18,413 | 94.89 |
| 70 - 79 years | 240 | 43.32 | 314 | 56.68 | 0 | 0.00 | 554 | 2.85 | 18,968 | 97.74 |
| 80 - 89 years | 102 | 38.49 | 163 | 61.51 | 0 | 0.00 | 265 | 1.37 | 19,233 | 99.11 |
| ≥ 90 years | 26 | 40.00 | 39 | 60.00 | 0 | 0.00 | 65 | 0.33 | 19,298 | 99.44 |
| Unknown adult | 42 | 45.65 | 44 | 47.83 | 6 | 6.52 | 92 | 0.47 | 19,390 | 99.92 |
| Subtotal | 3,271 | 43.53 | 4,231 | 56.31 | 12 | 0.16 | 7,514 | 38.72 | 19,390 | 99.92 |
| Unknown age | 5 | 31.25 | 2 | 12.50 | 9 | 56.25 | 16 | 0.08 | 19,406 | 100.00 |
| Total | 9,448 | 48.69 | 9,790 | 50.45 | 168 | 0.87 | 19,406 | 100.00 | 19,406 | 100.00 |

### Table 3. Origin of call and site of exposure for human exposure cases.

| Site                        | Origin of call | Site of exposure |
|-----------------------------|----------------|------------------|
|                             | N   | %   | N   | %   |
| Residence                   |     |     |     |     |
| Own                         | 12,257 | 63.16 | 17,170 | 88.48 |
| Other                       | 342 | 1.76 | 610 | 3.14 |
| Workplace                   | 282 | 1.45 | 476 | 2.45 |
| Health care facility        | 5,195 | 26.77 | 111 | 0.57 |
| School                      | 37 | 0.19 | 468 | 2.41 |
| Restaurant/food service     | 1 | 0.01 | 49 | 0.25 |
| Public area                 | 70 | 0.36 | 173 | 0.89 |
| Other                       | 1,208 | 6.22 | 223 | 1.15 |
| Unknown                     | 14 | 0.07 | 126 | 0.65 |
### Table 4. Route of human exposures.*

| Route                  | N     | % of All Routes | % of All Cases |
|------------------------|-------|-----------------|----------------|
| Ingestion              | 16,548| 79.97           | 85.27          |
| Dermal                 | 1,583 | 7.65            | 8.16           |
| Inhalation/Nasal       | 1,231 | 5.95            | 6.34           |
| Ocular                 | 754   | 3.64            | 3.89           |
| Bite/Sting             | 184   | 0.89            | 0.95           |
| Parenteral             | 172   | 0.83            | 0.89           |
| Unknown                | 164   | 0.79            | 0.85           |
| Aspiration (with ingestion) | 23   | 0.11            | 0.12           |
| Otic                   | 14    | 0.07            | 0.07           |
| Other                  | 13    | 0.06            | 0.07           |
| Vaginal                | 5     | 0.02            | 0.03           |
| Rectal                 | 2     | 0.01            | 0.01           |
| **Total Number of Routes** | **20,693** | **100.00** | **106.63** |

*Some cases may have multiple routes of exposure documented.

### Table 5. Substance categories most frequently involved in exposures for age ≤ 5 years old.

| Substance category                                              | Previous year rank | All substance | % | Single substance exposures | % |
|-----------------------------------------------------------------|--------------------|---------------|---|-----------------------------|---|
| Cosmetics/personal care products                                | 1                  | 959           | 10.48 | 929 | 11.12 |
| Cleaning substances (household)                                | 2                  | 943           | 10.31 | 903 | 10.81 |
| Analgesics                                                     | 3                  | 827           | 9.04  | 747 | 8.94  |
| Foreign bodies/toys/miscellaneous                              | 4                  | 533           | 5.83  | 517 | 6.19  |
| Antihistamines                                                | 5                  | 503           | 5.50  | 463 | 5.54  |
| Dietary supplements/herbs/homeopathic                          | 6                  | 496           | 5.42  | 464 | 5.55  |
| Topical preparations                                          | 8                  | 382           | 4.17  | 377 | 4.51  |
| Vitamins                                                       | 7                  | 378           | 4.13  | 326 | 3.90  |
| Pesticides                                                    | 9                  | 349           | 3.81  | 327 | 3.91  |
| Gastrointestinal preparations                                  | 10                 | 217           | 2.37  | 181 | 2.17  |
| Cardiovascular drugs                                          | 12                 | 216           | 2.36  | 121 | 1.45  |
| Plants                                                        | 15                 | 199           | 2.17  | 193 | 2.31  |
| Hormones and hormone antagonants                              | 16                 | 197           | 2.15  | 123 | 1.47  |
| Electrolytes and minerals                                     | 17                 | 185           | 2.02  | 168 | 2.01  |
| Essential oils                                                | 13                 | 176           | 1.92  | 165 | 1.97  |

### Table 6. Substance categories most frequently involved in exposures of adults (> 19 years).

| Substance category                      | All substances | % | Single substance exposures | % |
|-----------------------------------------|----------------|---|-----------------------------|---|
| Analgesics                              | 1,296          | 11.83 | 551                          | 9.72 |
| Sedative/hypnotics/antipsychotics       | 1,084          | 9.89  | 337                          | 5.94 |
| Antidepressants                         | 945            | 8.63  | 325                          | 5.73 |
| Cardiovascular drugs                    | 757            | 6.91  | 244                          | 4.30 |
| Alcohols                                | 601            | 5.49  | 67                           | 1.18 |
| Antihistamines                          | 476            | 4.34  | 209                          | 3.69 |
| Cleaning substances (household)         | 444            | 4.05  | 356                          | 6.28 |
| Pesticides                              | 434            | 3.96  | 334                          | 5.89 |
| Anticonvulsants                         | 410            | 3.74  | 118                          | 2.08 |
Table 6. Substance categories most frequently involved in exposures of adults (>19 years), continued.

| Substance category                        | All substances | %   | Single substance exposures | %   |
|------------------------------------------|----------------|-----|-----------------------------|-----|
| Hormones and hormone antagonists         | 342            | 3.12| 186                         | 3.28|
| Stimulants and street drugs              | 335            | 3.06| 149                         | 2.63|
| Fumes/gases/vapors                       | 295            | 2.69| 268                         | 4.73|
| Chemicals                                | 294            | 2.68| 254                         | 4.48|
| Muscle relaxants                         | 236            | 2.15| 90                          | 1.59|
| Cold and cough preparations              | 228            | 2.08| 106                         | 1.87|

Table 8. Top 5 most frequent plant exposures.

| Botanical name or category                  | N   |
|--------------------------------------------|-----|
| Oxalates (species unspecified)             | 38  |
| Plants: non-toxic                          | 33  |
| Phytolacca Americana (L.) (botanic name)   | 28  |
| Cherry (species unspecified, wild & domesticated) | 22  |
| Plants-general-unknown                      | 11  |
| Spathiphyllum species (botanic name)       | 10  |
| Poison ivy/oak                             | 9   |
| Philodendron (species unspecified)         | 7   |
| **Total of all plant calls**               | 331 |

Unintentional exposures were the most common reason for exposures (75.4%, n = 14,634) while intentional exposures accounted for 21.3% (n = 4,127) of exposures. Table 9 lists reasons for human exposures. Most unintentional exposures, 58.8% (n = 8,609) occurred in the ≤5-years-old age group. In patients less than 13 years of age, 97.8% (n = 9,745) of ingestions were unintentional. However, in the age 13 to 19-years-old group, intentional exposure was most common (67.2%, n = 1,283). In total, suspected suicide attempts accounted for 16.5% (n = 3,201) of human encounters. When a therapeutic error was the reason for exposure, a double dose was the most common scenario, 32.2% (n = 756).

Most encounters (65.9%, n = 12,780) were managed in a non-health care facility (i.e., a residence). Of the 6,368 encounters managed at a health care facility, 45% (n = 2,863) were admitted. Table 10 lists the management site of all human encounters.

Among human exposures, 14,591 involved exposures to pharmaceutical agents while 9,439 involved exposure to non-pharmaceuticals. Because an encounter could include numerous pharmaceutical agents and non-pharmaceutical agents, this total was greater than the total number of encounters. However, 86% (n = 16,683) of all human exposures were exposed to only a single substance. Among these single substance exposures, the reason for exposure was intentional in 25.6% (n = 2,160) of pharmaceutical-only cases compared to 3.8% (n = 316) of non-pharmaceutical single substance exposures.

When medical outcomes were analyzed, 26.4% (n = 5,116) of human exposures had no effect, 18.8% (n = 3,652) had minor effect, 9.3% (n = 1,813) had moderate effect, and 3.1% (n = 603) had major effects. Moderate effects were more common in the 13 to 19-year-old group while major effects were more common in those over 20 years of age. Moderate and major effects were most common in those with intentional encounters. More serious outcomes were related to single-substance pharmaceutical exposures, accounting for 35.7% (n = 5) of the fatalities. Table 11 lists all medical outcomes by age and Table 12 lists outcomes by reason for exposure.

Use of decontamination and specific therapies, including antidotal therapy, is detailed in Tables 13a and 13b (tables available online only at “journals.ku.edu/kjm”). There were 14 deaths in 2019 reported to the KSPCC. All deaths involved patients 20 years of age or older, and 11 of the deaths involved intentional exposures. Table 14 details the 14 reported deaths (available online only at “journals.ku.edu/kjm”).

Table 15 compares key statistics from 2015 to 2019. Overall case volumes have declined since 2016, however, the percentage of calls from healthcare facilities, and cases with moderate or major outcomes have increased steadily from 2015 to 2019. The number of deaths doubled from 2018 to 2019.

**DISCUSSION**

The ongoing importance of the KSPCC is reflected in trends that have seen rates of poisonings and overdoses increase at an alarming rate over the last decade. According to the Annual Surveillance Report of Drug-Related Risks and Outcomes, drug poisoning-related hospitalizations in the United States have increased 26% in over the last two years that data are available. The National Center for Health Statistics noted over 67,000 overdose related deaths in 2018.
Similarly, the KSPCC consistently has seen an increase in the number of cases from healthcare facilities and cases with moderate or major medical outcomes. Over the last five years, calls from healthcare facilities have increased by 22% while moderate/major outcomes increased by 43%. Cases from healthcare facilities account for more than 25% of the cases reported to the KSPCC. While the number of deaths doubled from 7 in 2018 to 14 in 2019, this more closely reflects previous years’ exposure-related fatalities with 15 and 16 deaths documented in 2016 and 2017, respectively.

The 2019 Kansas Poison Control Center at The University of Kansas Health System’s statistics continued to mirror those seen nationally by the other 54 accredited poison control centers nationwide. In 2018, 2,530,238 encounters were logged by poison control, including 2,099,751 human exposures. Overall encounters showed a 2.96% (n = 77,175) decline from 2017 to 2018, though healthcare facility human exposure cases decreased by only 0.261% from 2017. More serious outcomes (moderate, major, or death) continued to increase. Nationwide, the five substance classes most frequently involved in adult exposures were analgesics, sedative/hypnotics/antipsychotics, antidepressants, cardiovascular drugs, and cleaning substances (household), while the top five most common exposures in children age five years or less were cosmetics/personal care products, household cleaning substances, analgesics, foreign bodies/toys/miscellaneous, and topical preparations. There were 3,111 exposure-related fatalities reported nationwide in 2018.

Several important limitations must be noted when interpreting poison center data. Reporting exposures to the KSPCC is voluntary and the KSPCC is not contacted regarding all poisonings in the state of Kansas. Furthermore, in most cases, there is no objective confirmation of exposure.

**CONCLUSIONS**

The 2019 KSPCC annual report demonstrated that the center received over 20,000 total calls, including more than 19,000 human exposures. While pediatric exposures remain the most common, there continues to be an increasing trend in the number of calls from healthcare facilities and for cases with serious outcomes. In this regard, the experience of the KSPCC is similar to national data. This report supported the continued value of the KSPCC to both public and acute healthcare in the state of Kansas.

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Table 11. Medical outcome of human exposure cases by patient age.

| Outcome          | ≤5 years | 6 - 12 years | 13 - 19 years | ≥20 years | Unknown child | Unknown adult | Unknown age | Total |
|------------------|----------|--------------|---------------|-----------|---------------|---------------|-------------|-------|
| No effect        | 2,931    | 33.81        | 402           | 31.11     | 435           | 1,331         | 1793        | 5,116 |
| Minor effect     | 957      | 11.04        | 239           | 18.50     | 589           | 3087          | 1,854       | 2498  |
| Moderate effect  | 85       | 0.98         | 42            | 3.25      | 396           | 2075          | 1,285       | 1731  |
| Major effect     | 18       | 0.21         | 7             | 0.54      | 97            | 508           | 479         | 645   |
| Death            | 0        | 0.00         | 0             | 0.00      | 0             | 14            | 0           | 1     |
| No follow-up, nontoxic | 310 | 3.58       | 30            | 2.32      | 10            | 0.52          | 20          | 0.27  |
| No follow-up, minimal toxicity | 4,019 | 46.36 | 518           | 40.09     | 283           | 14.83         | 1,717       | 2313  |
| No follow-up, potentially toxic | 220 | 2.54 | 31            | 2.40      | 64            | 3.35          | 355         | 4.78  |
| Unrelated effect | 130      | 1.50         | 23            | 1.78      | 34            | 1.78          | 367         | 4.94  |
| Death, indirect report | 0 | 0.00 | 0             | 0.00      | 0             | 0.00          | 0           | 0     |
| Total            | 8,670    | 100.00       | 1,292         | 100.00    | 1,908         | 100.00        | 7,422       | 100.00 |

Table 12. Medical outcome by reason for exposure in human exposures.

| Outcome                      | Unintentional | Intentional | Other | Adverse reaction | Unknown | Total |
|------------------------------|---------------|-------------|-------|------------------|---------|-------|
| Death                        | 3             | 0.02        | 11    | 0.27             | 0       | 0     |
| Death, indirect report       | 0             | 0.00        | 0     | 0.00             | 0       | 0     |
| Major effect                 | 75            | 0.51        | 489   | 11.85            | 0       | 0     |
| Minor effect                 | 2,392         | 16.35       | 1,105 | 26.77            | 18      | 19.57 |
| Moderate effect              | 483           | 3.30        | 1,253 | 30.36            | 9       | 9.78  |
| No effect                    | 4,191         | 28.64       | 871   | 21.10            | 9       | 9.78  |
| No follow-up, nontoxic       | 364           | 2.49        | 5     | 0.12             | 1       | 1.09  |
| No follow-up, minimal toxicity | 6,288   | 42.97       | 153   | 3.71             | 19      | 20.65 |
| No follow-up, potentially toxic | 461 | 3.15 | 180   | 4.36             | 18      | 19.57 |
| Unrelated effect             | 377           | 2.58        | 60    | 1.45             | 18      | 19.57 |
| Total                        | 14,634        | 100.00      | 4,127 | 100.00           | 92      | 100.00 |

Table 15. 2015 to 2019 comparison of select statistics.

|                           | 2015 | 2016 | 2017 | 2018 | 2019 |
|---------------------------|------|------|------|------|------|
| Total cases               | 20,109 | 21,965 | 21,431 | 21,072 | 20,589 |
| Calls from healthcare facility | 4,267   | 4,514   | 4,892   | 5,224   | 5,195   |
| Moderate or major outcomes | 1,688   | 1,971   | 2,170   | 2,340   | 2,416   |
| Deaths                    | 13    | 15    | 16    | 7     | 14    |
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