In 2017, local health departments (LHD) reported 2,560 regulated children's camps operated in New York State (NYS). Of these, 536 were overnight camps and 2,024 were day camps, including 263 municipal day camps and 24 traveling summer day camps. It is estimated that over 900,000 children attend NYS children's camps each year.

To assess health and safety at camps, a children's camp incident surveillance system is maintained. Camp operators are required to report serious injuries, illnesses, potential rabies exposures, administrations of epinephrine, and allegations of camper abuse to LHDs. These incidents are investigated by LHDs and information is entered into the New York State Department of Health’s Environmental Health Inspection and Permitting System. A total of 1,003 incidents (1,265 victims), meeting criteria for reportable incidents in Subpart 7-2 of the New York State Sanitary Code (SSC), were reported statewide in 2017 (Figure 1), indicating that less than two out of one thousand camper’s experienced injury and illness while at camp. Statewide analysis of the data is used for injury prevention and control and has been used to determine amendments needed to the SSC and develop administrative guidance. The following summarizes the 2017 reportable incidents.

Injuries:
There were 796 injuries reported during the 2017 camp season. This represents a two percent increase compared to 2016 and a nine percent decrease compared to the 15-year average of reportable injuries occurring at children’s camps (Figure 2). Figures 3 through 16 provide details as to the types of injuries sustained and activities at the time of the injury during the 2017 camp season. Injuries reported are those that meet the criteria in Subpart 7-2 of the SSC including:

- Camper injuries that result in:
  - death or require resuscitation;
  - admission to a hospital (treatment in the emergency room (ER) is not considered admission to a hospital);
  - eye, head, neck or spine injuries which require referral to a hospital or other facility for medical treatment;
  - bone fractures or dislocations;
  - lacerations that require sutures, staples or medical glue; or
  - second or third degree burns to 5 percent or more of the body.

- Staff injuries which result in death, require resuscitation, or admission to a hospital (treatment in the ER is not considered admission to a hospital).

Illnesses and Illness Outbreaks:
Camper and staff illnesses suspected of being water-, food-, or air-borne, or spread by contact are required to be reported. There was a total of 119 individual illnesses and 33 illness outbreaks reported during the 2017 camping season (Figures 17 – 18). Illness outbreaks are detailed in the table below.
<table>
<thead>
<tr>
<th>Outbreak Type</th>
<th>Number of Outbreaks</th>
<th>Number Ill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Illness or Disease</td>
<td>Coxsackie Virus</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Conjunctivitis</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Impetigo</td>
<td>1</td>
</tr>
<tr>
<td>Gastrointestinal</td>
<td>Gastrointestinal of Unknown Etiology</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Norovirus</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Adenovirus</td>
<td>1</td>
</tr>
<tr>
<td>Mandated Reportable Communicable Disease (per 10NYCCR Part 2)</td>
<td>Mumps</td>
<td>1</td>
</tr>
<tr>
<td>Parasitic</td>
<td>Head Lice</td>
<td>3</td>
</tr>
<tr>
<td>Respiratory Infection</td>
<td>Strep Throat</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Pneumonia</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Respiratory of Unknown Etiology</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td><strong>33</strong></td>
</tr>
</tbody>
</table>

**Epinephrine Administrations:**

There were 19 incidents in which epinephrine was administered during the 2017 camping season (Figure 19). Of these, thirteen administrations were for food allergies, three administrations were for insect stings, and two administrations for an unknown allergen. An additional administration was to an adult camper with developmental disabilities who believed she was having an allergic reaction; however, upon evaluation at the emergency room it was determined she was in the beginning stages of a heart attack.

Of the total administrations, six epinephrine auto-injectors were from the camp’s supply and thirteen from the patient’s supply.

An amendment to Public Health Law, which allows children’s camps to stock and administer epinephrine auto-injectors, became effective on March 28, 2017. The amendment eliminated the requirements for a physician or hospital to oversee an epinephrine auto-injector program and to establish a collaborative agreement with the camp. It also eliminated the need for camps to file a “Notice of Intent to Provide Epinephrine Auto-Injectors” and other documents with a Regional Emergency Medical Services Council (REMSCO). As a result, the number of camps participating in an epinephrine auto-injector program is no longer available.

**Rabies Exposures:**

There were 12 reported bat-exposure incidents resulting in 74 campers and staff potentially exposed to rabies in the 2017 camping season (Figure 20). In four of these incidents, the bat was not captured, which resulted in 21 individuals being recommended for rabies post exposure prophylaxis (PEP). Seven individuals received PEP treatment and 14 refused treatment. In eight incidents, the bat was captured and tested negative for rabies, which resulted in PEP treatment being avoided for 53 individuals.

In addition to the bat-exposures, there were two separate reports of potential rabies exposures from a horse. PEP was not necessary in these incidents after 10-day observations of the animals ruled out rabies.
Allegations of Physical and Sexual Abuse:
There were 12 allegations of physical or sexual abuse of campers reported during the 2017 camping season. Of these incidents, three were alleged physical abuses and nine were alleged sexual abuses. The alleged perpetrator was the camp operator in one incident, a lifeguard in one incident, a counselor-in-training in one incident, another camper in three incidents, and a counselor in six incidents.

An allegation of abuse is investigated by law enforcement when it may contain a violation of the Penal Law. The LHD investigates all allegations to determine if the camp complied with supervision, staffing and other policies and procedures required by the Subpart 7-2 of the SSC.

Justice Center Reportable Incidents:
In 2017, there were eight incidents at Camps for Children with Developmental Disabilities (enrollment of 20% or more campers with developmental disabilities) reported to the Justice Center for the Protection of People with Special Needs (Justice Center). Of these, four incidents were allegations of neglect, which the Justice Center was the lead investigating agency. One of the four incidents was substantiated by the Justice Center. After the Justice Center completes its investigation, LHDs investigate the incidents for compliance with Subpart 7-2 of the SSC and oversee corrective action plans for the camp.

Four reports were classified by the Justice Center as significant incidents and were investigated by LHDs for compliance with Subpart 7-2 of the SSC. Of these, two allegations involved inappropriate camper-to-camper contact, one bruising from an unknown origin, and one lack of proper supervision/care. (Figure 21).

For the purpose of this summary report, Justice Center incidents may be reported in other categories, such as an injury, illness, or incident of alleged physical and sexual abuse if the incidents meet the criteria in Subpart 7-2 of the SSC for a reportable incident.

Fatalities:
There were no camper fatalities reported at regulated children’s camps during the 2017 season.

Other Significant Incident:
Four campers suffered carbon monoxide poisoning at a children’s overnight camp. The source of the carbon monoxide was found to be improperly vented on-demand hot water heaters. The water heaters were installed the prior year and vented through the side of the building under a porch. Prior to the start of the 2017 season, new bathrooms were constructed on the porch above the water heater vents resulting in an accumulation of carbon monoxide in the bathrooms.

Four campers experienced symptoms after using the bathrooms. One camper was found unconscious in the bathroom, one camper fainted upon exiting the bathroom, and two campers experienced headaches.

Two staff responding to the unconscious camper in the bathroom were also exposed to carbon monoxide and were transported to the hospital as a precaution for evaluation. The bathrooms were closed, and the local fire department was called to assess the carbon monoxide levels. The fire department reported that the carbon monoxide level in the bathrooms was 300 ppm (parts per million). Following the incident, the hot water heaters exhaust vents were properly vented, and carbon monoxide detectors installed in the bathrooms.
Injuries, 796

Individual Illnesses, 119

Outbreak Illness Incidents, 33

Justice Center Reportable Incidents*, 8

Epinephrine Administrations, 19

Potential Rabies Exposure, 14

Allegations of Physical and Sexual Abuse, 12

Fires, 2

N=1003

*Justice Center Reportable Incidents may be reported in multiple categories

Figure 1: Children's Camp Incidents - 2017

Figure 2: Camp Injuries by Year

Source: Local and State District Office Health Departments. (2017).
NYSDOH, Environmental Health Inspection and Permitting System
Figure 3: Injury Incidents by Camp Type - 2017

- Overnight Camp: 45%
- Day Camp: 55%

N=796


Figure 4: Injuries by Type - 2017

- Fracture: 52.9%
- Cut/Puncture*: 33.0%
- Concussion: 8.3%
- Back or Neck Strain/Sprain: 0.6%
- Internal (organ damage): 0.4%
- Burn: 0.3%
- Dislocation: 2.9%
- Other: 1.6%

N=796

*Requiring sutures, staples, or medical glue

Figure 5: Injuries by Activity - 2017

N=796

Source: Local and State District Office Health Departments. (2017). NYSDOH, Environmental Health Inspection and Permitting System

Figure 6: Sport Injuries by Activity - 2017

N=202

Source: Local and State District Office Health Departments. (2017). NYSDOH, Environmental Health Inspection and Permitting System
Figure 7: Head Injuries by Type - 2017

- Concussion: 52%
- Cut*: 40%
- Fracture: 2%
- Other: 6%

N=127

*Requiring sutures, staples, or medical glue

Source: Local and State District Office Health Departments. (2017). NYSDOH, Environmental Health Inspection and Permitting System

Figure 8: Concussion Injuries by Activity - 2017

- Field Sports
- Games-Organized Playing
- Court Sports
- Playing
- Amusement Park Rides
- Bicycling
- Boating/Canoeing
- Dancing/Acting
- Eating
- Fighting
- Nature Study/Walk
- Playground Equipment Activity
- Woodcutting/Chopping
- Ropes/Challenge Course
- Roller skating/Rollerblading
- Swimming
- Horseback Riding
- Amusement Park Rides
- Aquatic Theme Park Rides
- Walking/Running
- Free Period
- Frequent

N=66

Figure 11: Fractures by Activity - 2017

Source: Local and State District Office Health Departments. (2017). NYSDOH, Environmental Health Inspection and Permitting System

Figure 12: Cuts/Punctures Requiring Sutures, Staples, or Medical Glue by Activity - 2017

Source: Local and State District Office Health Departments. (2017). NYSDOH, Environmental Health Inspection and Permitting System
Figure 13: Sports Injuries by Type - 2017

- Fracture: 61.9%
- Cut*: 20.8%
- Concussion: 9.9%
- Other: 4.0%
- Dislocation: 3.0%
- Back or Neck Strain/Sprain: 0.5%

N=202

Source: Local and State District Office Health Departments. (2017). NYSDOH, Environmental Health Inspection and Permitting System

*Requiring sutures, staples, or medical glue

Figure 14: Free Period Injuries by Type - 2017

- Cut/Puncture*: 50%
- Back or Neck Strain/Sprain: 3%
- Concussion: 10%
- Fracture: 37%

N=40

Source: Local and State District Office Health Departments. (2017). NYSDOH, Environmental Health Inspection and Permitting System

*Requiring sutures, staples, or medical glue
**Figure 15: Travel between Activities Injuries - 2017**

- Fracture: 37.5%
- Cut*: 62.5%

N=16

*Requiring sutures, staples, or medical glue

Source: Local and State District Office Health Departments. (2017). NYSDOH, Environmental Health Inspection and Permitting System

**Figure 16: Organized Game Injuries - 2017**

- Fracture: 65%
- Cut/puncture*: 21%
- Concussion: 7%
- Dislocation: 4%
- Internal (organ damage): 1%
- Back or Neck Strain/Sprain: 1%
- Other: 1%

N=141

*Requiring sutures, staples, or medical glue

Source: Local and State District Office Health Departments. (2017). NYSDOH, Environmental Health Inspection and Permitting System
Figure 17: Individual Illnesses - 2017

Percentage of Illness

N=119

Source: Local and State District Office Health Departments. (2017). NYSDOH, Environmental Health Inspection and Permitting System

Figure 18: Outbreak Illnesses - 2017

Percentage of Individuals

N= 250 Individuals, 33 Outbreaks

Source: Local and State District Office Health Departments. (2017). NYSDOH, Environmental Health Inspection and Permitting System
Figure 19: Epi-Pen Administrations by Year

Source: Local and State District Office Health Departments. (2017).
NYSDOH, Environmental Health Inspection and Permitting System

Figure 20: Potential Rabies Exposures by Year

Source: Local and State District Office Health Departments. (2017).
NYSDOH, Environmental Health Inspection and Permitting System
Figure 21: Justice Center Reportable Incidents - 2017

- Significant Incidents, 4
- Substantiated Neglect, 1
- Unsubstantiated Neglect, 3
- Inappropriate camper-to-camper contact, 2
- Lack of Proper Supervision/Care, 1
- Bruising from Unknown Origin, 1

N=8

Source: Local and State District Office Health Departments. (2017). NYSDOH, Environmental Health Inspection and Permitting System