In 2016, local health departments (LHD) reported 2,595 regulated children’s camps operated in New York State (NYS). Of these, 538 were overnight camps and 2,057 were day camps, including 259 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 1,023 incidents (1,495 victims), meeting criteria for reportable incidents in Subpart 7-2 of the New York State Sanitary Code (SSC), were reported statewide in 2016 (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 2016 reportable incidents.

Injuries:

There were 781 injuries reported during the 2016 camp season. This represents a nine percent decrease compared to 2015 and a twelve 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 2016 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).

There were three nonfatal drownings reported in 2016:

- One incident involved a 10-year-old male camper and occurred during an open swim session. The camper was classified by the camp’s Progressive Swimming Instructor as a “swimmer”. The camper and 4-5 other campers were in the deep end of the pool having an underwater breath-holding contest. Campers submerged one at a time while the other campers counted out loud and a counselor, standing on the pool deck, timed them on his phone. The victim was taking his
turn when his assigned swimming buddy noticed that he had lost consciousness. The camper yelled for help and held the unconscious camper above the water. The counselor and assistant director pulled the victim out of the water. The assistant director began chest compressions while 911 was activated. After four compressions, the victim took a breath and regained consciousness. EMS arrived soon after and transported the victim to the hospital. The victim was discharged from the hospital that same day and was reported to be in good health. He returned to camp the following week.

• The second incident involved a 14-year-old male camper and occurred during an open swim session. The camper was classified by the camp’s Progressive Swimming Instructor as a “swimmer”. The camper was swimming in the shallow end of the pool, submerging under water and resurfacing within a few seconds. The lifeguard noticed that the camper did not surface after his normal amount of time underwater, which prompted the lifeguard to enter the water and rescue the camper. Upon surfacing the lifeguard noticed white foam coming from the camper’s mouth, his eyes rolled back in his head and he was shaking. The camper was placed onto a backboard and removed from the pool while 911 was activated. The camper had a pulse and was breathing. No CPR was needed. EMS transported the victim to the hospital. He was discharged from the hospital that same day and was reported to be in good health.

• The third incident involved a 17-year-old male counselor who was in the deep end of the pool while supervising campers. During a buddy check, the counselor was spotted at the bottom of the pool by a camper and another counselor. The counselor was retrieved from the pool bottom by other counselors and brought to the pool deck. The counselor began to cough up water and start to breathe on his own once on the pool deck while 911 was activated. No CPR was required. EMS transported the victim to the hospital where he was admitted for testing and evaluation. The counselor remained in the hospital for two days and returned to work at the camp upon his release.

Illnesses and Illness Outbreaks:
The table below details the camper and staff illnesses suspected of being water-, food-, or air-borne, or spread by contact. There was a total of 137 individual illnesses and 37 illness outbreaks reported during the 2016 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 III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Illness or Disease</td>
<td>Coxackie Virus</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Influenza-Like Illness</td>
<td>1</td>
</tr>
<tr>
<td>Eye Infection</td>
<td>Conjunctivitis</td>
<td>1</td>
</tr>
<tr>
<td>Gastrointestinal</td>
<td>Gastrointestinal of Unknown Etiology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Norovirus</td>
<td>2</td>
</tr>
<tr>
<td>Parasitic</td>
<td>Head Lice</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Scabies</td>
<td>1</td>
</tr>
<tr>
<td>Respiratory Infection</td>
<td>Strep Throat</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Respiratory of Unknown Etiology</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>37</strong></td>
</tr>
</tbody>
</table>
Epinephrine Administrations:

There were 20 incidents in which epinephrine was administered during the 2016 camping season (Figure 19). Of these, eleven administrations were for food allergies, five administrations were for insect stings, and four administrations for an unknown allergen.

Epinephrine was administered in ten instances where the camp was identified as participating in the Epinephrine Auto-Injector program, and ten incidents at camps not participating in the Epinephrine Auto-Injector program.

Of the total administrations, seven epinephrine auto-injectors were from the camp’s supply, ten from the patient’s supply, one from EMS, one from a doctor’s office, and one from the camp health director’s personal supply.

Approximately, 252 camps participated in the Epinephrine Auto-Injector Program in 2016.

Rabies Exposures:

There were 13 reported bat-exposure incidents resulting in 84 campers and staff potentially exposed to rabies in the 2016 camping season (Figure 20). In seven of these incidents, the bat was not captured, which resulted in 59 individuals being recommended for rabies post exposure prophylaxis (PEP). Thirty-six individuals received PEP treatment and 23 refused treatment. In five incidents, the bat was captured and tested negative for rabies, which resulted in PEP treatment being avoided for 20 individuals. In one incident, the bat was captured and tested positive for rabies, which resulted in PEP treatment for the five individuals.

In addition to the bat-exposures, there were five separate reports of potential rabies exposures from three dogs, a horse, and a chipmunk bite. The three dog bites occurred outside of the camp property when the individuals encountered the dogs being walked by their owners. In two of the incidents, the dogs could not be located after the event, which resulted in PEP administration to the campers. In the third case the dog was identified, and PEP was not necessary after 10-day observation of the animal ruled out rabies. PEP was also not necessary in the horse bite after determining the animal did not have rabies. PEP was not recommended or administered in response to the chipmunk bite.

Allegations of Physical and Sexual Abuse:

There were 11 allegations of physical and/or sexual abuse of campers reported during the 2016 camping season. Of these incidents, two were alleged physical abuses, eight were alleged sexual abuses and one was alleged physical and sexual abuse. The alleged perpetrator was another camper in five incidents, a counselor in four incidents, and the personal aid of a camper with developmental disabilities in one incident.

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 2016, there were 19 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, 13 incidents were allegations of abuse or
neglect, which the Justice Center was the lead investigating agency. Two of the 13 incidents were substantiated (1 abuse and 1 neglect). 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.

Six reports were classified as significant incidents and were investigated by LHDs for compliance with Subpart 7-2 of the SSC. Of these, three reports were regarding an injury requiring more than first aid, one alleged lack of proper medical care of a camper, one alleged lack of proper supervision, and one alleged inappropriate camper-to-camper contact (Figure 21).

Justice Center incidents are reported in other categories of this report, such as an injury, illness, or incident of alleged physical and sexual abuse when 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 2016 season.
Figure 1: Children's Camp Incidents - 2016

- Injuries, 781
- Individual Illnesses, 137
- Outbreak Illness Incidents, 37
- Justice Center Reportable Incidents*, 19
- Epinephrine Administrations, 20
- Potential Rabies Exposure, 18
- Allegations of Physical and Sexual Abuse, 11

N=1023

*Justice Center Reportable Incidents may be reported in multiple categories

Source: Local and State District Office Health Departments. (2016). NYSDOH, Environmental Health Inspection and Permitting System

Figure 2: Camp Injuries by Year

Source: Local and State District Office Health Departments. (2016). NYSDOH, Environmental Health Inspection and Permitting System
Figure 3: Injury Incidents by Camp Type - 2016

Day Camp 52%
Overnight Camp 48%

N=781

Source: Local and State District Office Health Departments. (2016).
NYSDOH, Environmental Health Inspection and Permitting System

Figure 4: Injuries by Type - 2016

Fracture 52.9%
Cut/Puncture* 31.2%
Concussion 9.6%
Back or Neck Strain/Sprain 0.8%
Dislocation 2.0%
Nonfatal Drowning 0.4%
Bite 0.1%
Other 2.9%

N=781

*Requiring sutures, staples, or medical glue

Source: Local and State District Office Health Departments. (2016).
NYSDOH, Environmental Health Inspection and Permitting System
Figure 5: Injuries by Activity - 2016

N=781
Source: Local and State District Office Health Departments. (2016). NYSDOH, Environmental Health Inspection and Permitting System

Figure 6: Sport Injuries by Activity - 2016

N=229
Source: Local and State District Office Health Departments. (2016). NYSDOH, Environmental Health Inspection and Permitting System
Figure 7: Head Injuries by Type - 2016

- Concussion: 54%
- Cut*: 36%
- Other: 9%
- Fracture: 1%

N=140

Source: Local and State District Office Health Departments. (2016).
NYSDOH, Environmental Health Inspection and Permitting System.

*Requiring sutures, staples, or medical glue

Figure 8: Concussion Injuries by Activity - 2016

- Travel Between Activities
- Transportation
- Playground Equipment Activity
- Horseback Riding
- Dancing/Acting
- Aquatic Theme Park Rides
- Swimming
- Fighting
- Playing
- Other
- Free Period
- Walking/Running
- Sleeping
- Games-Organized
- Court Sports
- Field Sports

N=75

Source: Local and State District Office Health Departments. (2016).
NYSDOH, Environmental Health Inspection and Permitting System.
Figure 9: Concussion Injuries by Sport and Game Activity - 2016

Source: Local and State District Office Health Departments. (2016). NYSDOH, Environmental Health Inspection and Permitting System

Figure 10: Concussions by Year

Source: Local and State District Office Health Departments. (2016). NYSDOH, Environmental Health Inspection and Permitting System
Figure 11: Fractures by Activity - 2016

N=413
Source: Local and State District Office Health Departments. (2016). NYSDOH, Environmental Health Inspection and Permitting System

Figure 12: Cuts/Punctures Requiring Sutures, Staples, or Medical Glue by Activity - 2016

N=244
Source: Local and State District Office Health Departments. (2016). NYSDOH, Environmental Health Inspection and Permitting System
Figure 13: Sports Injuries by Type - 2016

Fracture 69.4%
Cut/Puncture* 15.3%
Concussion 10.9%
Other 2.6%
Dislocation 1.7%

N=229

Source: Local and State District Office Health Departments. (2016). NYSDOH, Environmental Health Inspection and Permitting System

*Requiring sutures, staples, or medical glue

Figure 14: Free Period Injuries by Type - 2016

Concussion 25%
Cut/Puncture* 45%
Fracture 30%

N=20

Source: Local and State District Office Health Departments. (2016). NYSDOH, Environmental Health Inspection and Permitting System

*Requiring sutures, staples, or medical glue
Figure 15: Travel between Activities Injuries - 2016

Source: Local and State District Office Health Departments. (2016).
NYSDOH, Environmental Health Inspection and Permitting System

*Requiring sutures, staples, or medical glue

N=29

Figure 16: Organized Game Injuries - 2016

Source: Local and State District Office Health Departments. (2016).
NYSDOH, Environmental Health Inspection and Permitting System

*Requiring sutures, staples, or medical glue

N=140
Figure 17: Individual Illnesses - 2016

- Campylobacteriosis
- Influenza-Like Illness
- Pneumonia
- Pertussis
- MRSA
- Salmonellosis
- Croup
- Scabies
- Fifth Disease
- Hepatitis A
- Gastrointestinal of Unknown Etiology
- Cardiac Event
- Mononucleosis
- Ringworm
- Chicken Pox
- Impetigo
- Respiratory of Unknown Etiology
- Lyme Disease
- Other
- Non-Communicable Illness - Hospital Admission
- Conjunctivitis
- Coxsackie Virus
- Head Lice
- Strep Throat

N=137

Source: Local and State District Office Health Departments. (2016). NYSDOH, Environmental Health Inspection and Permitting System

Figure 18: Outbreak Illnesses - 2016

- Conjunctivitis
- Scabies
- Respiratory of Unknown Etiology
- Influenza-Like Illness
- Coxsackie Virus
- Head Lice
- Gastrointestinal of Unknown Etiology
- Norovirus
- Strep Throat

N= 462 Individuals, 37 Outbreaks

Source: Local and State District Office Health Departments. (2016). NYSDOH, Environmental Health Inspection and Permitting System
Figure 19: Epi-Pen Administrations by Year

![Epi-Pen Administrations by Year](image1)

Source: Local and State District Office Health Departments. (2016).
NYSDOH, Environmental Health Inspection and Permitting System.

Figure 20: Potential Rabies Exposures by Year

![Potential Rabies Exposures by Year](image2)

Source: Local and State District Office Health Departments. (2016).
NYSDOH, Environmental Health Inspection and Permitting System.
Figure 21: Justice Center Reportable Incidents - 2016

Source: Local and State District Office Health Departments. (2016). NYSDOH, Environmental Health Inspection and Permitting System