

# NON-MORTALITY SPECIAL INCIDENTS

Semi-Annual Report Submitted to the  
California Department of Developmental Services

JANUARY – JUNE 2009

Acumen, LLC

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500 Airport Blvd., Suite 365

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Burlingame, CA 94010

## INTRODUCTION AND BACKGROUND

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**This report summarizes rates of special incidents between January and June 2009 for DDS consumers living in the community. It compares rates across recent years and identifies months in which rates were unusually high.**

**DDS can use this report to track special incident rates over time and monitor the effectiveness of risk management activities.**

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As one element of risk management and quality assurance, the California Department of Developmental Services (DDS) and California's network of regional centers monitor the occurrence of adverse events, captured through Special Incident Reports (SIRs), to identify trends and develop strategies to prevent and mitigate risks. As required by Title 17 of the California Code of Regulations, vendors and long-term health care facilities report occurrences of suspected abuse, suspected neglect, injury requiring medical attention, unplanned hospitalization, and missing persons, if they occur when a consumer is receiving services funded by a regional center (under vendored care). In addition, *any occurrence* of consumer mortality or victim of crime must be reported whether or not it occurred while they were under vendored care.

This report, one of a series of semi-annual reports on non-mortality special incidents, summarizes incident rates for DDS consumers between January and June 2009. The report has two main goals:

1. To update time trends in special incident rates from our earlier reports to include data through June 2009.
2. To identify specific incident categories that were higher than their historical trend, and identify specific months in which incident rates were unusually high. DDS can use this report to track special incident rates over time.

The statistics and graphs presented in this report were constructed using data from the SIR System from 2002 through 2009. These data are augmented with three additional data sources maintained by DDS:

- The Client Master File (CMF)
- The Client Development Evaluation Report (CDER)
- The Early Start Report (ESR).

This report presents findings based on statistical analyses that measure a consumer's risk of experiencing a special incident. Further details are found at the bottom of each subsequent page.

## The average monthly incident rate for this period decreased compared to last period and last year.

**Table 1: All Non-Mortality Special Incidents, Compared to Previous Periods  
DDS Consumers, January – June 2009**

	Change From:	
	Jan-Jun 2008 (last year)	Jul-Dec 2008 (last period)
<b>Raw Rate</b>	-7% ↓	-2% ↓
<b>Case-Mix Adjusted Rate</b>	-6% ↓	-2% ↓

### Key Findings:

- Case-mix adjusted incident rates fell by 2% compared to the last period (Jul-Dec 2008) and by 6% compared to the same period one year ago (Jul-Dec 2007). Raw rates fell by roughly the same amount.
- The case-mix adjusted non-mortality incident rate was 0.49% this period, compared to 0.49% last period (Jul-Dec 2008) and 0.52% the same period last year (Jan-Jun 2008). These figures are not shown in the table above.

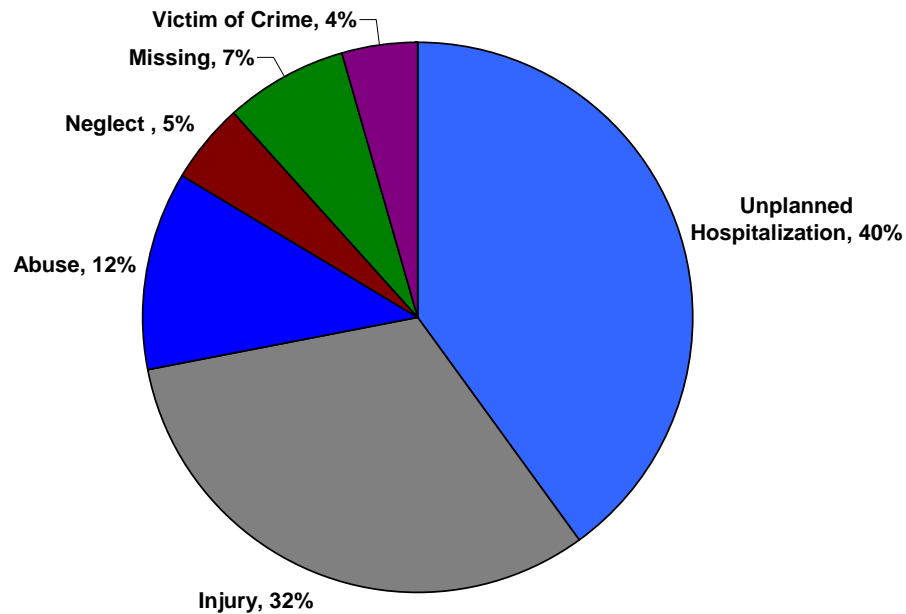
### More About These Data

The *Raw Rate* is defined as the percentage of statewide consumers who experience one or more special incidents in an average month. It is calculated by dividing the *total number of consumers with one or more incidents* by the *total consumer population*. Note that this rate does not tell you how many SIRs there were per person in a given month.

The *Case-Mix Adjusted Rate* accounts for the differences in the characteristics of the consumer population over time. When comparing statewide SIR rates to those of previous periods, it is important to distinguish trends affected by changes in population from trends associated with risk management practices. If, for example, there were an influx of medically fragile consumers, we would expect rates of unplanned hospitalization incidents to increase, even if the effectiveness of risk management practices did not change. Case-mix adjustment accounts for changes such as these, so that rates can be reasonably compared to previous periods.

## Unplanned hospitalization and injury incidents account for almost three quarters of reported non-mortality incidents.

Figure 1: Breakdown of Non-Mortality Special Incidents by Type, DDS Consumers, January – June 2009



### Key Findings:

- During the most recent 6-month period, unplanned hospitalizations were the most commonly reported non-mortality special incidents, accounting for 40% of all reported incidents. Injury incidents follow closely behind at 32%.
- The least common types of reported incidents were suspected neglect, missing person and victim of crime, which combined account for less than 20% of all special incidents.

### More About These Data

The percentages shown above are based on raw counts of reported special incidents and are not case-mix adjusted. Percentages may not add up to 100% due to rounding.

**The decreases compared to last period and last year were driven by most special incident types.**

**Table 2: Percent Change in Average Monthly Rates of Non-Mortality Special Incidents  
DDS Consumers, January – June 2009**

	Change From:	
	Jan-Jun 2008 (last year)	Jul-Dec 2008 (last period)
<b>Unplanned Hospitalization</b>	-4% ↓	-5% ↓
<b>Injury</b>	-6% ↓	-2% ↓
<b>Suspected Abuse</b>	-10% ↓	-2% ↓
<b>Suspected Neglect</b>	-36% ↓	-25% ↓
<b>Missing Person</b>	-8% ↓	-9% ↓
<b>Victim of Crime</b>	+7% ↑	-23% ↓

*Key Findings:*



- Compared to the previous six-month period (Jul-Dec 2008), reported rates of all incident types decreased.
- Compared to last year (Jan-Jun 2008), rates of all incident types decreased except for victim of crime.

*Follow-Up Activities:*

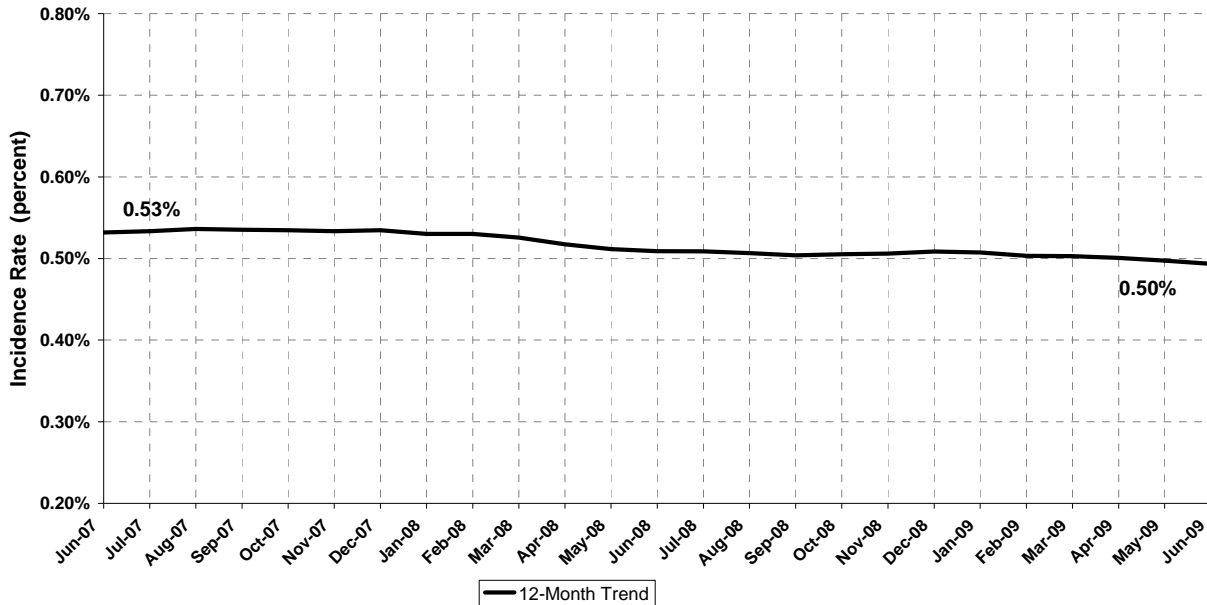
- *Reporting Back* - Although statewide rates generally decreased compared to last year, several regional centers saw increases within certain incident types. As of December 2009, each of these regional centers has reported back to DDS any discovery and remediation activities related to these spikes.
- *Technical Assistance* - Acumen is following up with those regional centers with quarterly spikes. Over the next 12 months, Acumen will monitor their rates closely and perform additional data analysis if the spike remains.

**More About These Data**

These figures are calculated using case-mix adjustment, described on page 4. Rates for specific incident types are calculated as the share of consumers experiencing an incident of that type in a given month.

## The statewide trend of non-mortality special incidents has decreased slightly over the past two years.

**Figure 2: Non-Mortality Special Incidents, Case-Mix Adjusted Statewide Trend  
DDS Consumers, June 2007 – June 2009**



### Key Findings:

- The black line in Figure 2 represents a 12-month moving average for all DDS consumers. See *More About These Data* below for more information.
- The trend in statewide non-mortality incident rates has decreased slightly over the past two years, from 0.53% in June 2007 to 0.50% in June 2009.
- The trend in statewide non-mortality incident rates has remained fairly constant through the most recent 6-month period (Jan-Jun 2009).

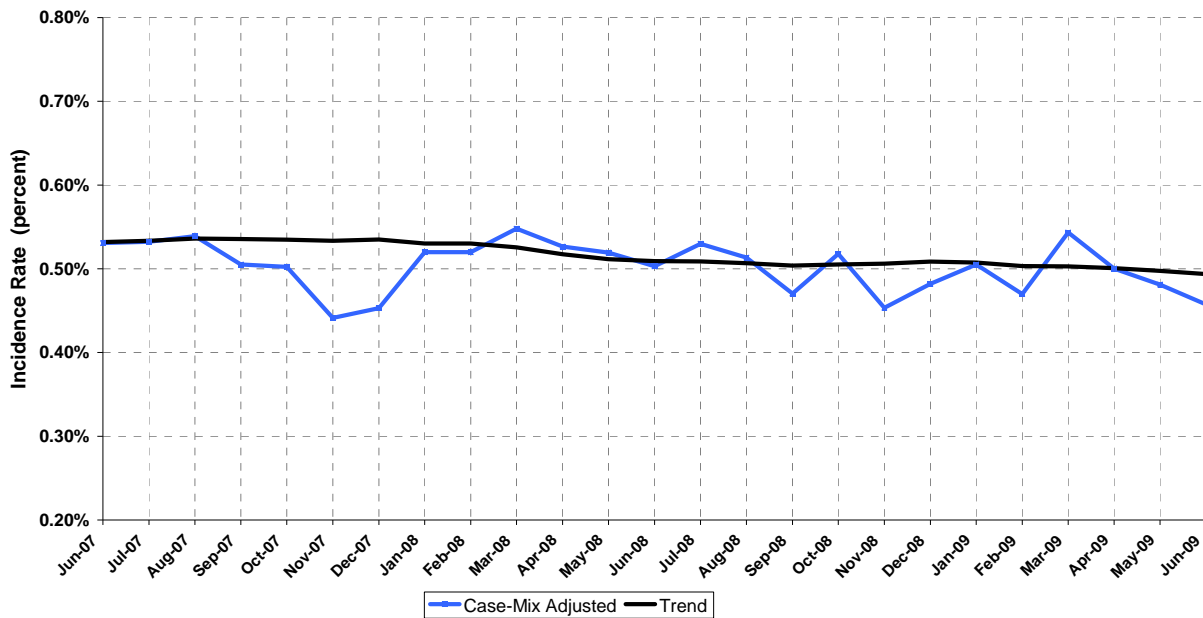
### More About These Data

This report summarizes incident rates for consumers living in the community. This includes consumers receiving services from a regional center not residing in a Developmental Center or state-operated facility. Special incidents refer to seven categories of adverse events defined by Title 17, Section 54327 of the California Code of Regulations. They include: missing person, suspected abuse, suspected neglect, serious injury, unplanned hospitalization, victim of crime, and death.

The monthly incident rate is defined as the share of consumers experiencing one or more non-mortality incidents in a given month. The trend line in Figure 1 represents a 12-month moving average of the monthly incident rate. It is calculated by taking an average of statewide non-mortality special incident rates from the most recent 12-month period. This trend also accounts for the differences in the characteristics of the consumer population over time. This approach, called “case-mix adjustment,” controls for changes in consumer characteristics and removes these effects from the calculated trend.

## Non-mortality special incident rates during the past six months were below the long-term average, except in March.

**Figure 3: Non-Mortality Special Incidents, Case-Mix Adjusted Monthly Rates  
DDS Consumers, June 2007 – June 2009**



### Key Findings:

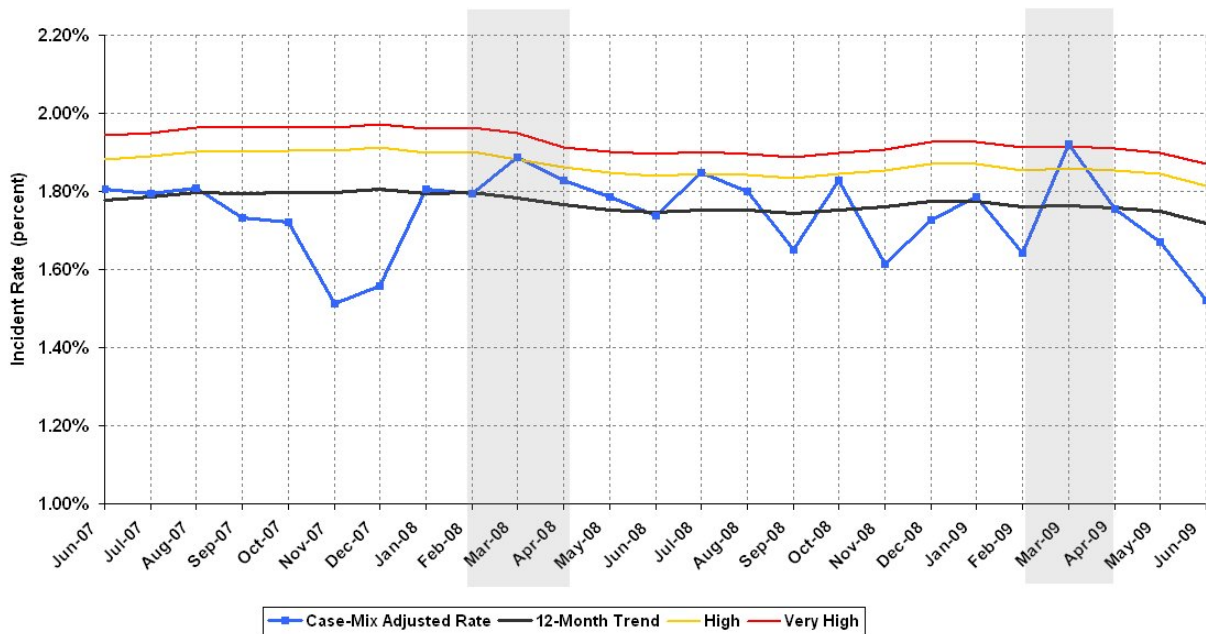
- The monthly non-mortality special incident rate (blue line) between January and June 2009 was below the long-term average (black line) in all months except for March 2009.
- The non-mortality special incident rate was unusually high in March 2009 compared to the long-term average.

### More About These Data

The black line in the graph above is the same line shown in Figure 1, representing the 12-month trend. The blue line represents the percentage of consumers statewide who experience one or more special incidents in a month. Both rates are case-mix adjusted, meaning that the trends account for changes in consumer characteristics over time. For example, unplanned hospitalization rates may increase because of an increase in consumers over the age of 65. Case-mix adjustment controls for consumer characteristics and removes these effects from the calculated trend.

## In March, the statewide non-mortality incident rate for out-of-home consumers crossed the "very high" threshold.

**Figure 4: Non-Mortality Special Incidents, Case-Mix Adjusted Monthly Rates  
DDS Out-of-Home Consumers, June 2007 – June 2009**



### Key Findings:

- Non-mortality incident rates for the out-of-home population spiked above the “very high” threshold in March 2009.
- Non-mortality special incident rates tend to increase during the winter-spring months, as seen in previous years.
- March 2008 also saw a spike in non-mortality incident rates.

### Follow-Up Activities:

- Acumen is conducting additional discovery activities to determine whether the March 2009 spike in non-mortality incidents was associated with the H1N1 flu virus.

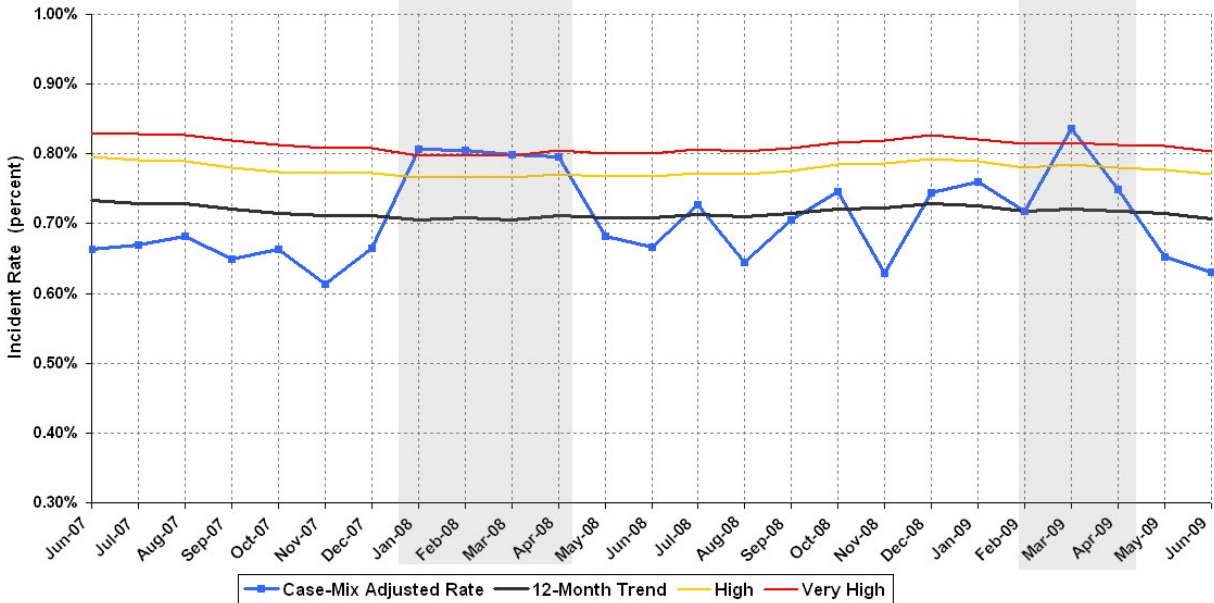
### More About These Data

*Out-of-home Consumers* are defined as individuals residing in community settings such as licensed residential services, Family Home Agency (FHA), Supported Living Services (SLS), or Independent Living Services (ILS).

This graph identifies mortality incident rates that are unusually high, and therefore classified as a “spike.” For example, a rate that rises above the yellow line in a given month probably did *not* occur due to chance, since this will occur randomly in only one month out of twenty (less than 5% of the time). A rate that rises above the red line in a given month will occur randomly less than 1% of the time. Rates above the red line, therefore, are very unlikely to be chance events and are classified as “spikes.”

## The March spike in non-mortality incident rates was driven by a spike in unplanned hospitalization incidents.

**Figure 5: Unplanned Hospitalization Incidents, Case-Mix Adjusted Monthly Rates DDS Out-of-Home Consumers, June 2007 – June 2009**



### Key Findings:

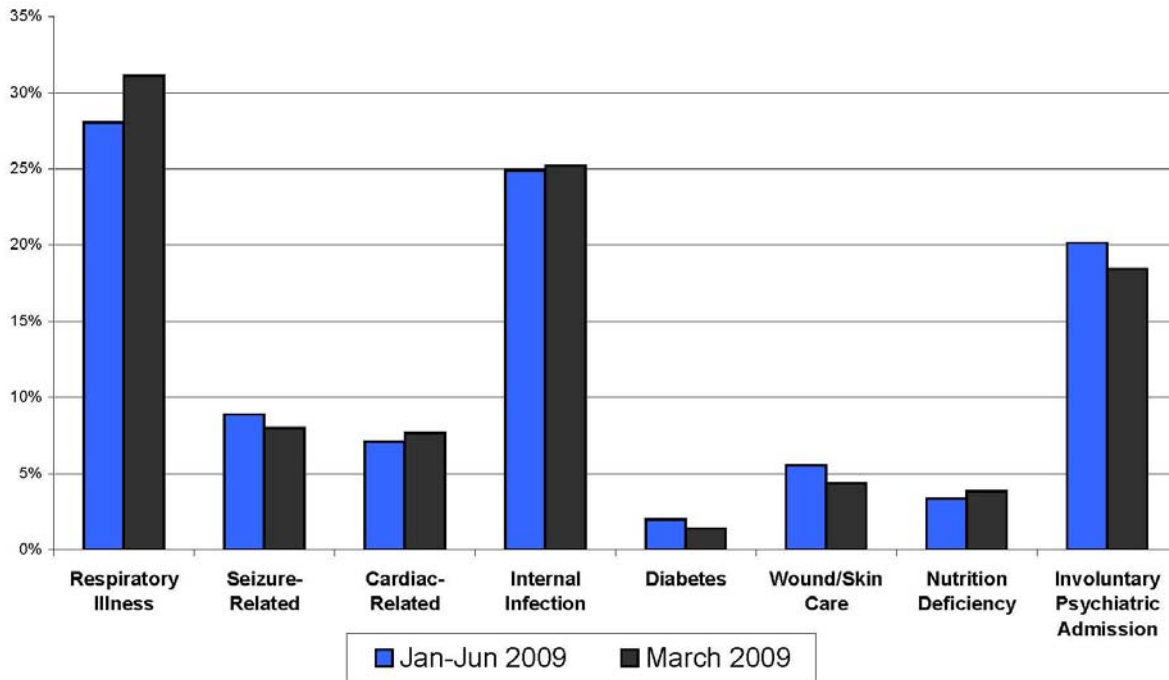
- Hospitalization incidents, which account for the greatest share of non-mortality incidents, spiked in March 2009 for the out-of-home population.
- An increase between December 2008 and March 2009 can be seen across most regional centers, as risk factors tend to increase during winter months. Incidents of mortality also increased during this period.
- In particular, Harbor, North Bay, San Andreas, and San Diego Regional Centers experienced spikes in rates of unplanned hospitalization in March 2009.
- This seasonal increase can also be seen between December 2007 and March of 2008. Rates of reported hospitalization crossed the “very high” threshold in each of those three months.

### More About These Data

The black line in the graph above represents the 12-month trend in out-of-home hospitalization incidents. The blue line represents the percentage of consumers statewide who experience one or more hospitalization incidents in a month. Both rates are case-mix adjusted, meaning that the trends account for changes in consumer characteristics over time. See page 3 for more details.

The distribution of hospitalization incident types in March was very similar to the distribution over the entire period.

Figure 6: Share of Unplanned Hospitalization Incidents by Type  
DDS Consumers, Jan-Jun 2009 compared to March 2009



*Key Findings:*



- The distribution of hospitalization types in March was similar to the average distribution of hospitalization types over the entire 6-month period.
- Respiratory illness, internal infection, and involuntary psychiatric admission accounted for the great shares of hospitalization types in both March and in the 6-month period.

*Follow-Up Activities:*

- The elevated rates of respiratory illness in March 2009 suggest that the spike could be driven by the H1N1 flu virus. Acumen is investigating this possible connection.

**More About These Data**

The percentages shown above are based on raw counts of unplanned hospitalization incidents. Percentages may not add up to 100% due to rounding.

This chart is a breakdown of reportable categories of unplanned hospitalization. Note that not all hospitalization incidents are summarized above, since not all hospitalization incidents are reportable.

## Regional centers experiencing spikes in previous quarters investigated those incidents associated with the spike.

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### *Regional Center Activities: Monitoring and Discovery*

- Regional centers took the following actions to determine whether spikes in incident rates were isolated events or more systemic issues:
  - Reviewed specific SIRs and individual charts
  - Conducted or requested additional data analysis to get demographic information for the consumers/incidents that caused the spike
  - Reviewed the living environments of involved consumers
  - Interviewed service coordinators to clarify any questions or inconsistencies regarding the charts and incident reports

### *Regional Center Activities: Remediation*

- In general, regional centers did not find systemic issues. However, there were some notable isolated events leading to multiple special incidents:
  - In one regional center, a thief broke into a provider's main office and stole about fifty personal and incidental (P&I) checkbooks, leading to dozens of SIRs. In response, the regional center went on to ensure that this and other providers had adequate security equipment in place to prevent similar events in the future.
  - In another case, all suspected neglect incidents resulted from staff at a particular vendor leaving work several minutes early. Appropriate disciplinary action was taken by the facility, while the regional center's quality assurance staff implemented trainings with facility administrators to prevent similar incidents from occurring again.
- The most common follow-up actions were:
  - Investigation of elevated rate; took no action (43%)
  - Arrangements for technical support/training for service providers (39%)
- Reported barriers to follow-up included lack of training among community psychiatrists to care for individuals with mental retardation/developmental disabilities and difficulties obtaining discharge reports from hospitals.

### **More About These Data:**

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Regional centers now provide structured feedback on how they respond to spikes in incident rates. Starting in September 2007, regional centers complete an online form that describes why the spike occurred, what follow-up actions were taken, and whether they faced any obstacles in implementing these follow-up activities. In the first year, fewer than half of regional centers submitted a reporting back form. Since January 2009, all regional centers with spikes have submitted a form.

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## With overall incident rates declining compared to last year, few remediation activities are necessary at the state level.

Compared to last year (Jan-Jun 08), rates of all incident types decreased except for victim of crime, which saw only a slight increase. As a result, the only remediation activity planned is further discovery analysis related to the March 2009 spike in non-mortality incidents (see Pg. 7). However, DDS has a number of monitoring and system improvement initiatives planned for the coming year:

### *Update on Monitoring Activities:*


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- *Long-term Increases in Incident Rates:* Every three months, Acumen develops a quarterly report for each regional center summarizing trends in special incident rates. In January, we revised the reports to identify long-term changes in incident rates as well as monthly spikes. In addition to these quarterly reports, Acumen is conducting data analysis for several regional centers whose special incident data indicate long-term increases over the past few years. We are working with these regional centers to explain these increases and propose appropriate follow-up activities.
  - *Reporting Back by Regional Centers:* Regional centers experiencing spikes in special incident rates provide structured feedback to DDS describing any follow-up measures taken to address the spike. Beginning in March 2009, regional centers report back on quarterly spikes in special incident rates rather than monthly spikes. This information on how regional centers respond to long-term trends may be used to develop strategies on how to mitigate risk to consumers statewide.

### *Update on System Improvement Activities:*

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- *Risk Management Tools for Regional Centers:* Over the past year, Acumen has developed several sets of risk management tools for regional centers, including mortality review guidelines and case management checklists. Developed in coordination with the ARCA Chief Counselors Training Subcommittee, regional center risk management chairs, and medical consultants, these tools offer regional centers new materials to address and mitigate risks among their consumer populations.
  - *DDS SafetyNet Website:* Acumen maintains the DDS SafetyNet, a website promoting health and safety for individuals with developmental disabilities. SafetyNet materials respond directly to trends in special incident rates to help manage risk among the consumer population. Recent articles have promoted strong relationship building and safe internet use, responding to an increase in suspected neglect incidents during the last semi-annual period. Specifically, these articles presented the differences between healthy and unhealthy relationships and information about internet predators and scams, knowledge that helps individuals to avoid incidents of neglect. The DDS SafetyNet Website has also recently addressed numerous other health and safety topics, including outdoor food safety and communicating about health.

- In Fiscal Year 2006-2007 DDS began funding a Mental Health Consultant through the Mental Health Services Act. This part-time position provides services to support the DDS and the Department of Mental Health (DMH) co-sponsored Mental Health/Developmental Disabilities Collaborative. The position is also intended to improve communications between regional centers and county mental health agencies, identify gaps and barriers in service delivery, and explore and report on innovative and collaborative services for persons with developmental disabilities who have a mental illness. The Mental Health Services Act also funds regional center projects to improve care for consumers with a dual diagnosis. In May 2009, six regional centers received a total of \$675,000 to provide a variety of trainings for service providers and mental health professionals, develop and advance partnerships with mental health providers, and establish collaboratives.

*Planned System Improvement Activities for the Coming Year:*

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- *Reporting Back by Regional Centers:* DDS and Acumen will continue to collect information from regional centers on how they respond to increases in their special incident rates.
  - *Risk Management Tools for Regional Centers:* In early 2010, Acumen plans to release the mortality review guidelines and case management checklists to the regional centers. As of February 2010, we have posted checklists in English and Spanish on ProgramInfo, a web-based information system for DDS, Acumen, and the regional centers. Regional centers can also use ProgramInfo to participate in discussion boards on risk management topics and share risk management resources among themselves.
  - *DDS SafetyNet Website:* DDS and Acumen determine content for the DDS SafetyNet Website based on trends in special incident rates. This year, DDS and Acumen will continue to target unplanned hospitalization, the most common type of special incident. More specifically, SafetyNet materials in the coming months will focus on hospitalizations due to diabetes and nutritional deficiency through articles on exercise and healthy eating. Both of these hospitalization sub-types saw spikes in the most recent semi-annual period, with rates of nutritional deficiency falling above the long term average in 9 of the past 12 months. Acumen is also developing materials on H1N1 flu treatment and prevention, as this year's flu season is projected to be longer and more serious than in years past. Finally, DDS and Acumen are redeveloping the structure and appearance of the SafetyNet website to improve the user experience for all audiences.