# NON-MORTALITY SPECIAL INCIDENTS

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

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This report summarizes rates of special incidents between January and June 2012 for DDS consumers living in community residential care settings. 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.

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, Section 54327 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 2012. The report has two main goals:

- To update time trends in special incident rates from our earlier reports to include data through June 2012.
- 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 to 2012. These data are augmented with three additional data sources maintained by DDS:

- 1. The Client Master File.
- 2. The Client Development Evaluation Report.
- 3. The Early Start Report.

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 non-mortality special incident rate this period was higher than last period.

Table 1: All Non-Mortality Special Incidents, Compared to Previous Periods
DDS Out-of-Home Consumers, January - June 2012

	Change From:	
	Jan-Jun 2011 (last year)	Jul-Dec 2011 (last period)
Raw Rate	-0.6%	3.3%
Case-Mix Adjusted Rate	-1.6%	2.6%

Arrows indicate statistically significant differences.

#### Key Findings:

- The case-mix adjusted non-mortality incident rate for out-of-home consumers was 1.99% this period, compared to 1.94% last period (Jul-Dec 2011) and 2.02% the same period last year (Jan-Jun 2011). These figures are not shown in the table above.
- Case-mix adjusted incident rates rose 2.6% compared to the last period (Jan-Jun 2011), but remained 1.6% lower than the same period a year ago. A similar pattern occurred in the raw incident rates. These differences were not statistically significant.

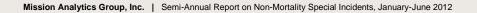
#### **More About These Data**

This report summarizes incident rates for consumers residing in community settings such as licensed residential facilities, Family Home Agency (FHA), Supported Living Services (SLS), or Independent Living Services (ILS). This excludes consumers residing in a developmental center or state-operated facility. Special incidents refer to categories of adverse events defined by Title 17, Section 54327 of the California Code of Regulations. They include: missing person, suspected abuse, suspected neglect, medication errors or serious injury, unplanned medical or psychiatric hospitalization, victim of crime, and death.

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 differences in the characteristics of the consumer population over time. In comparing statewide SIR rates to those of previous periods, case-mix adjustment permits us to distinguish trends affected by changes in population from trends associated with risk management practices. For example, an influx of medically fragile consumers could increase rates of unplanned hospitalization incidents, even if the effectiveness of risk management practices did not change.

Arrows indicate that the change is statistically significant at the 95% confidence level. These differences are expected to occur by chance less than 5% of the time.



### The statewide trend for non-mortality special incidents has remained essentially flat over the past two years.

2.25% 2.00% 
1.75% 
2.01% 
1.99%

1.25% 
1.00% 
1.00% 
0.75% 
0.50% 
0.25% 
0.00% 
1.2-Month Average

Figure 1: Non-Mortality Special Incidents, Case-Mix Adjusted Statewide Trend DDS Out-of-Home Consumers, June 2010 – June 2012

#### **Key Findings:**



- The long-term trend in statewide non-mortality incident rates is essentially unchanged from the previous period.
- The long term trend has remained very close to 2.0% over the previous two years.

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

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.

#### The increase for the period is due to a spike in March; the last month of the period shows a drop off due to late reporting.

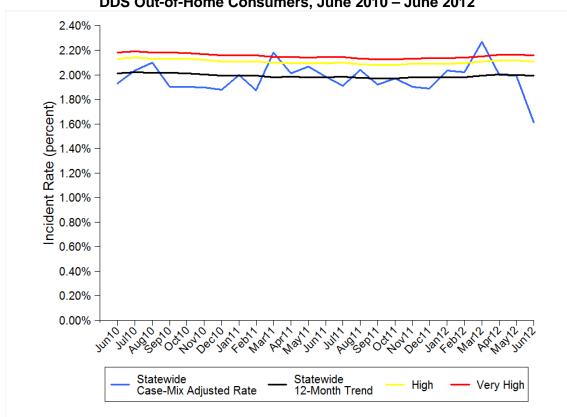


Figure 2: Non-Mortality Special Incidents, Case-Mix Adjusted Monthly Rates
DDS Out-of-Home Consumers, June 2010 – June 2012

#### Key Findings:



- The adjusted incident rate rose above the "very high" threshold in March 2012 but then returned to the long-term trend.
- The low rate for June may reflect delays in SIR closure, although late reporting is less common for non-mortality SIRs.

#### **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. See page 2 for more details.

This graph identifies non-mortality incident rates that are unusually high and, therefore, classified as a "spike." A rate that rises above the yellow line in a given month will occur randomly in only one month out of twenty (less than 5% of the time) and is considered "High". 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 "Very High."

### The March spike in all non-mortality incidents was the result of a spike in unplanned medical hospitalizations.

1.00% 
0.80% 
0.60% 
0.20% 

Jun10 Aug10 Oct10 Dec10 Feb11 Apr11 Jun11 Aug11 Oct11 Dec11 Feb12 Apr12 Jun12 
— Adjusted SIR Rate, Statewide 
— Very High, Statewide 
— High, Statewide

Figure 3: Unplanned Medical Hospitalization Incidents, Case-Mix Adjusted Monthly Rates, DDS Out-of-Home Consumers, June 2010 – June 2012

#### **Key Findings:**



- The adjusted rate for unplanned medical hospitalizations spiked above the "very high" threshold in March 2012. In most recent years, March has been a peak month for unplanned medical hospitalization SIRs.
- The increase in hospitalizations was spread across at least nine regional centers and was associated with both internal infections and respiratory illness.

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

See page 4 for description.

## Unplanned medical hospitalization, medication error and injury incidents are the most common non-mortality incident types.

Victime of Crime, 4% Missing Person, 7% Suspected Neglect, 4% Unplanned Medical Hospitalization, Suspected Abuse, 35% 10% Injury, 17% Unplanned Psychiatric Medication Error, Hospitalization, 8% 16%

Figure 4: Breakdown of Non-Mortality Special Incidents by Type All DDS Consumers, January - June 2012

#### **Key Findings:**



- Due to the March 2012 spike, unplanned medical hospitalization represented a larger share (35%) of incidents this period than last period (32%).
- Injury and medication error incidents are the next most common incident types.

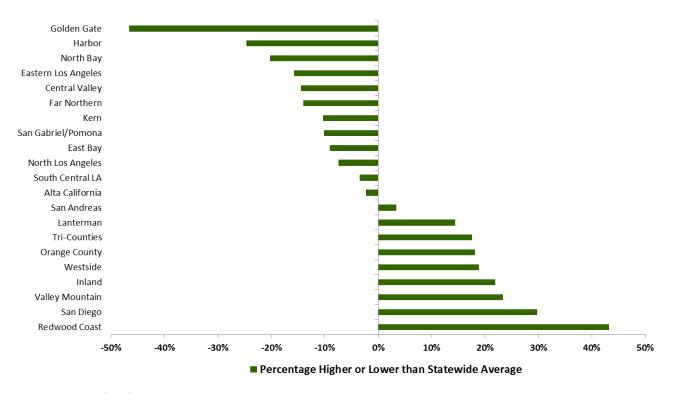
#### **More About These Data**

The percentages shown above are based on raw counts of reported special incidents and are not casemix adjusted. Percentages may not sum to 100% due to rounding error.

### Among the 21 regional centers, Redwood Coast had the highest non-mortality incident rate.

Figure 5: Non-Mortality Special Incident Rates by Regional Center Compared to State

July 2011 – June 2012



#### Key Findings:



- Redwood Coast Regional Center (RCRC) continued to have a rate of reported non-mortality incidents that was substantially higher than the statewide average. Over the last year, RCRC's rate was 56% higher than the state average, up from 34% above average in the previous report.
- San Diego Regional Center (SDRC) moved from below average for January-December 2011 to second highest at 30% above the statewide average.

#### Follow-Up Activities:

- SDRC's non-mortality rate required additional review. See page 8 for detailed analysis.
- Mission Analytics is continuing to provide RCRC with technical assistance regarding medication error rates, which is the main contributor to RCRC's high rate of non-mortality incidents. See page 8 for more detail.

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

The percentages above are case-mix adjusted, meaning that they account for differences in the characteristics of the consumer population over time. See Page 2 for more details.

### Mission Analytics Group is conducting further analyses to identify and address causes of unusually high incident rates.

Mission Analytics is coordinating closely with the regional centers to track and monitor the follow-up activities associated with quarterly SIR spikes. For longer term increases in incident rates, Mission Analytics uses SIR case reviews, site visits, and statistical analyses as part of its monitoring, discovery, and improvement activities. A number of additional activities continue to support DDS and regional centers in preventing future incidents. We describe these activities below.

#### Monitoring & Discovery Activities:

- Reporting Back: Regional centers with quarterly spikes in individual incident types are required to report back to Mission Analytics any discovery and remediation activities related to these spikes including a description of why any spikes occurred, what follow-up actions were taken, and whether they faced obstacles in implementing these follow-up activities. These responses are reviewed by the DDS Quality Management Executive Committee on a quarterly basis and may be used to develop strategies on how to mitigate risk to consumers statewide.
  - The ratio between SDRC's non-mortality rate and the state average (as seen on page 8) increased enough to trigger reporting back requirements. However, Mission Analytics conducted additional review of this change and determined that the change was associated with a substantial drop in the statewide rate during the April-June 2012 quarter. During the same period, SDRC's rate rose 4%, a difference that was not statistically significant relative to its trend. Given this pattern, Mission Analytics concluded that a review of SIRs at SDRC would not provide insights into the cause of the higher ratio. Mission Analytics and SDRC continue to monitor the SDRC rate relative to the statewide average.
  - o In all residency types, the medication error rate for RCRC was at least double that for the rest of the state between April 2011 and March 2012. Mission Analytics presented findings from data analysis in May 2012. Between July and December 2012, Mission Analytics will conduct follow-up analyses on medication errors at RCRC. Additionally, Mission Analytics offered to conduct site visits at RCRC in October 2012 regarding medication administration and medication errors. Finally, Mission Analytics wil present findings from data analysis and site visits, and RCRC and its vendors will work together on improving policies and practices to limit medication errors.
- Long-term Increases in Incident Rates: Mission Analytics has established a
  multi-stage process to investigate drivers of long-term increases in incident
  rates. We provide additional analyses and technical assistance to regional
  centers identified based on results such as those shown on page 8. For such
  regional centers, we conduct additional analyses to determine the detailed
  incident types and/or consumer characteristics associated with the increase.
  Based on these results, we determine whether or not a more detailed review



of the SIRs is necessary to better understand the issue. As appropriate, we also work with the regional centers to identify mitigation strategies.

#### System Improvement Activities:

- DDS SafetyNet Website: Mission Analytics maintains the DDS SafetyNet, a
  website promoting health and safety for individuals with developmental
  disabilities. In addition to addressing general safety issues, SafetyNet
  materials respond directly to trends in special incident rates to help manage
  risk among the consumer population. For example, content for Summer
  2012 focuses on avoiding unplanned hospitalizations for diabetes.
- DDS Mental Health Services Act (MHSA): DDS began Cycle II of the MHSA Projects on July 1, 2011. Five regional centers received MHSA funds in the following areas: Substance Abuse, Infant/Early Childhood Mental Health, MHSA Forums, Psychotherapy to Reduce Psychiatric Hospitalizations, and Transition Age Youth. Projects will establish a task force; develop assessment and treatment tools; train professionals, families, and consumers; and, promote best practices and service approaches to effectively serve consumers with mental illness involved in the criminal justice system.