

# **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 2011 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.**

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 (SIR), 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 2011. The report has two main goals:

1. To update time trends in special incident rates from our earlier reports to include data through June 2011.
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 to 2011. 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 non-mortality special incident rate this period was slightly lower than the same period a year ago.**

**Table 1: All Non-Mortality Special Incidents, Compared to Previous Periods  
DDS Consumers, January - June 2011**

	Change From:	
	Jan-Jun 2010 (last year)	Jul-Dec 2010 (last period)
<b>Raw Rate</b>	-1.6%	+0.1%
<b>Case-Mix Adjusted Rate</b>	-1.0%	+0.9%

Arrows indicate statistically significant differences.

**Key Findings:**



- The case-mix adjusted non-mortality incident rate was 0.516% this period, compared to 0.512% last period (Jul-Dec 2010) and 0.522% the same period last year (Jan-Jun 2010). These figures are not shown in the table above.
- Case-mix adjusted incident rates fell by 1.0% compared to the same period a year ago (Jan-Jun 2010). Comparable declines occurred in the raw incident rates. These declines were not statistically significant.
- The adjusted rate for January-June 2011 rate was 0.9% higher than in the July-December 2010 period, but this change was not statistically significant.

**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.

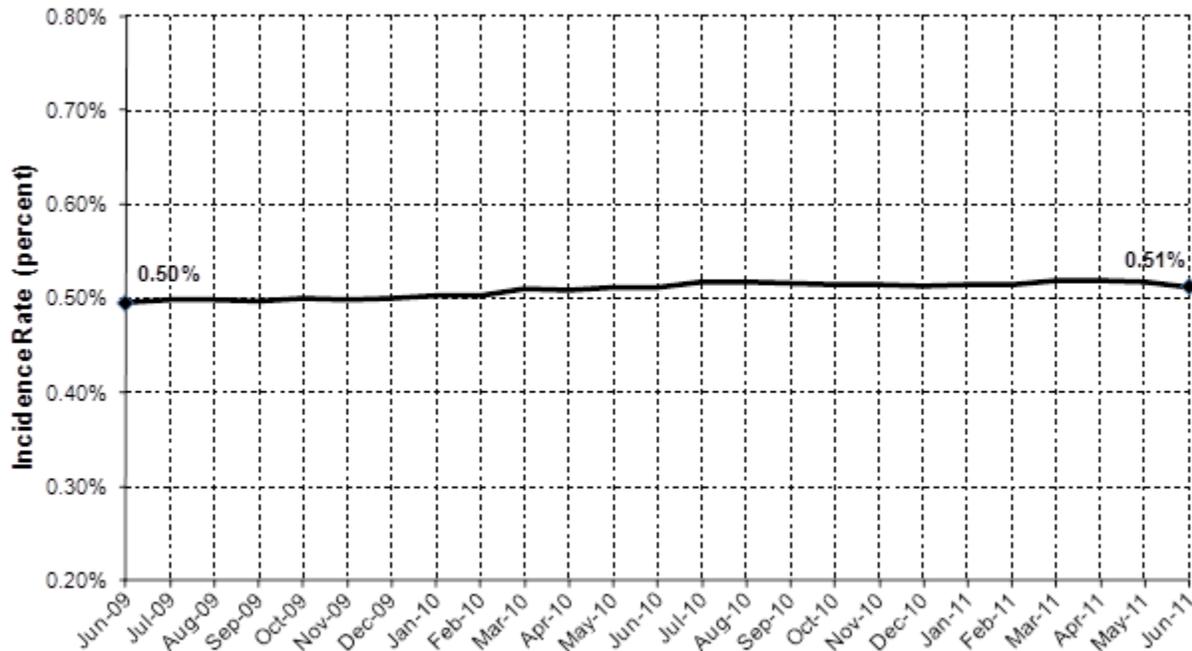
The *Raw Rate* is defined as the percentage of statewide consumers who experience one or more special incidents in an average month. It is calculated by dividing the *total number of consumers with one or more incidents* by the *total consumer population*. Note that this rate does not tell you how many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

Figure 1: Non-Mortality Special Incidents, Case-Mix Adjusted Statewide Trend  
DDS Consumers, June 2009 – June 2011



### Key Findings:

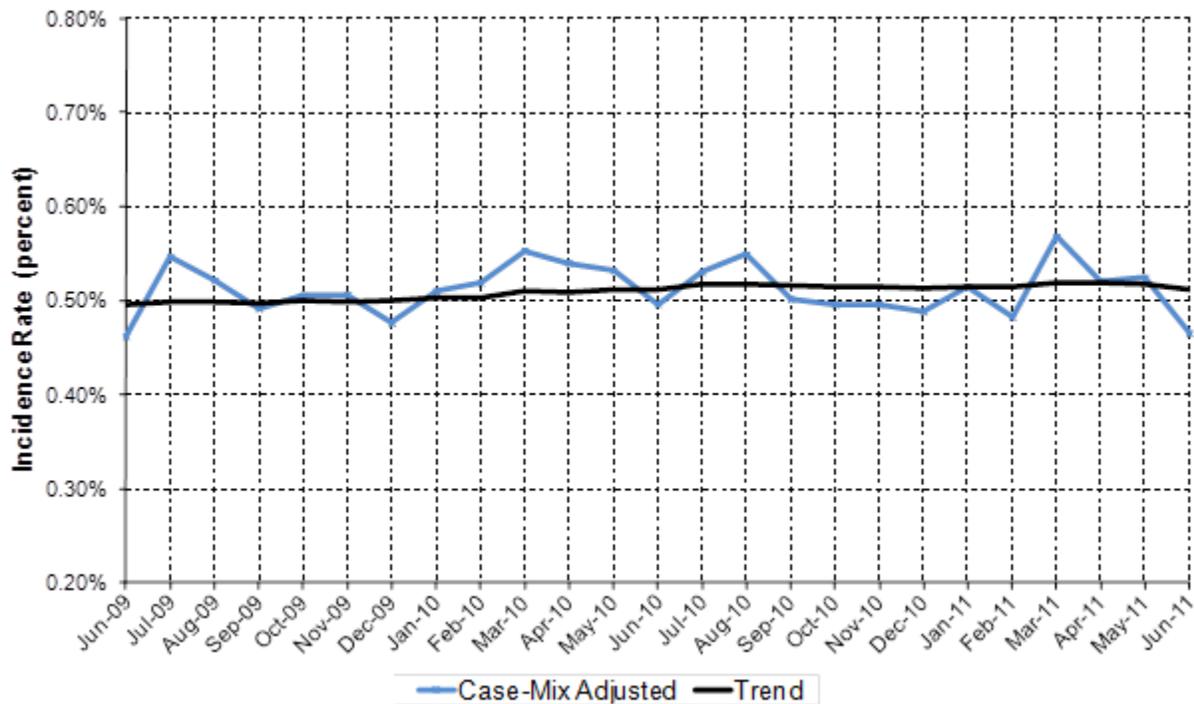
- The long-term trend in statewide non-mortality incident rates is essentially unchanged from the previous period.
- Although the trend in statewide non-mortality incident rates decreased slightly compared to the same period a year ago (see page 2), the average rate has essentially returned to its long range level.

### 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 2 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.

## After an increase in July and August, non-mortality incident rates were below the long-run average.

Figure 2: Non-Mortality Special Incidents, Case-Mix Adjusted Monthly Rates  
DDS Consumers, June 2009 – June 2011



### Key Findings:

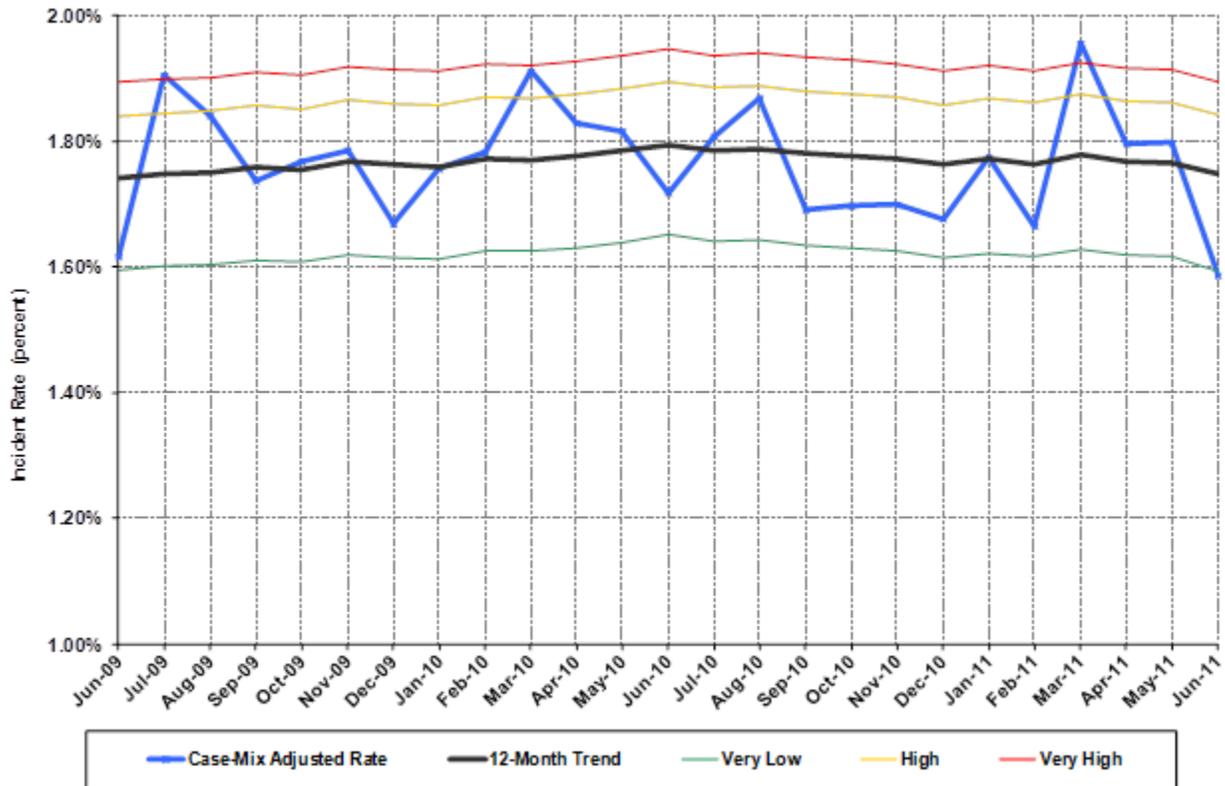
- Except for March, the monthly non-mortality special incident rate (blue line) was below the 12-month trend for most of the past year.
- An increase in incident rates occurs each March, driven by unplanned hospitalizations. This phenomenon is reviewed in the following pages.

### More About These Data

The black line in the graph above is the same line shown in Figure 2, 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.

## The March increase in the statewide non-mortality incident rate represented a spike in the rate for out-of-home consumers.

Figure 3: Non-Mortality Special Incidents, Case-Mix Adjusted Monthly Rates  
DDS Out-of-Home Consumers, June 2009 – June 2011



### Key Findings:

- Out-of-home consumers represent the majority of reported non-mortality incidents, since most incidents are reportable only when under vendored care.
- The increase in the non-mortality incident rate in March crossed the “very high” threshold, meaning it was a statistically significant jump compared to the long term trend.

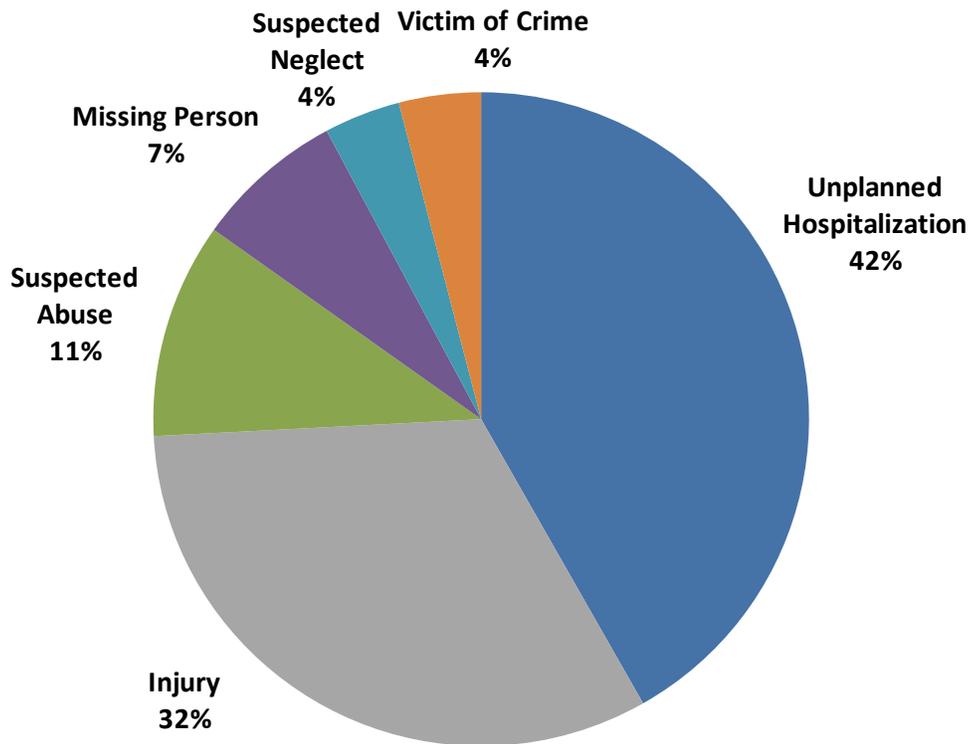
### More About These Data

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

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.”

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

Figure 4: Breakdown of Non-Mortality Special Incidents by Type  
DDS Consumers, January - June 2011



### Key Findings:



- Unplanned hospitalizations, at 42%, continue to be the most commonly reported non-mortality special incident type. This share is 3% higher than in the previous six month period.
- Injury incidents declined as a share of incident between January and June 2011, returning to the same share (32%) as in the January-June 2010 period. Missing person, suspected neglect and victim of crime incidents also had small declines in their shares.

### More About These Data

The percentages shown above are based on raw counts of reported special incidents and are not case-mix adjusted.

## The March increase in non-mortality incidents was driven by unplanned hospitalizations.

**Table 2: Percent Change in Average Monthly Rates of Non-Mortality Special Incidents  
DDS Consumers, January - June 2011**

	Change From:	
	Jan-Jun 2010 (last year)	Jul-Dec 2010 (last period)
<b>Unplanned Hospitalization</b>	<b>+0%</b>	<b>+8%</b>
<b>Injury</b>	<b>+0%</b>	<b>-5%</b>
<b>Suspected Abuse</b>	<b>-13%</b>	<b>-3%</b>
<b>Suspected Neglect</b>	<b>+8%</b>	<b>+4%</b>
<b>Missing Person</b>	<b>-16%</b>	<b>-7%</b>
<b>Victim of Crime</b>	<b>-16%</b>	<b>-14%</b>

Arrows indicate statistically significant differences.

### Key Findings:

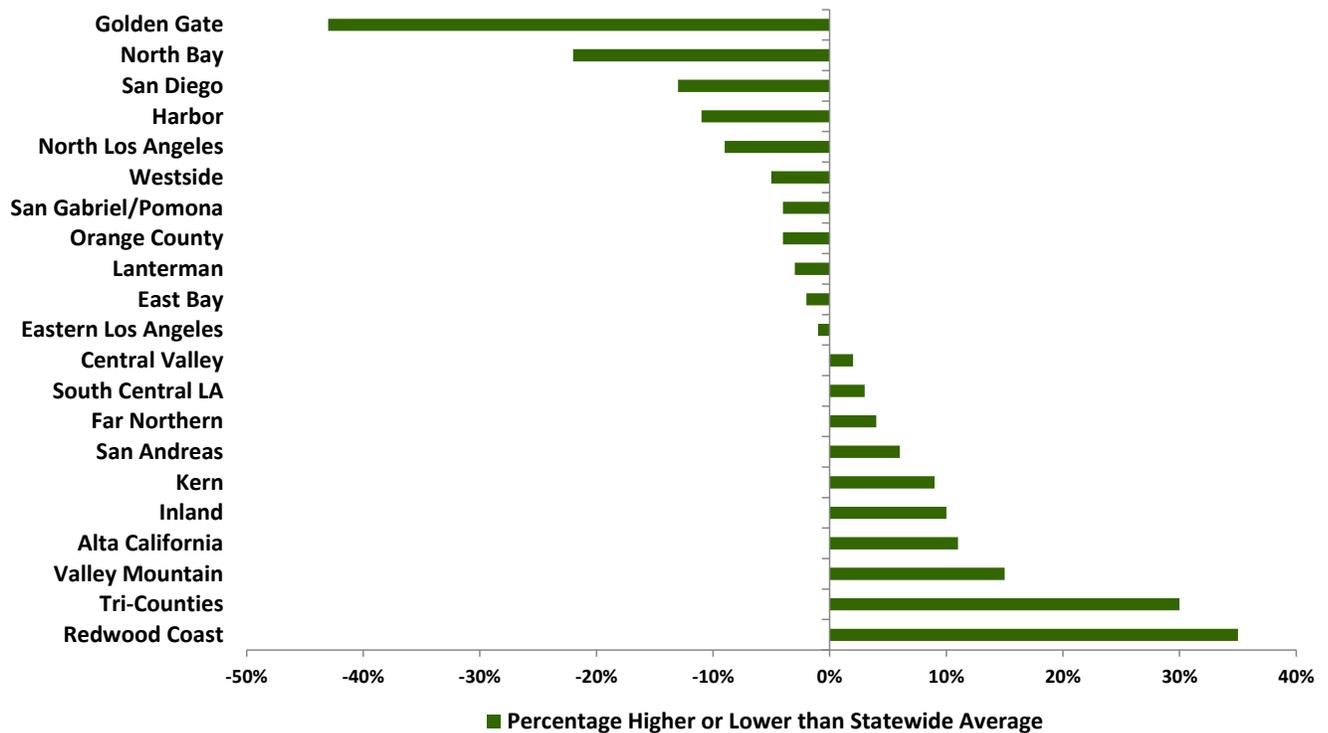
- Consistent with Figure 4, the increase in non-mortality special incident rates compared to last period was driven primarily by an increase in unplanned hospitalizations. This increase almost meets the test for statistical significance. However, the rate of unplanned hospitalizations this period was essentially identical to the rate the previous year.
- Rates of suspected neglect reports rose, but the increase was not statistically significant on a statewide basis.
- Rates of all other incident types were down this period, relative to both the previous period and the previous year, except for the injury rate, which was the same as the previous year. These differences were not statistically significant.

### More About These Data

These figures are calculated using case-mix adjustment, as described on page 2. Arrows indicate that the change is statistically significant at the 95% confidence level, assuming a binomial distribution. These differences are expected to occur by chance less than 5% of the time. Rates for specific incident types are calculated as the share of consumers experiencing an incident of that type in a given month.

**Among the 21 regional centers, Redwood Coast, Tri-Counties and Valley Mountain had the highest non-mortality incident rates.**

**Table 4: Non-Mortality Special Incident Rates by Regional Center Compared to State June 2010 – June 2011**



**Key Findings:**



- For the reporting period, Tri-Counties Regional Center (TCRC) and Redwood Coast Regional Center (RCRC) had rates of reported non-mortality incidents that were more than 30% above the statewide average. Although Valley Mountain Regional Center (VMRC) had the third highest rate, it is much closer to the state average than in the previous period.
- Golden Gate Regional Center continued to have unusually low rates of non-mortality incidents, at 43% below the statewide average.

**Follow-Up Activities:**

- Mission Analytics Group, Inc. (Mission), the risk management contractor, is providing technical assistance to VMRC and TCRC to help determine the cause of high incident rates and possible remediation activities. RCRC will receive technical assistance in fiscal year 2011-12. See page 11 for additional information.

**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 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 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 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.
- *Long-term Increases in Incident Rates:* Mission 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. 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
  - In June 2011, Mission conducted site visits with vendors at TCRC and Far Northern Regional Center (FNRC) regarding medication administration and medication errors. This followed earlier analyses highlighting missed doses as a key driver of increased rates of reported injury incidents. The site visits included observation of medication administration at Community Care Facilities (CCFs) and Supported Living Services (SLS) vendors, as well as discussions of policies and procedures with regional center staff. Mission provided both regional centers with site visit reports providing a list of suggested approaches for vendors to improve medication administration. Based on its site visit report, FNRC decided to host a symposium on medication administration for SLS vendors in November 2011. Additional follow-up for Kern Regional Center, where analyses also highlighted medication errors, is pending the completion of the FNRC symposium.
  - In contrast to TCRC, no single incident type was responsible for the overall high rate of non-mortality special incidents at VMRC. Follow-up analysis by Mission showed that VMRC was well above statewide averages on missing person, victim of crime and unplanned

hospitalization incidents. Within unplanned hospitalization, VMRC had higher than average rates of infection, respiratory illness, diabetes and cardiac illness. After reviewing data findings with VMRC, Mission tested a number of hypotheses to explain these differences. The only notable findings to result were: (1) Victim of crime incidents were concentrated in Stockton, which has one of the highest crime rates in the state; and (2) ICF/DDN residents represented a disproportionate share of the unplanned hospitalization incidents. From February to June 2011, VMRC was close to or even below the statewide average for all non-mortality incidents. Therefore, no additional drill-down is planned at this time, although Mission will continue to monitor rates at VMRC.

***System Improvement Activities:***

- *DDS SafetyNet Website:* Mission 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 Fall 2011 focuses on involuntary psychiatric admissions.
- *DDS Mental Health Services Act (MHSA):* DDS and regional centers are concluding Cycle I of the MHSA Projects. Between January and July 2011, three regional centers conducted nine training events for clinicians, other professionals, direct service providers, families, and consumers. One Regional Planning Summit also convened to promote and facilitate collaboration between regional centers and county mental health programs.