2010-2011 YEAR IN REVIEW

RISK MANAGEMENT AND MITIGATION

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INTRODUCTION AND BACKGROUND

According to Title 17 of the California Code of Regulations, vendors and long-term health care facilities must report certain "special incidents" that occur to consumers with developmental disabilities. This year-end report summarizes California's rates of reported special incidents during the fiscal year (FY) 2010-2011.

The California Department of Developmental Services (DDS) relies on a network of 21 regional centers to plan, coordinate, and monitor an array of services for individuals with developmental disabilities. In July 2010, DDS served 244,100 individuals with developmental disabilities in community settings. In 2001, DDS initiated a comprehensive risk prevention, mitigation, and management system as one cornerstone of quality services for consumers.

As part of this system, DDS monitors the occurrence of adverse events, or "special incidents" 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 person, if they occur when a consumer is under vendored care. (See last page for definitions of special incidents and 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 year-end report summarizes California's rates of reported special incidents during FY 2010-2011 (FY 10/11). It delineates special incident rates by type, comparing them with incident rates from the previous fiscal year. The rates and graphs presented in this report were constructed using data from the Special Incident Reporting (SIR) System from January 2002 through June 2011, augmented with three additional data sources maintained by DDS:

1. The Client Master File (CMF)
2. The Client Development Evaluation Report (CDER)
3. The Early Start Report (ESR).

Mission, the risk management contractor for DDS, compiled this report based on statistical analyses that measure a consumer's risk of experiencing a special incident. The report concludes with a discussion of how DDS, Mission, and the regional centers are working to ensure effective risk management practices to prevent the occurrence of special incidents.

The rate of special incidents has been steady over time.

Table 1
Reported Special Incidents for All DDS Consumers

	FY 08/09	FY 09/10	FY 10/11
Total Number of Consumers	266,419	269,373	270,596
Total Number of Reported Incidents	17,437	18,148	17,991
All Incidents per 1,000 Consumers	65.4	67.4	66.5
Deaths per 1,000 Consumers	6.3	6.6	5.9

FY 10/11 counts are from data received July 2011, with incidents reported by June 30, 2011.

Key Findings:

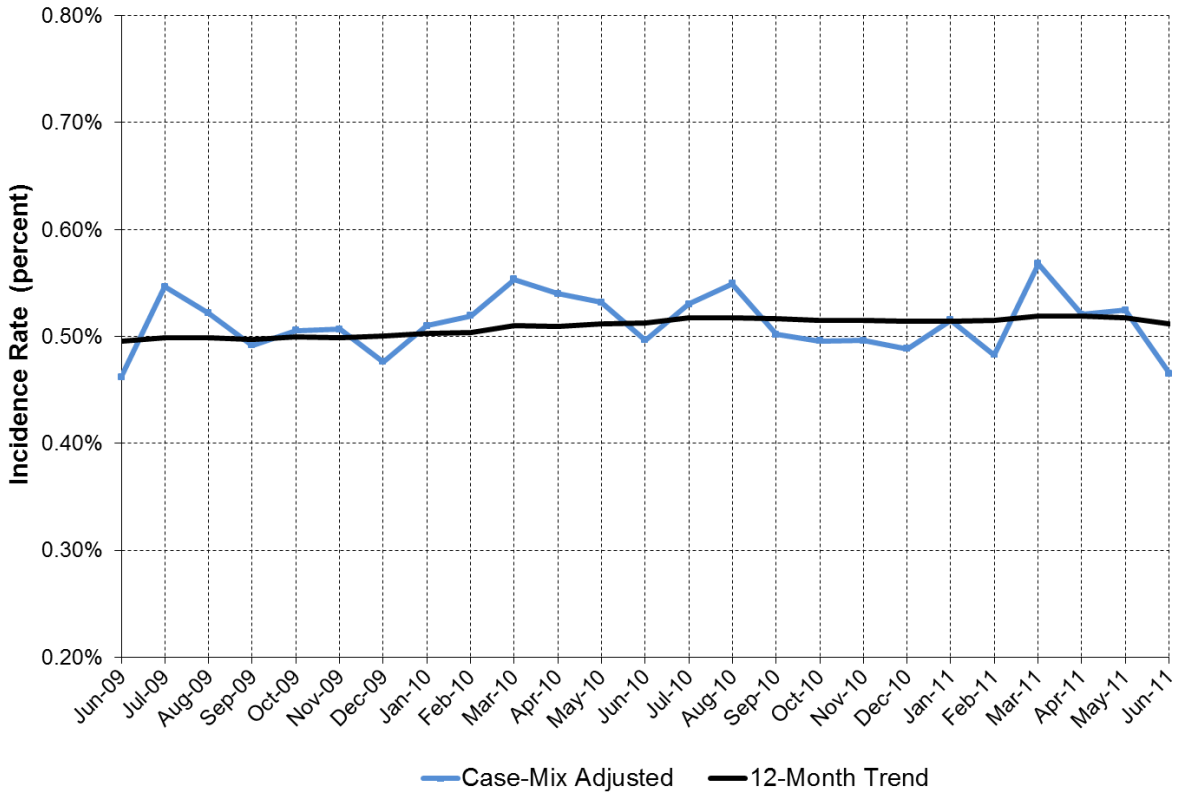
- Approximately 270,600 consumers were served by DDS at some point in FY 10/11, up about 4,000 from FY 08/09.
- There were 17,991 special incidents reported in FY 10/11, including 16,401 non-mortality incidents and 1,590 deaths.
- Between FY 09/10 and FY 10/11, there was no significant change in the rate of all incidents per 1,000 consumers.
- The number of deaths per 1,000 consumers in FY 10/11 (5.9) was 11% lower than that of the previous year (6.6) and 6% lower than that of FY 08/09 (6.3). These changes are not statistically significant.
- At 5.9 deaths per 1,000 consumers, California's overall mortality rate appears to be lower than rates published by other states, although the populations served by each state may differ. The Ohio Department of Developmental Services, which serves a similar share of its state population, reported 8.4 deaths per 1,000 in calendar year 2010. See page 7 for details.

More About These Data

Total Number of Consumers refers to the total number of individuals served by DDS at any point during a fiscal year. For FY 10/11, the total number counts individuals served between July 2010 and June 2011. This includes people diagnosed as having a developmental disability who are served in the community (Status Code 2) and children receiving Early Start services (Status Code 1). It does not include individuals who are served in a State Developmental Center. See *Definitions* on page 9 for more details.

The non-mortality incident rate has remained close to the 12-month trend line, although it was elevated in the spring of 2011.

Figure 1: Statewide Non-Mortality Rates, All DDS Consumers Age 3 and Up Case-Mix Adjusted Monthly Rates since June 2008



Key Findings:

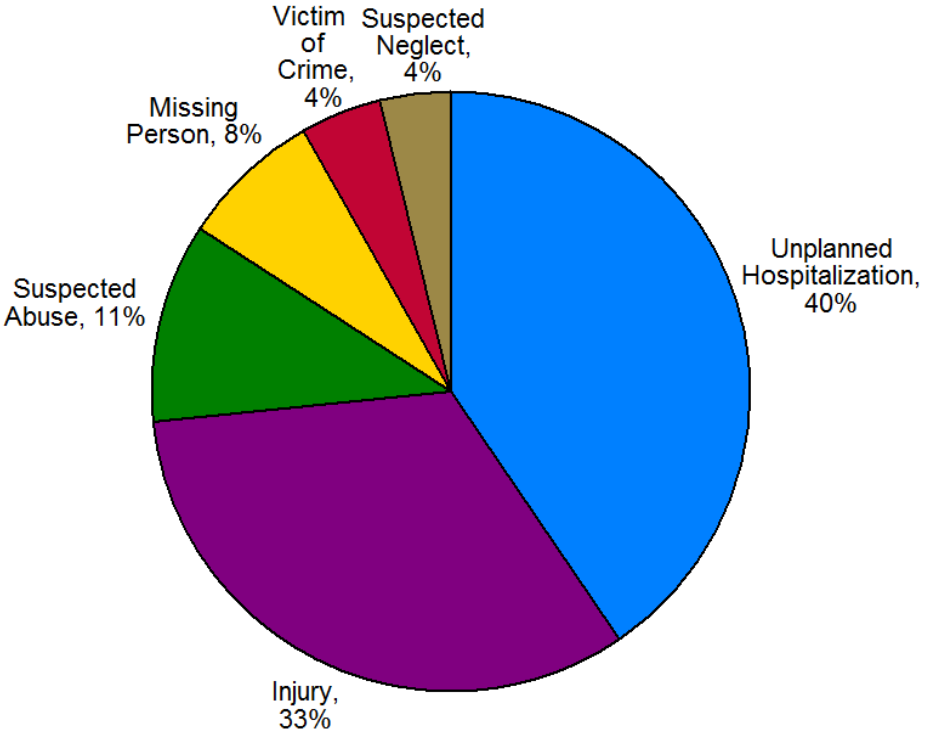
- The monthly non-mortality special incident rate (blue line) was largely at or below the 12-month trend for the first eight months of FY 10/11. The rate jumped between February and March 2011, but returned to the long term trend in the following months.

More About These Data

The black line above represents a 12-month moving average. It is calculated by taking an average of statewide incident rates from the most recent 12-month period. The blue line represents the share of consumers statewide who experience one or more special incidents in a month. The lines shown on this graph account for differences in consumer characteristics, as well as changes in the characteristics of the consumer population over time. This approach, called "case-mix adjustment," controls for consumer characteristics such as age and medical condition and removes these effects from the calculated trend.

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

Figure 2: Breakdown of Non-Mortality Special Incidents by Type, All DDS Consumers, July 2009 - June 2010



Key Findings:

- Unplanned Hospitalization is the most commonly reported non-mortality incident type, accounting for about 40% of all reported incidents in FY 10/11. Injury incidents are the second most commonly reported incident type, making up 33% of all reported incidents.
- The least common types of reported incidents are suspected neglect, victim of crime, and missing person, which combined account for 16% of all special incidents.

More About These Data

Definitions of all special incident types can be found on the *Definitions* page (page 9).

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

The rates of most non-mortality incident types fell from FY 09/10 to FY 10/11, but these changes were not statistically significant.

Table 2: Case-Mix Adjusted Breakdown of Special Incidents by Type, FY 10/11

	Avg. Monthly Incident Rate FY 10/11	Change from FY 09/10	Change from FY 08/09
Unplanned Hospitalization	0.20%	-2%	+5%
Injury	0.18%	+5%	+7%
Suspected Abuse	0.06%	-10%	-5%
Suspected Neglect	0.02%	-7%	-31%*
Missing Person	0.04%	-7%	-6%
Victim of Crime	0.03%	-4%	-9%

* indicates statistically significant change

Key Findings:

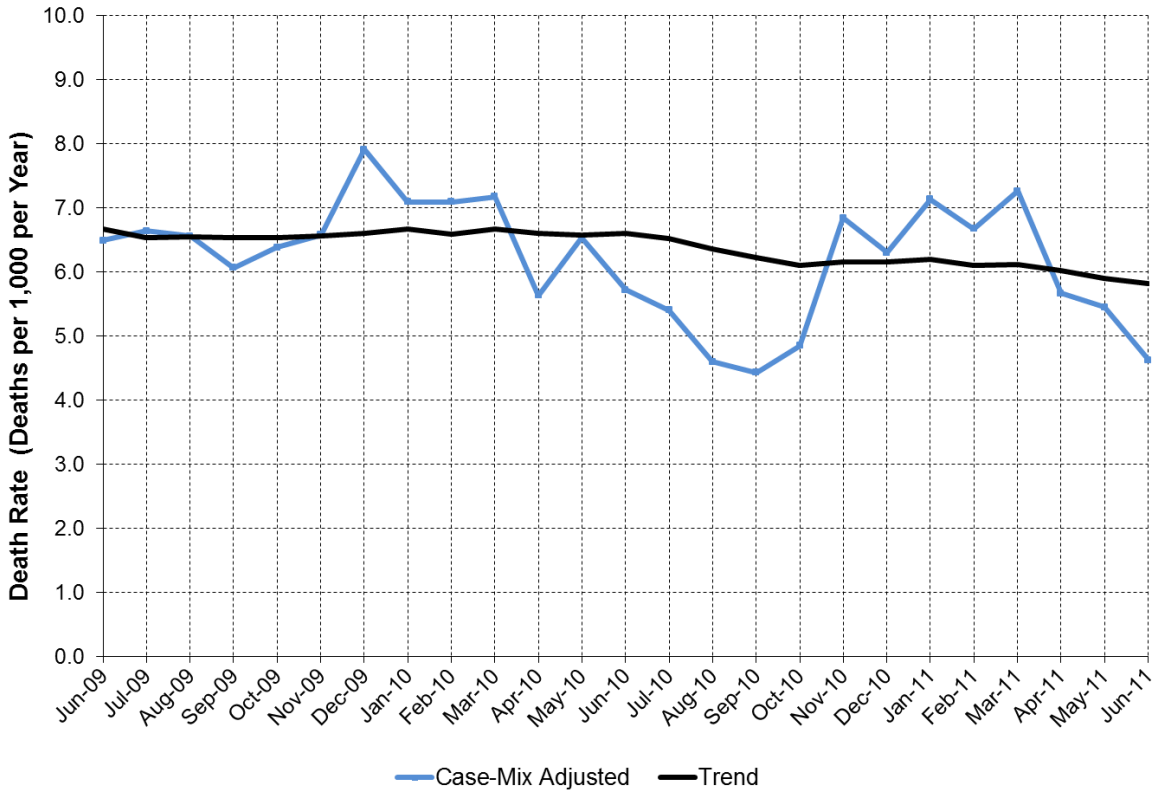
- Except for injury incidents, the average monthly incident rates declined between FY 09/10 and FY 10/11, although these declines were not statistically significant.
- The rate of reported injury incidents was higher in FY 10/11 than in either of the previous years, but these differences were not statistically significant.
- The only statistically significant change in the rate of non-mortality incidents occurred for suspected neglect incidents, which were 31 percent lower in FY 10/11 than in FY 08/09.

More About These Data

"Avg. Monthly Incident Rate for FY 10/11" refers to the rate of consumers statewide who experience one or more incidents in an average month. Rates are case-mix adjusted (refer to page 3 for description). Case-mix adjusted rates include only individuals aged 3 and above.

The mortality rate dipped substantially below the long-term trend in late summer 2010 but rose again in the period from November 2010 to March 2011.

Figure 3: Mortality Incidents, Statewide
Case-Mix Adjusted Monthly Rates since June 2009



Key Findings:

- From May to October 2010, the monthly mortality rate (the blue line) was unusually low, pulling down the long term trend from an annualized rate of 6.5 deaths per 1,000 to about 6.1 deaths per 1,000.
- Some of the reduction in deaths during the summer was offset by a higher mortality rate between November 2010 and March 2011, but declines after March led to a lower mortality rate for the year overall.

More About These Data

The trend line (black line) is the monthly mortality rate averaged over the latest 12-month period. The monthly rate is multiplied by 12 to provide an annualized rate, meaning the rate that would be seen for the year if the monthly rate prevailed for 12 months. The trend is calculated by taking the average of the *Case-mix Adjusted Rate* (blue line) for the previous twelve-month period (case-mix adjustment described on page 3).

California's mortality rates appear to be no higher than published rates from other states.

Table 3: Comparison of Statewide Mortality Rates

State Organization and Year	Share of State Population Served	Population Included	Deaths per 1,000
California DDS, FY 2010/11	0.7%	Children and adults living in the community	5.9
Connecticut DDS, FY 2010/11	0.4%	Children and adults living in the community	11.9
Louisiana OCCD, FY 2008/09	0.2%	Children and adults served on waivers	12.2
Massachusetts DMR, CY 2008	0.5%	Adults	17.8
Ohio MRDD, CY 2010	0.7%	Children and adults	8.4
South Dakota DDD, CY 2010	0.3%	Children and adults served on waivers	12.4

Key Findings:

- At 5.9 deaths per 1,000 consumers, California's mortality rate appears to be lower than those of other states we observed.
- Differences in mortality rates may occur as a result of differences in severity and disabilities between California's consumer population and those populations served by other states.

More About These Data

See page 2 for the definition of individuals included in the California mortality data.

Other state rates are drawn from online resources including the *Connecticut Mortality Annual Report FY2011* (March 2012), www.ct.gov/dds/lib/dds/health/reports/mortality_report_fy_11.pdf, *Louisiana OCDD Waiver Services 2009 Mortality Review Report* (April 2010), new.dhh.louisiana.gov/assets/docs/OCDD/publications/MortalityReviewReport2009Issued040110.pdf, *2008 Mortality Report for Massachusetts* (August 2010), www.mass.gov/Eeohhs2/docs/dmr/mortalityreport2008.pdf. *Ohio 2010 MUI/Registry Unit Annual Repor*t, http://test.mr.state.oh.us/health/MUIReport/2010/report10.htm, *South Dakota Division of Developmental Disabilities Trend Analysis: 2010 Critical Incident Reporting* (June 2011), http://www.dhs.sd.gov/dd/Division/documents/CIR%20Annual%20Report%202010.pdf.

The risk management contractor is expanding its analyses to better target remediation activities at the regional center and state level.

Mission, has expanded its use of SIR case reviews and statistical analyses as part of its monitoring, discovery and improvement activities associated with spikes or with longer term increases in incident rates. A number of additional activities will also support regional centers in avoiding future incidents. We describe these activities below.

Monitoring & Discovery Activities:

- *Discovery and Reporting Back:* Regional centers receive graphs each month that allow them to identify significant increases in special incident rates. They also receive reports each quarter summarizing trends in special incident rates. Regional centers are reporting back to DDS information about their follow-up activities to all spikes in incident rates. These reports will provide information in greater depth about any unusual increases in incident rates and help guide Mission activities.
- *Long-term Increases in Incident Rates*: Mission investigates the factors driving long-term increases in incident rates at specific regional centers. For several regional centers, these investigations found medication errors to be a key factor in the higher rates. A detailed review of the associated SIRs found missed doses to be the most common cause. Mission subsequently conducted site visits with several regional centers regarding medication administration and medication errors. One regional center developed a symposium on medication administration for the type of vendors most likely to have errors.

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.
- *Mortality Review Data Collection:* Working with a subcommittee of the ARCA Chief Counselors and Risk Management and Planning Committee chairs from the regional centers, Mission identified a set of proposed data system changes to improve reporting practices for mortality special incidents, including more structured information on cause of death to improve mortality data analysis.

Planned Activities for the Coming Year:

- Mission will apply new risk models to their data analysis to adjust for regional center variation in caseload characteristics.
- In light of the importance of medication errors, the updated models distinguish these incidents from other injury incidents. In addition, the updated models distinguish between psychiatric hospitalizations and other unplanned hospitalizations. The new models will be used in quarterly reports and other project activities starting in fall 2011.

Terms and Definitions

Case-Mix Adjustment – A process that accounts for differences in the characteristics of the consumer population over time. Case-mix adjustment allows us to distinguish trends driven by changes in population from trends driven by risk management practices. If, for example, there were an influx of medically fragile consumers into a given region, 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 (and risk management practices) can be reasonably compared to previous periods. Children under age 3 are excluded from case-mix adjusted results.

Death Rate – The annual number of deaths per 1,000 individuals. For monthly mortality data, an annualized rate is calculated by multiplying the monthly rate by 12.

Injury – Serious injury/accident, including: lacerations requiring sutures or staples; puncture wounds requiring medical treatment beyond first aid; fractures; dislocations; bites that break the skin and require medical treatment beyond first aid; internal bleeding requiring medical treatment beyond first aid; any medication errors; medication reactions that require medical treatment beyond first aid; or burns that require medical treatment beyond first aid.

Missing Person – When a consumer is missing and the vendor or long-term health care facility has filed a missing persons report with a law enforcement agency.

Mortality – Any consumer death, regardless of cause.

Out-of-home Consumer – An individual residing in a community setting such as licensed residential services, Family Home Agency (FHA), Supported Living Services (SLS), or Independent Living Services (ILS), rather than in the home of a parent or guardian.

Raw (rate) – The unadjusted rate (e.g. the total number of incidents divided by the total number of consumers).

Suspected Abuse – Reasonably suspected abuse/exploitation, including: physical; sexual; fiduciary; emotional/mental or physical and/or chemical restraint.

Suspected Neglect – Reasonably suspected neglect, including failure to: provide medical care for physical and mental health needs; prevent malnutrition or dehydration; protect from health and safety hazards; assist in personal hygiene or the provision of food, clothing or shelter or exercise the degree of care that a reasonable person would exercise in the position of having the care and custody of an elder or a dependent adult.

Total Number of Consumers – The total number of individuals served by DDS at any point during the fiscal year. Note that this number is larger than the number of individuals served by DDS at a single point in time. This total includes consumers living in the community – that is, consumers receiving services from a regional center not residing in a Developmental Center or state-operated facility.

Unplanned hospitalization – Unplanned or unscheduled hospitalization due to the following conditions: respiratory illness, including but not limited, to asthma; tuberculosis; and chronic obstructive pulmonary disease; seizure-related; cardiac-related, including but not limited to, congestive heart failure; hypertension and angina; internal infections, including but not limited to, ear, nose and throat, gastrointestinal, kidney, dental, pelvic, or urinary tract; diabetes, including diabetes-related

complications; wound/skin care, including but not limited to, cellulitis and decubitus; nutritional deficiencies, including but not limited to, anemia and dehydration; or involuntary psychiatric admission.

Vendored Care – A consumer is considered “under vendored care” when they are receiving services funded by a regional center.

Victim of Crime - Includes the following: robbery, including theft using a firearm, knife, or cutting instrument or other dangerous weapons or methods which force or threaten a victim; aggravated assault, including a physical attack on a victim using hands, fist, feet or a firearm, knife or cutting instrument or other dangerous weapon; larceny, including the unlawful taking, carrying, leading, or riding away of property, except for motor vehicles, from the possession or constructive possession of another person; burglary, including forcible entry; unlawful non-forcible entry, and attempted forcible entry of a structure to commit a felony or theft therein; rape, including rape and attempts to commit rape.