2015–2016 YEAR IN REVIEW

RISK MANAGEMENT AND MITIGATION

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> **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 individuals with developmental disabilities. This year-end report summarizes California's rates of reported special incidents during the fiscal year (FY) 2015/16.**

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 FY 15/16, DDS served approximately 290,844 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 individuals.

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 an individual is under vendored care. (See the last page for definitions of special incidents and vendored care.) In addition, any occurrence of individual mortality or victim of crime must be reported whether or not it occurred while the individual was under vendored care. This year-end report summarizes California's rates of reported special incidents during FY 15/16. The report 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 July 2009 through June 2016, augmented with three additional data sources maintained by DDS:

1. The Client Master File (CMF)
2. The Client Development Evaluation Report (CDER)
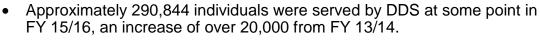3. The Purchase of Service (POS)

Mission Analytics Group (Mission), the risk management contractor for DDS, compiled this report based on statistical analyses that measure a individual'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.
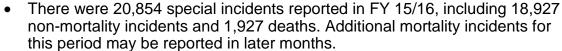
The rate of special incidents is lower this fiscal year than in the previous two.

Table 1: Reported Special Incidents for All DDS Individuals

	FY 15/16	FY 14/15	FY 13/14
Total Number of Individuals	290,844	277,199	265,757
Total Number of Reported Incidents	20,854	21,748	20,347
All Incidents per 1,000 Individuals	71.7	78.5	76.6
Deaths per 1,000 Individuals	6.6	7.0	6.8

FY 15/16 counts use data received August 2016, with incidents reported through June 30, 2016.

Key Findings:

- Approximately 290,844 individuals were served by DDS at some point in FY 15/16, an increase of over 20,000 from FY 13/14.

- There were 20,854 special incidents reported in FY 15/16, including 18,927 non-mortality incidents and 1,927 deaths. Additional mortality incidents for this period may be reported in later months.
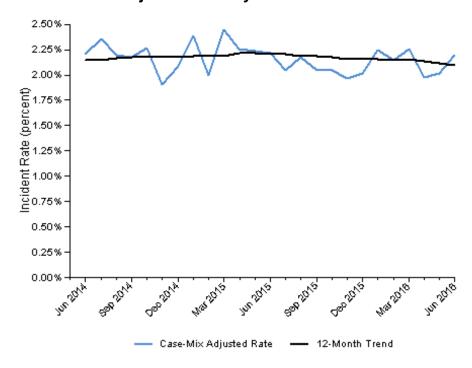
- The number of deaths per 1,000 individuals in FY 15/16 (6.6) is 4.8% lower than that for the previous year (7.0) and 2.7% lower than that for FY 13/14.

- The differences between incidents in FY 15/16 and FY 14/15 and FY 15/16 and FY 13/14 are statistically significant.

More About These Data

Total Number of Individuals refers to the total number of individuals served by DDS at any point during a fiscal year. For FY 15/16, the total number counts individuals served between July 2015 and June 2016. This number includes people diagnosed as having a developmental disability who are served in the community (Status Code 2) and children who receive Early Start services (Status Code 1). The number does not include individuals who are served in a State Developmental Center. See *Definitions* on page 12 for more details.

Figure 1: Statewide Non-Mortality Rates, Out-of-Home Individuals Age 3 and Up Case-Mix Adjusted Monthly Rates Since June 2014

Key Findings:

- The monthly non-mortality special incident rate (blue line) was below the long-term trend from July to December 2015, reducing the long-term trend.

- The monthly rate was higher than the long-term trend in January and March 2016, though this increase was smaller than in the previous year.
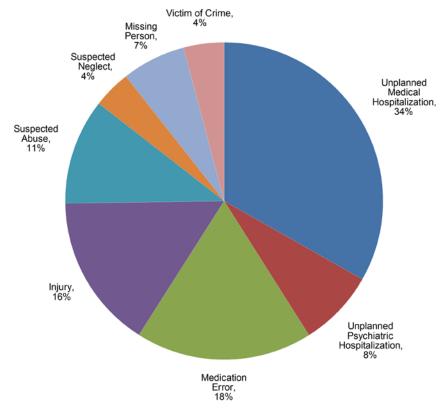
More About These Data

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

Unplanned medical hospitalizations, injury incidents, and medication errors account for over two-thirds of reported non-mortality incidents.

Figure 3: Breakdown of Non-Mortality Special Incidents by Type, All DDS Individuals, July 2015 – June 2016

Pie chart segments:
- Unplanned Medical Hospitalization, 34%
- Medication Error, 18%
- Injury, 16%
- Suspected Abuse, 11%
- Unplanned Psychiatric Hospitalization, 8%
- Missing Person, 7%
- Victim of Crime, 4%
- Suspected Neglect, 4%

Key Findings:

- Unplanned medical hospitalization remains the most commonly reported non-mortality incident type, accounting for about 34% of all reported incidents in FY 15/16. Medication error and injury incidents are the second and third most commonly reported incident types, at 18% and 16% respectively.

- The least common types of reported incidents are victim of crime, suspected neglect, and missing person, which combined, account for about 15% of all special incidents.

More About These Data

Definitions of all special incident types can be found on the *Definitions* page (page 12). The percentages shown above are based on raw counts of special incidents and are not case-mix adjusted. The percentages in the chart do not add up to 100% because of rounding.

The rate of suspected neglect incidents saw the largest change from the last fiscal year.

Table 2: Case-Mix Adjusted Breakdown of Special Incidents by Type, FY 15/16

	Avg. Monthly Incident Rate FY 15/16	Change from FY 14/15	Change from FY 13/14
Unplanned Medical Hospitalization	0.72%	-3%	-1%
Unplanned Psychiatric Hospitalization	0.17%	-2%	2%
Injury	0.36%	-9%	-9%
Medication Error	0.38%	-8%	-3%
Suspected Abuse	0.25%	-4%	0%
Suspected Neglect	0.09%	-17%	-17%
Missing Person	0.14%	-8%	-6%
Victim of Crime	0.10%	4%	11%

Key Findings:

- The rate of suspected neglect decreased by 17% compared to the previous year and the year before. These differences are not statistically significant.

- The victim of crime incident rate was 0.10% this fiscal year, and rose by 4% from the last fiscal year, and 11% from FY 13/14. These changes are not statistically significant.

More About These Data

"Avg. Monthly Incident Rate for FY 15/16" refers to the rate of out-of-home individuals 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.
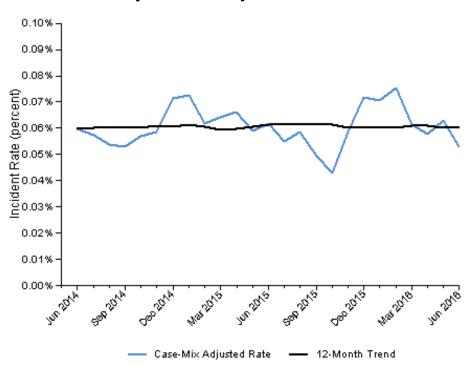
The mortality rate was higher than the long-term trend from December 2015 to March 2016.

**Figure 4: Mortality Incidents, Statewide
Case-Mix Adjusted Monthly Rates Since June 2014**

Key Findings:

- After falling well below the long-term trend in the early months of FY 15/16, the mortality rate rose substantially during the winter season (December 2015-March 2016), as in the last fiscal year.

- The long-term trend in mortality incidents has been steady over the last two fiscal years.

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 12-month period (case-mix adjustment described on page 3). This rate is calculated differently from those in Table 1; it includes only individuals age 3 and over and is case-mix adjusted.

California's mortality rates appear to be lower 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 15/16	0.7%	Children and adults living in the community	6.6
Connecticut DDS, FY 13/14	0.5%	Children and adults living in the community	14.4
Louisiana OCCD, FY 11/12	0.3%	Children and adults served on waivers	9.7
Massachusetts DDS, CY 2013	0.3%	Adults	17.4
Ohio DODD, CY 2014	0.8%	Children and adults	9.3
South Dakota DDD, CY 2014	0.3%	Children and adults served on waivers	11.2

Key Findings:

> - At 6.6 deaths per 1,000 individuals, 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 individual population and 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 FY2014* (November 2015), http://www.ct.gov/dds/lib/dds/health/reports/mortality_report_fy_14.pdf

Louisiana OCDD Waiver Services Annual Mortality Report 2012
http://new.dhh.louisiana.gov/assets/docs/earlysteps/publications/AnnualMortalityReport20112012.pdf

2012 & 2013 Mortality Report, http://www.mass.gov/eohhs/docs/dmr/reports/mortalityreport2012.pdf

O*hio 2014 MUI Abuser Registry Unit Annual Report*,
http://dodd.ohio.gov/HealthandSafety/Documents/2014%20MUI%20ANNUAL%20REPORT%20FINAL.pdf

South Dakota Division of Developmental Disabilities Critical Incident Reporting Trend Analysis: 2014
https://dhs.sd.gov/dd/Division/CIR_Annual_Report_2014.pdf

The risk management contractor analyzes SIR data to better target remediation activities at the regional center and state level.

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

Monitoring and Discovery Activities:

- *Discovery and Reporting Back:* Regional centers with quarterly spikes in individual incident types are required to report 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 the regional centers faced obstacles in implementing these follow-up activities. These responses are reviewed by the DDS Quality Management Executive Committee (QMEC) semi-annually, and may be used to develop strategies for mitigating risk to individuals statewide.

- *Long-Term Increases in Incident Rates*: Mission has established a multi-stage process to investigate drivers of long-term increases in incident rates. Mission provides additional analyses and technical assistance to regional centers identified based on results. For such regional centers, the contractor conducts additional analyses to determine the detailed incident types and/or individual characteristics associated with the increase. Based on these results, the contractor determines whether a more detailed review of the SIRs is necessary to better understand the issue. As appropriate, Mission also works with the regional centers to identify mitigation strategies.

- *Monitoring Medication Use and Chronic Conditions:* Mission is using Medi-Cal claims data for DDS individuals to identify individuals who are prescribed large numbers of prescription medications for long-term use to support regional center clinical staff in monitoring for possible polypharmacy issues. In addition, the Medi-Cal claims data are used to help identify individuals with chronic medical conditions such as diabetes.

- *Monitoring Suspected Abuse and Neglect Incidents:* Mission provides additional outreach to regional centers on cases of individuals who are at increased risk of suspected abuse and/or neglect. Mission provides information on individuals who have been the subject of two suspected abuse or neglect incidents within a year. Mission provides quarterly spreadsheets that identify individuals who were the subject of a suspected abuse or neglect SIR during the most recent quarter, to determine which of those individuals were the subjects of the same type of SIR within the previous 12 months.

- *Additional Analyses on Residential Settings:* At the request of the QMEC, Mission conducts additional analyses on a semi-annual basis to determine whether any types of residential care settings were associated with risks of special incidents that were higher than expected given the care challenges for the resident populations.

- *Monitoring Individuals Who Have Transitioned from Lanterman Developmental Center to the Community:* Through December 2015, one year

after the closure of Lanterman Developmental Center, Mission conducted analyses and submitted semi-annual Lanterman Risk Management Reports to DDS. These reports included all individuals who transitioned from Lanterman Development Center between January 2009 and December 2014 (mover cohort). The semi-annual reports helped monitor changes in residential settings, changes in the Client Development Evaluation Report (CDER), and Special Incident Report (SIR) rates.

- *Monitoring Individuals Who Have Transitioned from Sonoma Developmental Center to the Community:* Mission developed a draft monitoring report with input from the Sonoma Quality Management Advisory Group (QMAG). Mission will submit findings in a semi-annual Sonoma Risk Management Report to DDS and the QMAG. This report will include data regarding all individuals who have transitioned from Sonoma Developmental Center. The semi-annual report will help monitor changes in residential settings, changes in the CDER, and SIR rates. Mission will continue to develop these semi-annual reports for one year after the last individual has transitioned from Sonoma Developmental Center.

- *Monitoring Individuals who have Transitioned from any Developmental Center to the Community*: Building on the analyses developed for "Lanterman movers," Mission began to expand monitoring activities to include individuals who have transitioned from other developmental centers. This report will include data regarding all individuals who have transitioned from any Developmental Center. The semi-annual report will help monitor changes in residential settings, changes in the CDER, and SIR rates. Individuals who transitioned from Lanterman Developmental Center will continue to be monitored in this report.

- *Additional Monitoring of Individuals who have Transitioned from any Developmental Center to the Community:* Mission provides additional outreach to regional centers on cases of individuals in the mover cohort who have experienced two or more SIRs during a quarter and report to DDS and regional center on these individuals for risk prevention and mitigation purposes. Mission provides quarterly spreadsheets that identify individuals who have experienced two or more SIRs of the same type of SIR within the previous 12 months.

System Improvement Activities:

- *Public Health Campaign Regarding Pneumococcal and Flu Vaccines,* as well as *Vision, Hearing, Dental Health, and Cancer Screening Issues among DDS Clients*: Data from the National Core Indicators (NCI) in 2012 suggested that individuals with developmental disabilities in California use preventive healthcare at lower rates than individuals with developmental disabilities in other states participating in the NCI. DDS, through Mission and in collaborations with the ACCRMC and the chairs of the regional center Risk Management and Planning Committees (RMAPC), is implementing an informational campaign to increase the use of pneumococcal and flu vaccines, vision and hearing tests, preventive dental care, and cancer screenings. The campaign will develop materials and disseminate them through the www.ddssafety.net website and the regional centers. In FY 15/16, we began to develop the pneumococcal and flu vaccines material. The campaign will launch with regional centers in FY16/17.

- *DDS SafetyNet Website:* Mission maintains the DDS SafetyNet, a website promoting health and safety for individuals with developmental disabilities. In addition to addressing safety issues identified in partnership with the ARCA Chief Counselor Risk Management Committee, SafetyNet materials respond directly to trends in special incident rates to help manage risk among the individual population.

- *Medication Error Diagnostic Tool:* Based on findings from analysis of long-term increases in incident rates and follow-up site visits, Mission developed a medication error diagnostic tool to help service coordinators and residential care providers establish and maintain effective medication administration and reduce the risk of medication errors. Currently, nine regional centers use the tool. Some regional centers have used the tool, in particular, in connection with individuals who have left Lanterman Developmental Center because medication errors occur at a much higher rate among the mover population than in the population with developmental disabilities as a whole. The regional centers complete the diagnostic tool and send the data to Mission each quarter for analysis.

- *DDS Mental Health Services Act (MHSA):* Cycle III (Fiscal Year 2014/15 - 2016/17) MHSA Projects are now in their second year. A Mental Health/Forensic Collaborative will assist individuals and regional centers in navigating the criminal justice system and shortening incarceration time by establishing competency to stand trial training and identifying resources within the community. An infant mental health project will promote cultural competence in clinical care settings, while another project will develop a mental health clinic to provide psychiatric assessment, medication management, and individual and group therapy. Two projects will assist transition age youth with referral and connections to appropriate community resources, continuity of care before, during and after hospital admission, identifying new community resources, early detection and assessment of mental health conditions and establishment of a Wellness/Drop-In Center. The final project will provide training on evidence-based practices and how each can be used for prevention and early intervention.

Planned Activities for the Coming Year:

- *Monitoring Individuals Who Have Transitioned from Sonoma Developmental Center to the Community:* Mission will submit findings in a semi-annual Sonoma Risk Management Report to DDS. This report will include data regarding all individuals who have transitioned from Sonoma Developmental Center. The semi-annual report will help monitor changes in residential settings, changes in the CDER, and SIR rates.

- *Monitoring of Individuals who have Transitioned from any Developmental Center to the Community*: Mission will continue to monitor individuals who have transitioned from other developmental centers. This report will include data regarding all individuals who have transitioned from any Developmental Center. The semi-annual report will help monitor changes in residential settings, changes in the CDER, and SIR rates.

- *Planning for Future Monitoring of Individuals who have Transitioned from Fairview and Porterville Developmental Centers to the Community*: In FY 16/17, Mission and DDS will begin the planning process to monitor individuals who have transitioned from Fairview and Porterville developmental centers.

- *A Public Health Campaign Regarding Pneumococcal and Flu Vaccines,* as well as *Vision and Hearing, among DDS Clients*: DDS, through Mission and in collaborations with the ACCRMC and the chairs of the regional center Risk Management and Planning Committees (RMAPC), is implementing an informational campaign to increase the use of pneumococcal and flu vaccines. In FY 16/17, we will conduct the pneumococcal and flu vaccines campaign and develop the vision and hearing material for next fiscal year. Additionally, Mission in collaboration with four regional centers will implement a pilot to monitor individuals at high risk of experiencing an unplanned medication hospitalization due to respiratory conditions. The four regional centers will ask these individuals to receive a flu and/or Pneumococcal vaccination if medically indicated by their physician and track if they received them or not. In June 2017, Mission will analyze the SIR data to see if there is a reduction in their unplanned medication hospitalization incidents.

- *Mortality System Improvement Project:* Based on findings from other state mortality practices, DDS, through Mission and in collaboration with the ACCRMC, is working to update SANDIS to collect enhanced mortality data from the regional centers. New SANDIS fields to capture more structured mortality information will be implemented in FY 16/17. Mission will provide expanded mortality analysis based on this information.

Case-Mix Adjustment – A process that accounts for differences in the characteristics of the individual 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 individuals into a given region, we would expect rates of unplanned hospitalization incidents to increase, even if the effectiveness of the 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.

Medication Error – When an individual under vendored care experiences one or more of the following situations: 1) wrong medication, 2) wrong dose, 3) wrong time, or 4) wrong route. According to the Reporting Alignment Project, an individual has a one-hour window to take his or her medications based on the time prescribed by the physician. Any medication administered or self-administered more than one hour before or after the prescribed time is considered a missed dose medication error.

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

Mortality – Any individual death, regardless of cause.

Out-of-home Individual – 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 individuals).

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 Individuals – 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 individuals living in the community, that is, individuals receiving services from a regional center not residing in a Developmental Center or state-operated facility.

Unplanned Medical 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.

Involuntary Psychiatric Admission – Unplanned or unscheduled hospitalization due to a psychiatric condition.

Vendored Care – A individual is considered "under vendored care" when he or she is 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 that 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.