Year in Review

Annual Report submitted to the California Department of Developmental Services

Fiscal Year 2017-2018

Report prepared: September 2018

About this Report

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. 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 2001, DDS initiated a comprehensive risk prevention, mitigation, and management system as one cornerstone of quality services for individuals. This year-end report summarizes California's rates of reported special incidents during the fiscal year (FY) 2017-18. In FY 17-18, DDS served approximately 325,080 individuals with developmental disabilities in community settings.

As part of the risk management system, DDS monitors the occurrence of adverse events, or "special incidents," to identify trends and develop strategies for preventing and mitigating 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 receiving services funded by a regional center (under vendored care). (See page 10 for definitions of special incidents and vendored care.) In addition, any occurrence of mortality or an individual being a 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 17/18. 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 through June 2018, augmented with the DDS Client Master File (CMF), the Client Development Evaluation Report (CDER), and the Purchase of Service (POS). Mission Analytics Group (Mission), the risk management

Summary of Findings

- The number of individuals served by DDS has grown faster than the number of incidents, so the number of incidents per 1,000 individuals is lower this fiscal year than the last two.
- Adjusting for the changing characteristics of the caseload, the rates of mortality and non-mortality incidents have been flat over time.
- With more than 1,400 psychiatric admissions this fiscal year, the rate of unplanned psychiatric hospitalizations is 12% higher this fiscal year than the last.

contractor for DDS, compiled this report based on statistical analyses that measure an 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. See below for a summary of findings.

THE RATE OF SPECIAL INCIDENTS WAS LOWER THIS FISCAL YEAR THAN IN THE PREVIOUS TWO YEARS.

At the end of FY 17/18, DDS was serving 325,080 individuals. This number includes people diagnosed as having a developmental disability who are served in the community and children who receive Early Start services. The number does not include individuals who are served in a State Developmental Center. See *Definitions* on page 10 for more details.

Table 1: Reported Incidents for Individuals Served by DDS

	FY 17/18	FY 16/17	FY 15/16
Total Number of Individuals, Last Month of Fiscal Year	**325,080**	310,209	295.919
Total Number of Reported Incidents	**21,967**	21,340	20,938
All Incidents per 1,000 Individuals	**67.6**	68.8	70.8
Deaths per 1,000 Individuals	**6.4**	6.7	6.8

Counts use data with incidents reported through June 30, 2018.

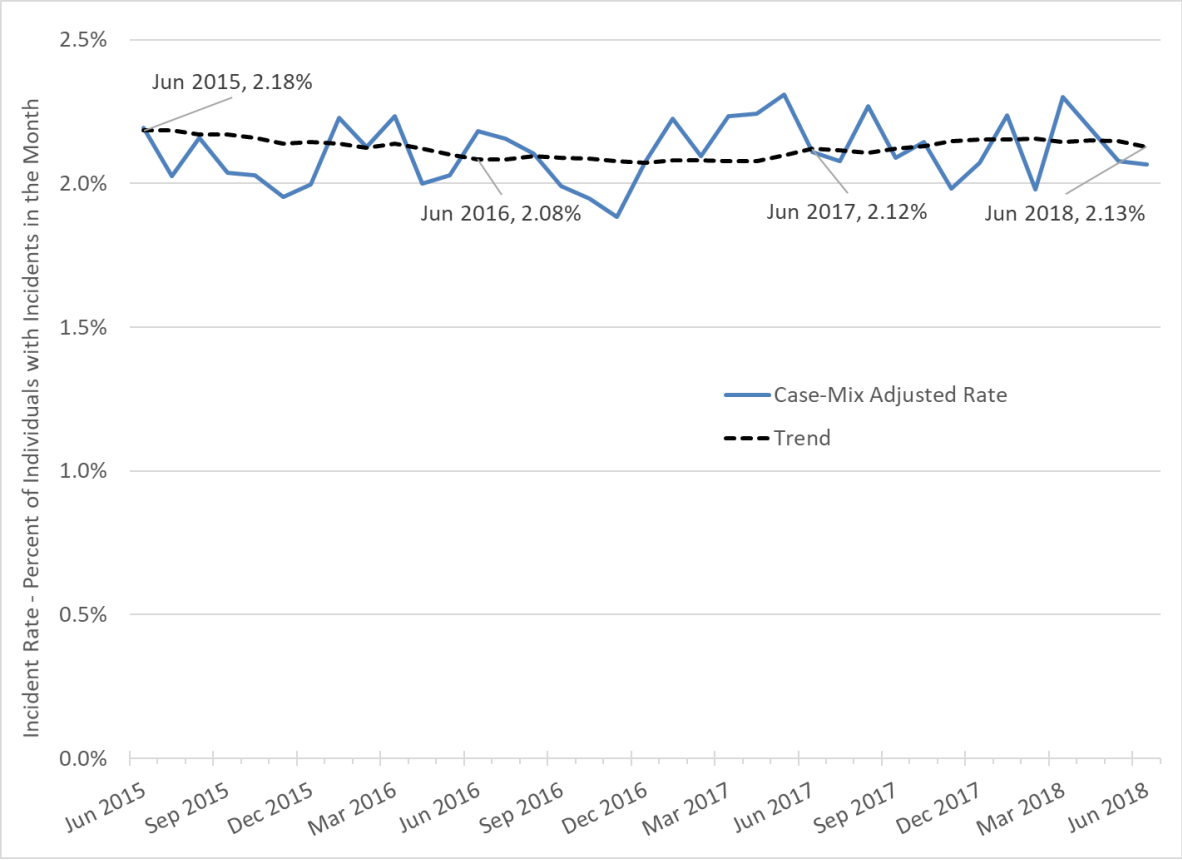
Key Findings

- The number of individuals served by DDS has increased over the last two fiscal years, and at 325,080 is nearly 10% greater than the number served in FY 15/16.
- There were 21,967 special incidents reported in FY 17/18, including 19,896 non-mortality incidents and 2,071 deaths.
- The number of deaths per 1,000 individuals in FY 17/18 (6.4) is 4% lower than that of the previous fiscal year (6.7). However, additional mortality incidents for this period may be reported in later months.
- The differences in the number of all incidents per 1,000 individuals between FY 17/18 versus each of the two preceding years are statistically significant.

THE NON-MORTALITY LONG-TERM TREND WAS FLAT FOR 2017-2018.

The blue line in Figure 1 represents the share of individuals statewide who experience one or more special incidents in a month. The trend line (dotted black) represents a 12-month moving average of the data in the blue line. The value for each month in the trend line is the average of the monthly incident rates over the previous 12 months. The lines shown on this graph represent individuals age 3 and above who do not live in the home of a parent/guardian. The rates account for changes in the characteristics of the 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.

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



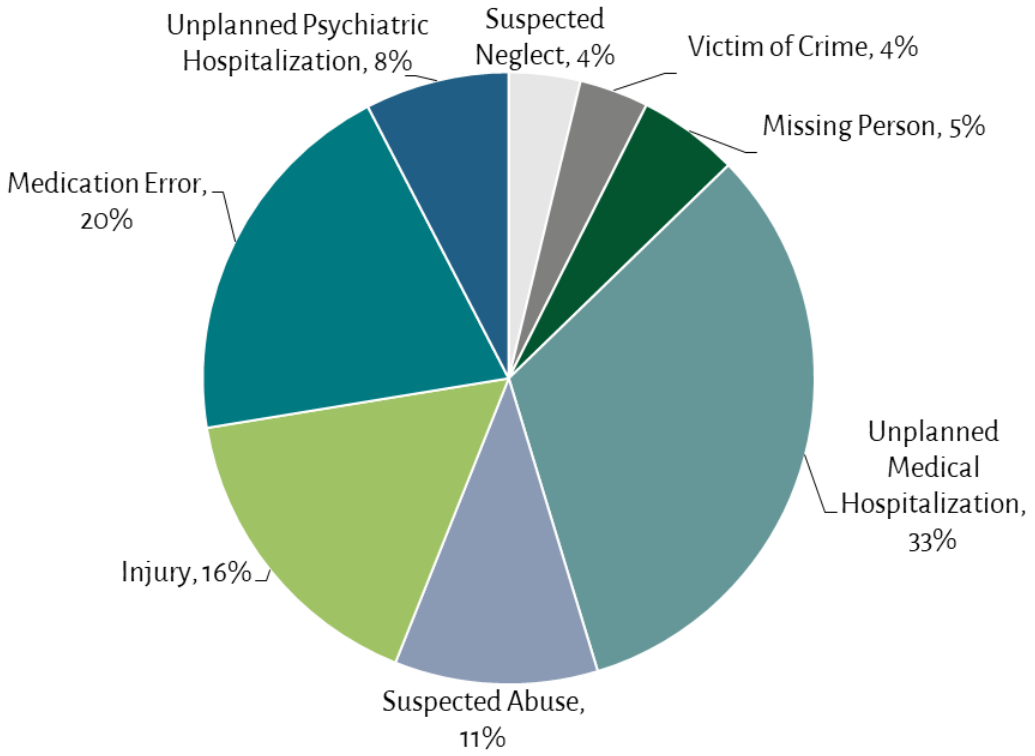
Key Findings

- The seasonal pattern of lower monthly rates of non-mortality special incidents (blue line) from July to December and higher from January to June (due to winter hospitalizations) was less clear for FY17/18 than in previous years.
- Although the rate was highly variable from month to month, the long-term trend (dotted black line) was between 2.11% and 2.15% throughout the fiscal year. Adjusting for case-mix, the average monthly rate for the 12-months ending in June 2018 was almost identical to the rate for the 12-months ending June 2017.

UNPLANNED MEDICAL HOSPITALIZATIONS, INJURY INCIDENTS, AND MEDICATION ERRORS ACCOUNT FOR MORE THAN TWO-THIRDS OF REPORTED NON-MORTALITY INCIDENTS.

Definitions of all special incident types can be found on the *Definitions* page (page 10). The percentages shown below 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.

Figure 2: Breakdown of Non-Mortality Special Incidents by Type, Individuals served by DDS, July 2017 – June 2018



Key Findings

- Unplanned medical hospitalization remains the most commonly reported non-mortality incident type, accounting for about 33% of all reported incidents in FY 17/18. Medication error (20%) and injury (16%) incidents continue to be the second and third most commonly reported incident types.
- The least common types of reported incidents are victim of crime, suspected neglect, and missing person, which, combined, account for about 13% of all special incidents.

THE RATE OF UNPLANNED PSYCHIATRIC HOSPITALIZATION INCIDENTS SAW THE LARGEST INCREASE FROM THE LAST FISCAL YEAR.

We calculate a monthly incident rate for each incident type. In Table 2, "Avg. Monthly Incident Rate for FY 17/18" refers to the share of out-of-home individuals statewide who experience one or more incidents in an average month. Rates are case-mix adjusted (refer to *Definitions* on page 10). Case-mix adjusted rates include only individuals aged 3 and above.

Table 2: Case-Mix Adjusted Breakdown of Special Incidents by Type

	Avg. Monthly Incident Rate FY 17/18	Percentage Change from FY 16/17	Percentage Change from FY 15/16
Unplanned Medical Hospitalization	**0.72%**	-3%	-2%
Unplanned Psychiatric Hospitalization	**0.17%**	12%	7%
Injury	**0.43%**	7%	9%
Medication Error	**0.38%**	-1%	5%
Suspected Abuse	**0.26%**	4%	5%
Suspected Neglect	**0.09%**	-4%	7%
Missing Person	**0.13%**	-4%	-1%
Victim of Crime	**0.09%**	-4%	-8%

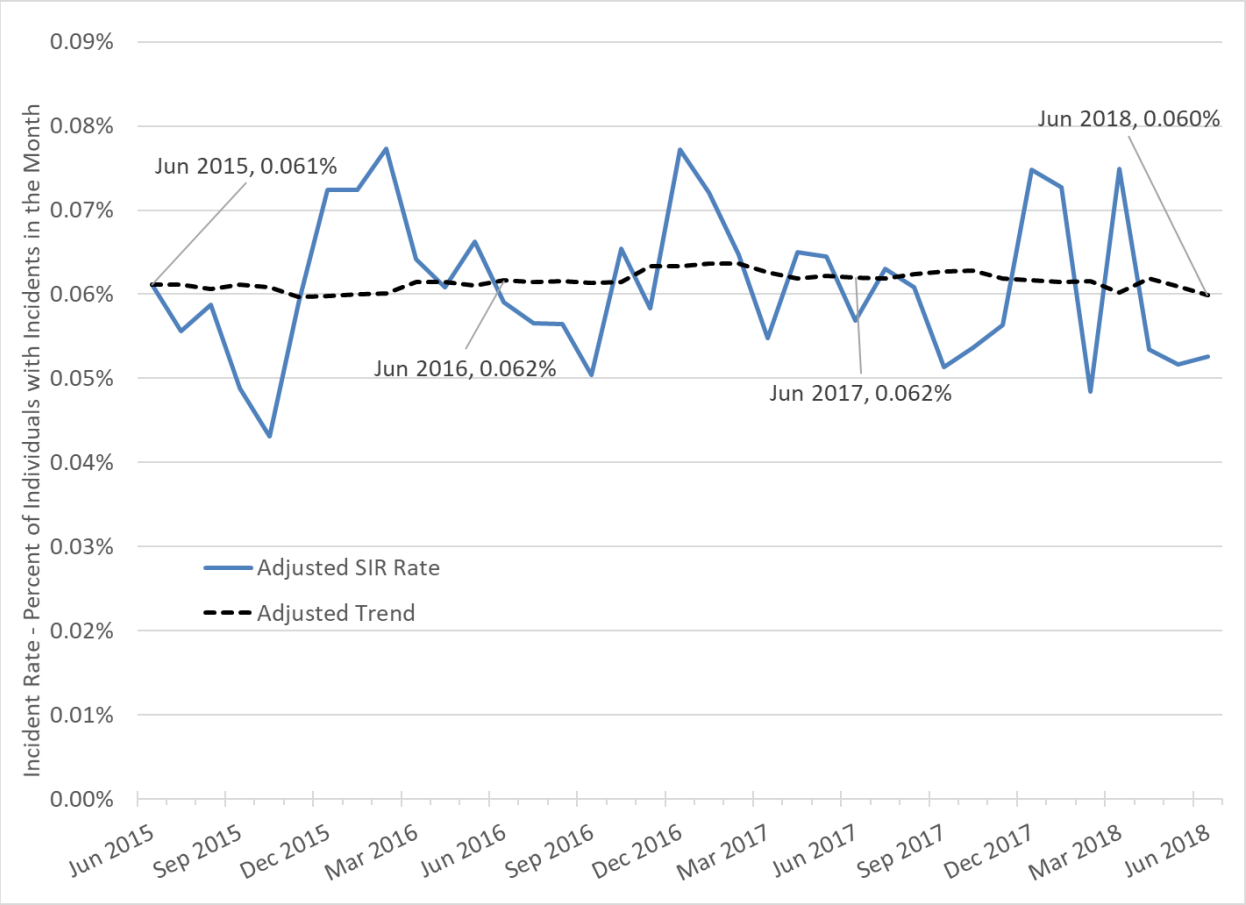
Key Findings

- The rate of unplanned psychiatric hospitalizations incidents in FY 17/18 increased by 12% compared to FY 16/17, and 7% relative to FY 15/16. There were 1,417 unplanned (involuntary) psychiatric admissions in FY 17/18.
- Incident rates also rose for injury and suspected abuse incidents. The injury incident rate increased by 7% from FY 16/17 to FY 17/18; the suspected abuse incident rate increased 4% from FY 16/17.
- Rates of all other incident types fell from FY 16/17 to FY 17/18.

THE MORTALITY RATE WAS NEARLY AS HIGH IN MARCH 2018 AS IT WAS IN DECEMBER 2017.

The blue line in Figure 3 represents the monthly mortality rate (in percent) adjusted for case-mix (see description of case-mix adjustment on page 3). The trend line (dotted black) represents a 12-month moving average of the data in the blue line. The value for each month in the trend line is the average of the monthly incident rates over the previous 12 months. For both lines, the rates include only individuals age 3 and over and are case-mix adjusted. All individuals are included in these rates, regardless of residence.

Figure 3: Mortality Incidents, Statewide
Case-Mix Adjusted Monthly Rates Since June 2014



Key Findings

- Unlike the preceding two years, the monthly mortality rate did not drop by March following the typical spike in December. The March 2018 rate was as high as the December rate, both close to 0.075.
- Despite the March peak, the long-term trend in mortality incidents was slightly lower for the year ending June 2018.

Risk Management Activities

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. Additional activities that support regional centers in avoiding future incidents are described activities below.

Monitoring and Discovery

Discovery and Reporting Back: Regional centers with quarterly spikes in individual incident types report to DDS, through 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 provided to the DDS Quality Management Executive Committee (QMEC) quarterly and may be used to develop strategies for how to mitigate risk to individuals statewide.

Long-Term Increases in Incident Rates: Mission has established a multi-stage process to investigate long-term increases in incident rates. Mission provides additional analyses and technical assistance to regional centers identified based on results. For such regional centers, Mission conducts additional analyses to determine the detailed incident types and/or individual characteristics associated with the increase. Based on these results, Mission 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.

- Over the fiscal year, Mission conducted additional analyses and discussions with Central Valley Regional Center (CVRC) in response to its consistently high rate of injury incidents. Mission found that internal bleeding accounted for the largest share of the difference and a review of internal bleeding incidents indicated that about three-quarters of incidents were bruising. In discussion with Mission, CVRC indicated that it had emphasized the importance of reporting to its providers and that some licensed providers subsequently adopted a practice of having a medical professional look at all bruises, classifying the incidents as reportable since they received medical treatment. This is inconsistent with the practice at other regional centers and explains the high relative rate of injury incidents at CVRC. As of June 2018, the rate of injury incident at CVRC remains high relative to the state average.

Monitoring of Medication Use and Chronic Conditions: To support regional center clinical staff in monitoring for possible polypharmacy issues, Mission uses Medi-Cal claims data for DDS clients to identify individuals who are prescribed large numbers of prescription medications for long-term use. In addition, the Medi-Cal claims data are used to help identify individuals with chronic medical conditions, such as diabetes. Mission is currently working with regional centers to identify other ways to use claims data to target risk mitigation strategies.

- Early in FY 17/18 North Los Angeles County Regional Center (NLACRC) asked Mission for assistance regarding an increase by more than one third in its rate of medication errors. Subsequent analysis indicated that the increase in medication errors was concentrated in the populations served in SLS and ICFs. In SLS the increase was an increase in repeat medication errors. In ICFs the increase arose from

increases in both first and repeat errors. In its final report (October 2017) Mission recommended that NLARC start by attempting to limit the risk of repeat medication errors. As of June 2018, the rate of medication errors at NLARC was lower than the state average rate.

Monitoring of Suspected Abuse and Neglect Incidents: Mission provides additional outreach to regional centers for 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.

- In FY 17/18, Mission conducted additional analyses and technical assistance on suspected abuse and/or neglect rates at Frank D. Lanterman Regional Center (FDLRC), North Bay Regional Center (NBRC), South Central Los Angeles Regional Center (SCLARC), Valley Mountain Regional Center (VMRC) and Redwood Coast Regional Center (RCRC). For FDLRC, NBRC and SCLARC, the high rates have since fallen close to the statewide average. For VMRC, subsequent analyses found the regional center had unusually high rates of repeated abuse (same individual with multiple incidents), especially physical abuse. By March 2018, the rate of suspected abuse at VMRC was approximately 13% greater than the state average rate.
- Mission continues to monitor RCRC's risk of suspected abuse and suspected neglect, as well as medication errors at RCRC, sending updated data to RCRC each quarter. In 2016 and 2017, RCRC had taken steps to limit the risk of suspected abuse among individuals that it serves, and they appeared to have some success at limiting the risk of repeat abuse. However, they were not successful at reducing the overall rate of suspected abuse. Mission has recently summarized for DDS the history of high rates of these incidents at RCRC and associated technical assistance.

Additional Analyses of Residential Settings: At the request of the QMEC, Mission conducts additional analyses 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 to the Community Due to Developmental Center Closure: Mission submits semi-annual reports to DDS to support the Quality Management Advisory Group for the Sonoma, Fairview, and Porterville general treatment area closure cohorts. These reports track all individuals who have transitioned from the developmental centers since the closure plan date. The semi-annual reports 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 each developmental center.

Monitoring of Individuals Who Have Transitioned from Any Developmental Center to the Community: In addition to monitoring the closure cohorts, Mission develops a semi-annual report that includes data on all individuals who have transitioned from developmental centers within the last five years, whether or not these transitions were part of the closure process. These semi-annual reports also help monitor changes in residential settings, changes in the CDER, and SIR rates.

Additional Monitoring of Individuals Who Have Transitioned from Any Developmental Center to the Community: Mission provides additional outreach to regional centers for cases of individuals in the mover cohort who have experienced two or more SIRs during a quarter and report to DDS and the 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

Technical Assistance on Request from Regional Centers. Mission provides additional analyses on request to regional centers testing different mitigation strategies.

- *Analysis of Falls:* In 2017, FNRC began tracking how falls happen among individuals it serves to better understand mitigation approaches. Providers are asked to complete a form each time an individual falls, documenting the circumstances. FNRC sends the forms to Mission, which compiles them and sends quarterly reports to FNRC summarizing the data. In January-March 2018, for example, providers reported 29 falls, 11 of which had injuries identified in a SIR. Analysis found that most falls occur at home, usually in the bedroom, and that inappropriate footwear and failure to use an assistive walking device are the biggest contributors to falls.
- *Data Breaches:* In February 2018, San Gabriel Pomona Regional Centers (SGPRC) approached Mission with a request for training and technical assistance on information security. Between 2015 and 2018, SGPRC had experienced a series of instances in which HIPPA-protected and other information had been compromised that concerned individuals whom SGPRC serves. In nearly all cases this occurred when staff had the information on a laptop, mobile phone, or on hard copies, and the devices or copies were lost or stolen—often, from their cars. SGPRC asked Mission to develop training on data and information security for staff at provider agencies. Mission agreed to provide such training but recommended that SGPRC first explore the feasibility of encrypting electronic media that providers use and strategies to minimize the use of identified paper records.

Tour of Regional Centers Regarding Risk Management Practices: Mission and DDS will visit all 21 regional centers between September 2018 and January 2019. The team will meet with regional center executive directors, chief counselors, quality assurance managers, and SIR coordinators to gain a common understanding of SIR reporting and risk management practices at each regional center. The visits will also provide an opportunity for regional centers to share their strengths and challenges in meeting their clients' needs and managing risk. The discussions will help DDS and Mission identify strategies to improve risk management activities with the regional centers. Finally, DDS and Mission will document practices at each regional center and, therefore, identify variation in practices across centers. This is important both to identify best practices across the system and to assess how differences in reporting practices relate to observed differences in incident rates.

Terms and Definitions

- **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 client, 3) wrong dose, 4) wrong time, 5) wrong route. For example, 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 and, therefore, a "wrong time" medication error.

- **Missing Person** – When an individual is missing and the vendor or long-term health care facility has filed a missing person 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 individuals with 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; or

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 the end of the fiscal year. Note that this number is smaller than the number of individuals served at any point during the fiscal year. This total includes individuals living in the community, that is, individuals receiving services from a regional center not residing in a Developmental Center or a 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; and nutritional deficiencies, including but not limited to anemia and dehydration.

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

- **Vendored Care** – An 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, fists, 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 to a structure to commit a felony or theft therein; and rape, including rape and attempts to commit rape.