

Oregon's Mental Health Service System for Children

*Recent trends in provision of mental health services
&
Changes in characteristics of children served*

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Present goal:

Begin to *broadly describe* what is happening within the children's service system.

Future goals:

Explain significant trends and patterns in the data.

Predict impact of treatment on client well-being (accomplished in part via linking of these data to other data sources, e.g., child welfare data, juvenile justice data)

Data Sources for Current Analyses

Client Process Monitoring System
(CPMS)

Medicaid Database (MMIS)

Client Process Monitoring System (CPMS) tracks:

- Clients receiving *outpatient* (non-hospital) treatment from a government-funded mental health / addiction services provider, regardless of insurance eligibility
- Both clients receiving outpatient *mental health* services and outpatient *chemical dependency* services (different data elements for these two groups)
- *Episodes* of service: Data on client at beginning and end of treatment episode (does *not* contain data on service encounters within episode)

Medicaid database tracks:

- *Eligibility and enrollment* status of clients who are at some point eligible for services *reimbursable through Medicaid*
- All health care *encounters* associated with Medicaid claims (mental health treatment is more often reimbursable through Medicaid than chemical dependency treatment)
- Client and provider demographics and characteristics
- Billing information (service charges)

Analyses of data on all children
who received government-funded mental
health or chemical dependency services
between 1/1999 and 12/2003

(Excludes children seen in hospital settings only)

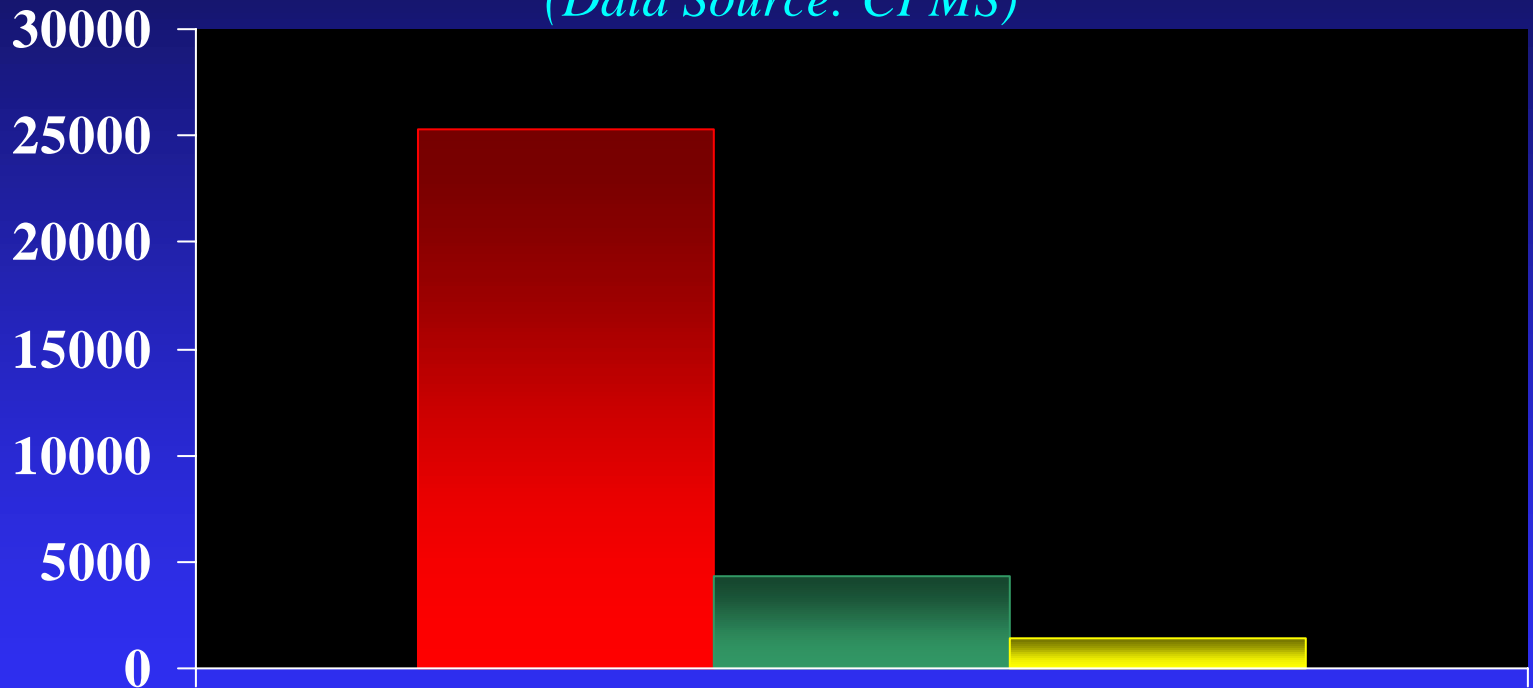
How many children are in treatment for mental health and/or addiction problems?

In 2003, per CPMS, over 30,000 children had an open chart with a government-funded mental health or addiction services treatment provider.

Far more children were in treatment for mental health problems than for chemical dependency problems. Only a small fraction were in treatment for both mental illness and chemical dependency.

Number of Children in Treatment with a Government-Funded Mental Health or Addiction Services Provider 2003

*(Data Source: CPMS)**



■ Mental Health Only ■ Chemical Dependency Only ■ Both

* "In Treatment" = Chart open for at least one day in 2003.

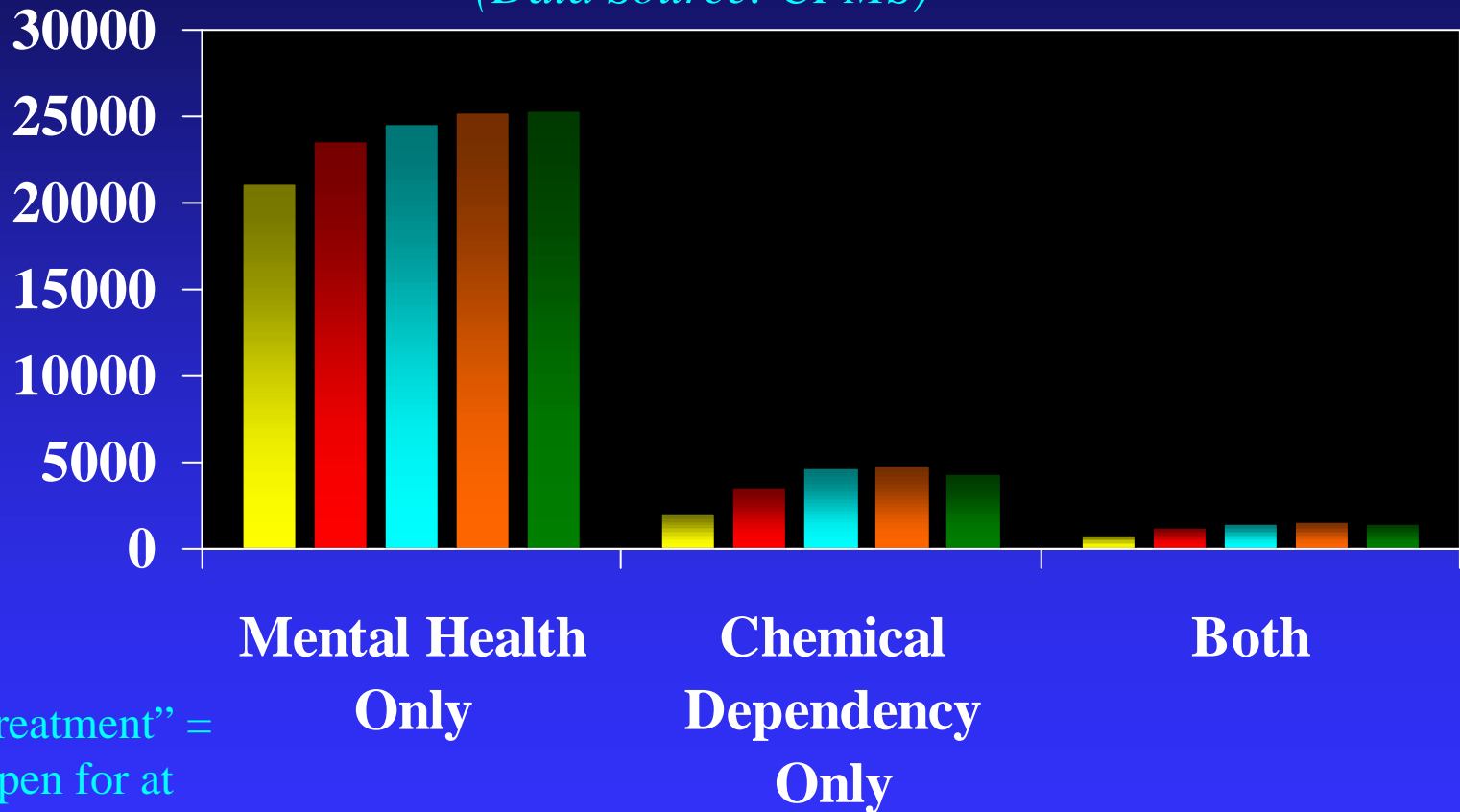
Has there been any change in the number of children receiving treatment?

The number of children in treatment for mental health problems has been increasing (at a decreasing rate) at least since 1999.

The number in treatment for chemical dependency also increased (at a decreasing rate) from 1999 to 2002, but then decreased from 2002 to 2003.

Number of Children in Treatment with a Government-Funded Mental Health or Addiction Services Provider 1999-2003

*(Data Source: CPMS)**



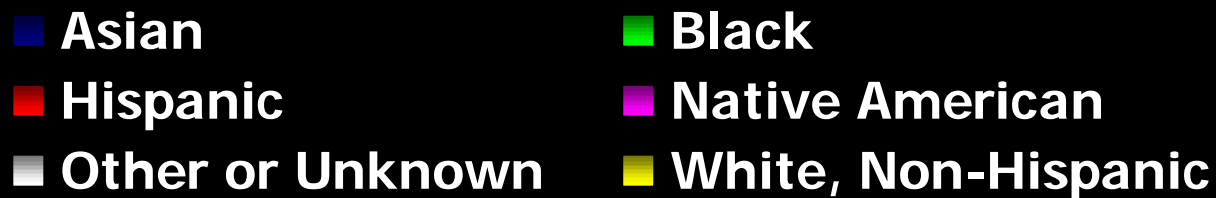
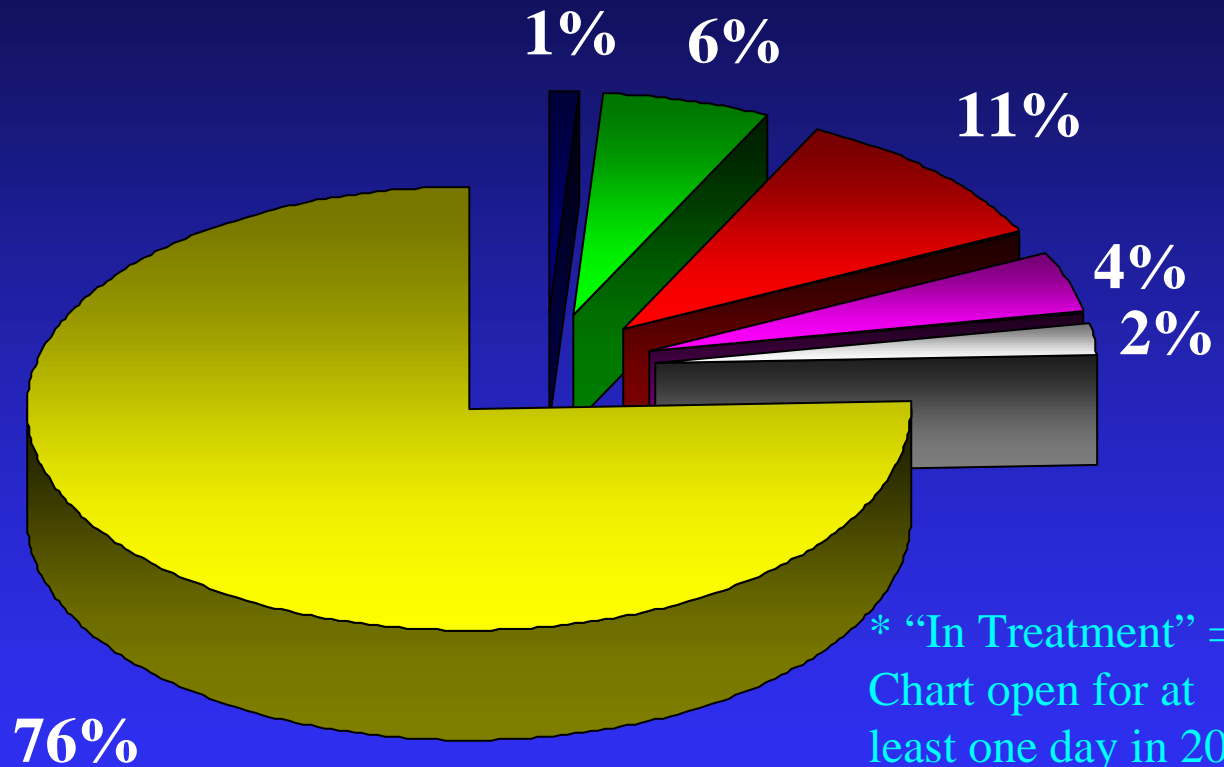
* "In Treatment" =
Chart open for at
least one day in 2003.



What is the ethnic/racial heritage of the children receiving mental health and/or chemical dependency services?

Race / Ethnicity of Children in Treatment 2003

(Data Source: CPMS)*



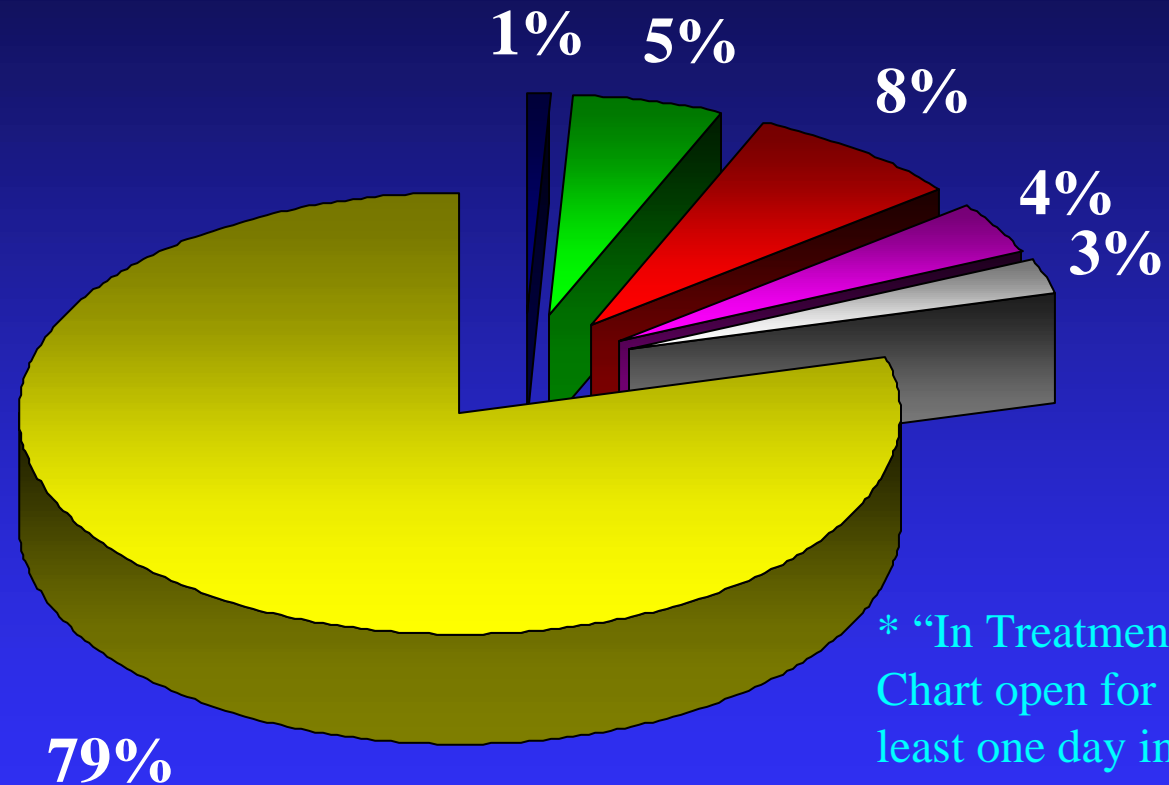
Has there been any change in the ethnic/racial diversity of children receiving mental health and/or chemical dependency services?

There has been an increase in the diversity of the treatment population. Much of the increase in diversity is attributable to an increase in the number of Hispanic children in treatment.

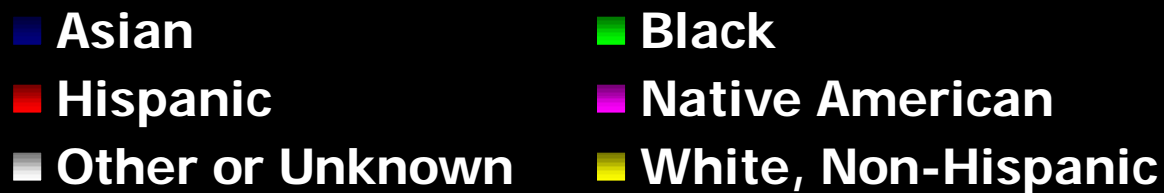
In 2003, 11% of the treated population identified as Hispanic. 5 years earlier, in 1999, only 8% of the treated population identified as Hispanic.

Race / Ethnicity of Children in Treatment 1999

(Data Source: CPMS)*



* "In Treatment" =
Chart open for at
least one day in 2003.

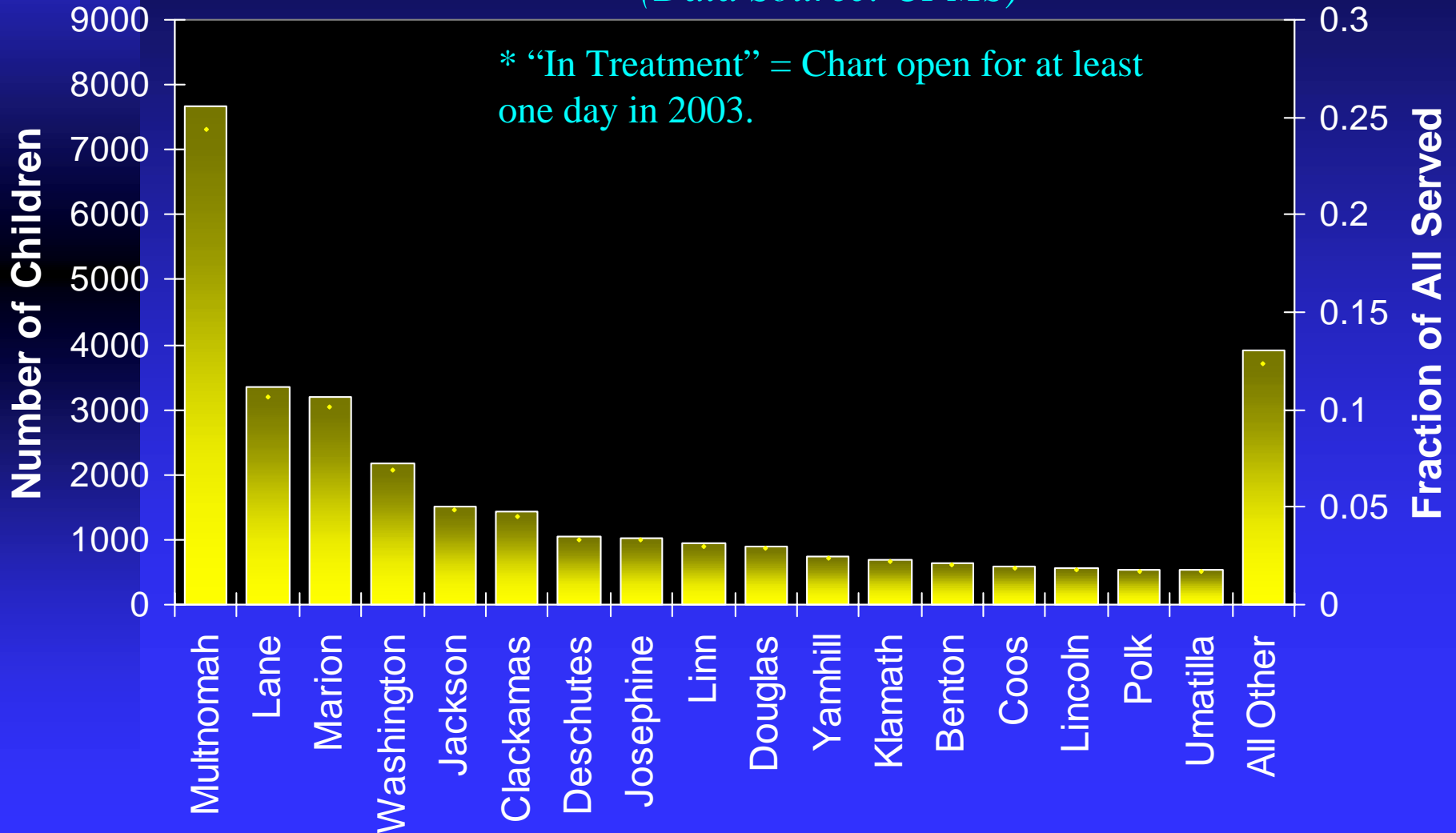


*Where do the children receiving mental health
and/or addiction services live?*

Per CPMS, approximately 25% of the children in treatment live in Multnomah county. An additional 20% live in Lane and Marion counties.

Number of Children in Treatment By County 2003

(Data Source: CPMS)



What are the age and sex distributions of children in treatment for mental health and/or addiction problems?

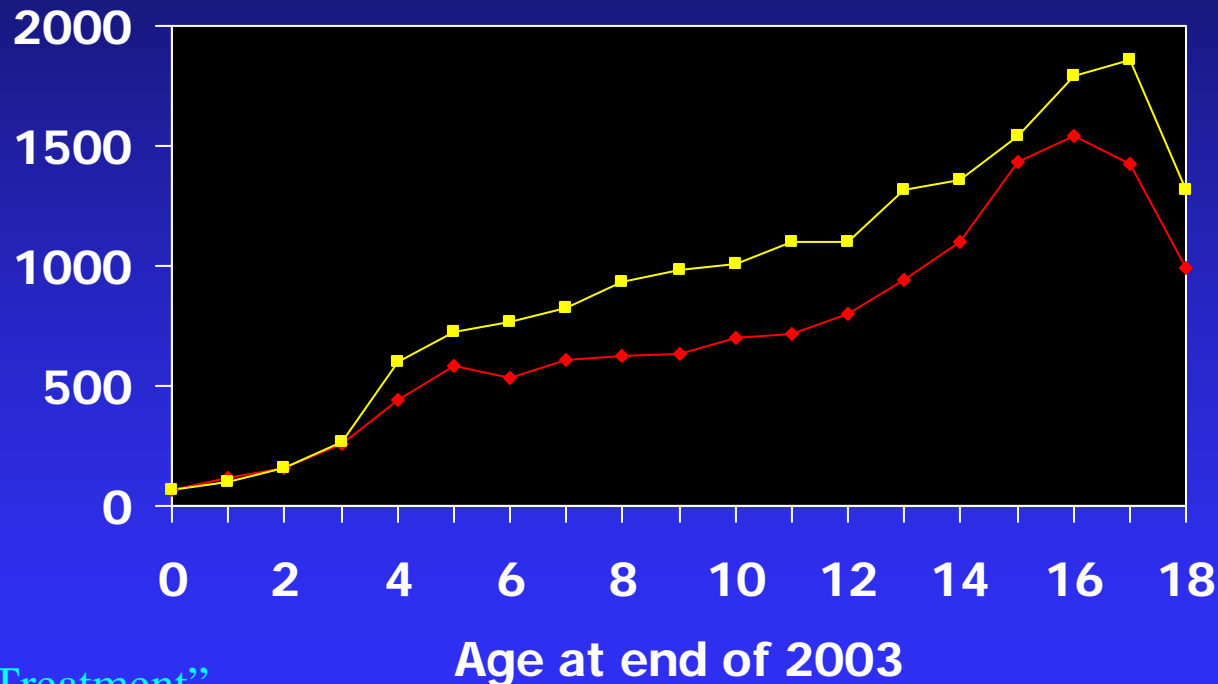
The number of children in either mental health or addiction treatment increases with age, until at least age 16.

After age 3, the number of boys in treatment exceeds the number of girls in treatment.

Number of Children in Treatment with a Government-Funded Mental Health and/or Addiction Services Provider, 2003

By Age and Gender

(Data Source: CPMS)*



* "In Treatment"
= Chart open for
at least one day
in 2003.

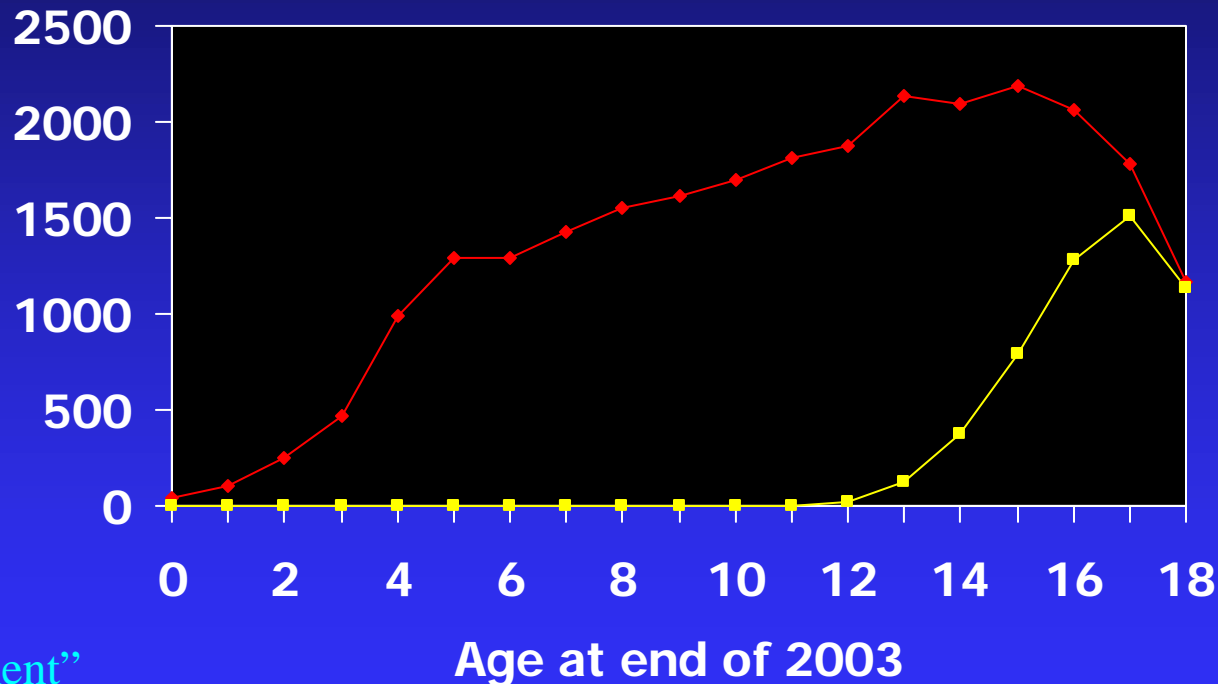
—◆— Girls —■— Boys

Children in treatment for chemical dependency are significantly older, on average, than children in treatment for mental illness.

Number of Children in Treatment with a Government-Funded Mental Health and/or Addiction Services Provider, 2003

By Age and Service Type

(Data Source: CPMS)*



* "In Treatment"
= Chart open for
at least one day
in 2003.

—◆— MH Treatment —■— A&D Treatment

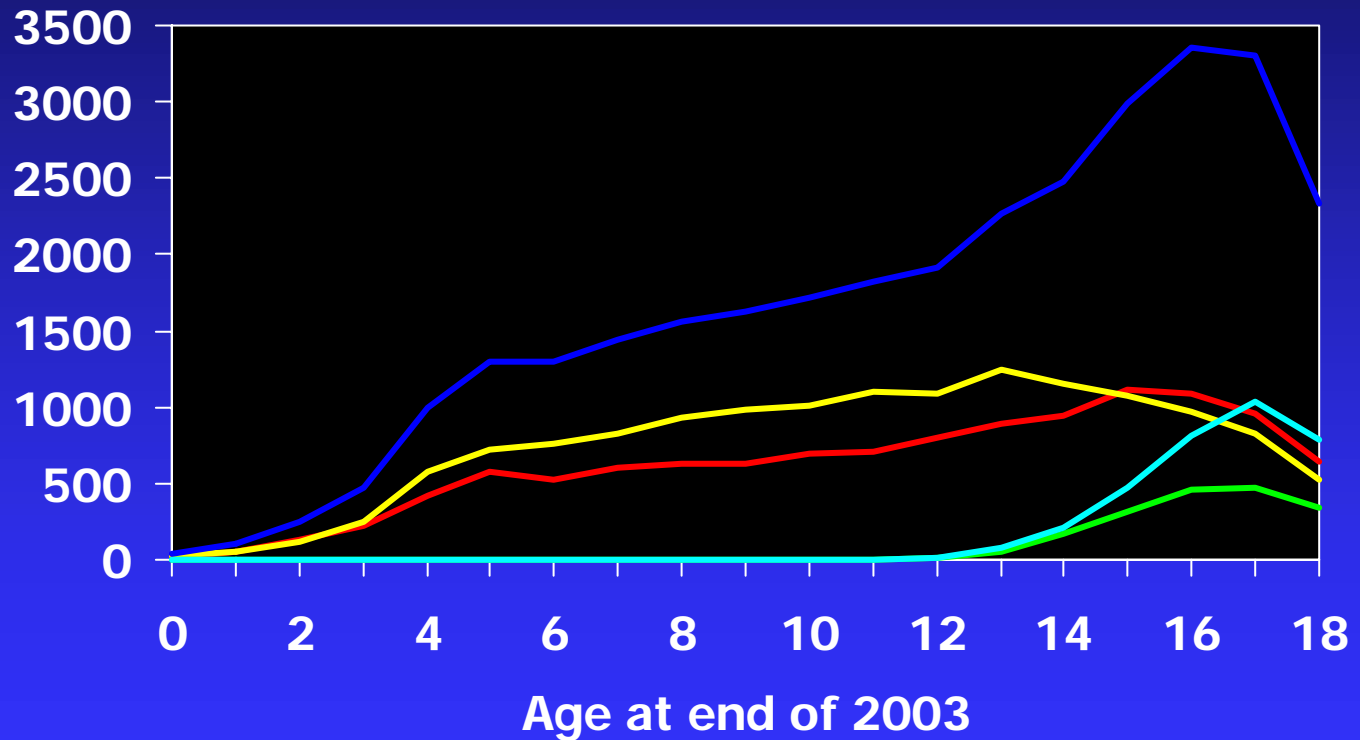
The number of boys in treatment exceeds the number of girls in treatment. This is true within both the population treated for mental health problems and the population treated for chemical dependency.

Exception: There are more girls aged 15+ than boys aged 15+ in treatment with a mental health provider.

Number of Children in Treatment with a Government-Funded Mental Health and/or Addiction Services Provider, 2003

By Age, Service Type, and Gender

*(Data Source: CPMS)**



* "In Treatment"
= Chart open for
at least one day
in 2003.

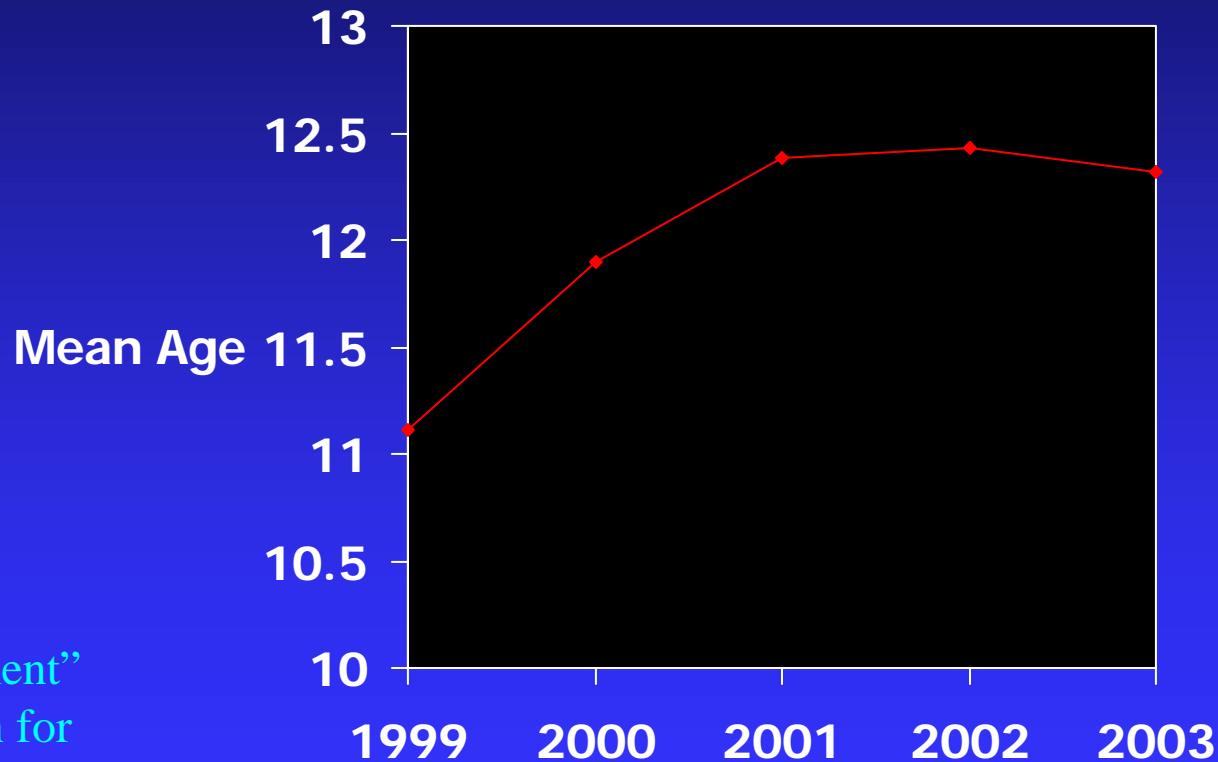


Has there been any change in the age distribution of children in treatment?

Per CPMS, the mean age of children in treatment increased from just over 11 (in 1999) to almost 12 ½ (in 2001). Per this same data source, mean age changed little between 2001 and 2003.

Mean Age of Children in Treatment with a Government-Funded Mental Health and/or Addiction Services Provider 1999-2003

*(Data Source: CPMS)**

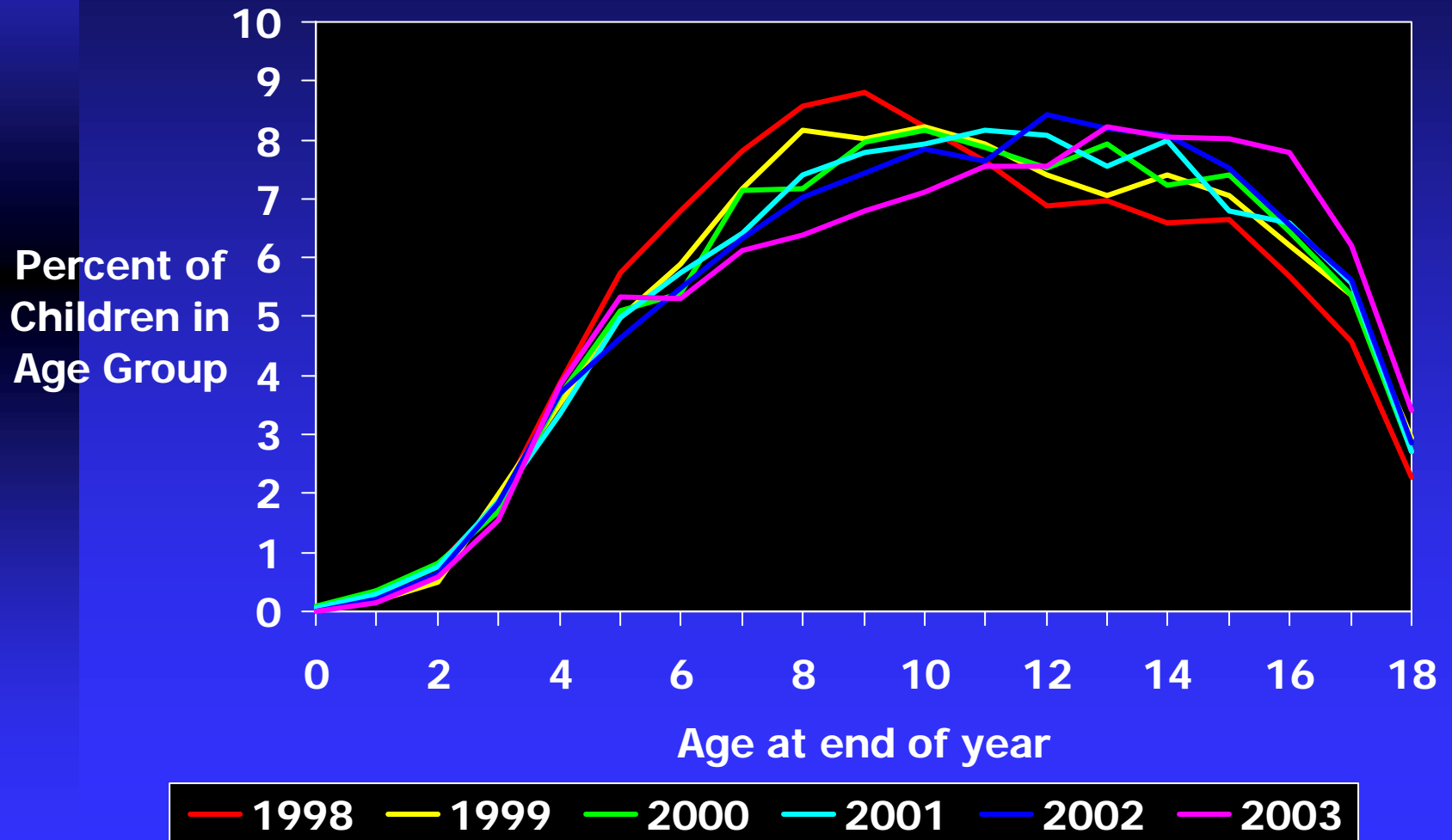


* "In Treatment"
= Chart open for
at least one day
in 2003.

An increase in the average age of children in treatment is also apparent within the subset of children who are Medicaid-eligible and receiving mental health services through managed care. (Change from just under 11 in 1999 to over 12 in 2001-2003.)

Age Distributions for Medicaid-Eligible Children Receiving MHO Services, 1998 – 2003

(Data source: MMIS)

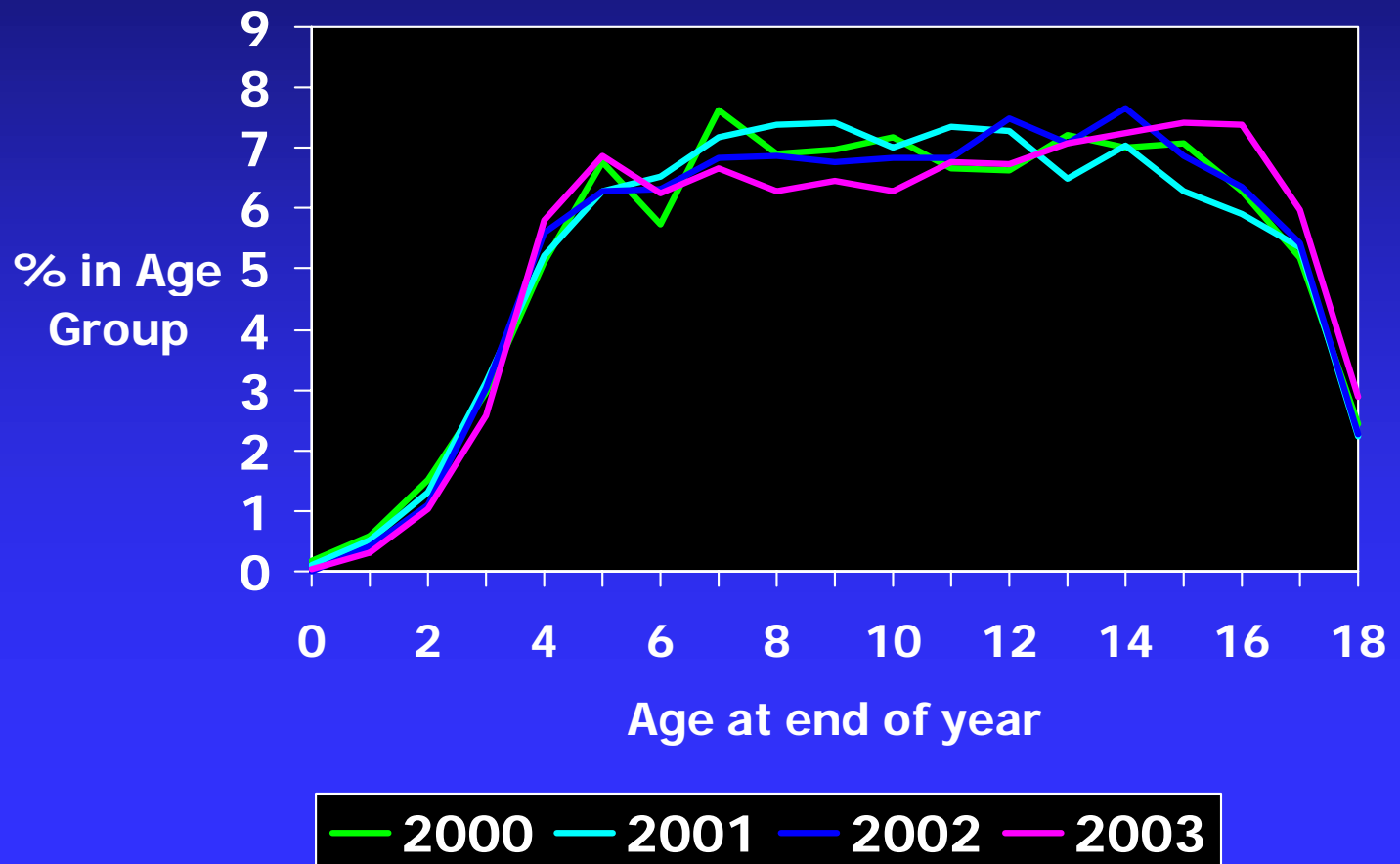


The change in the age distribution of children in treatment is not clearly attributable to a change in the average age at entry into service.

Age Distributions for Medicaid-Eligible Children Entering MHO Service Population, 2000- 2003*

(Data source: MMIS)

**Child considered as “entering” service population if child did not receive service in the two preceding years.*



What types of services are being provided to children in treatment for mental health / chemical dependency problems?

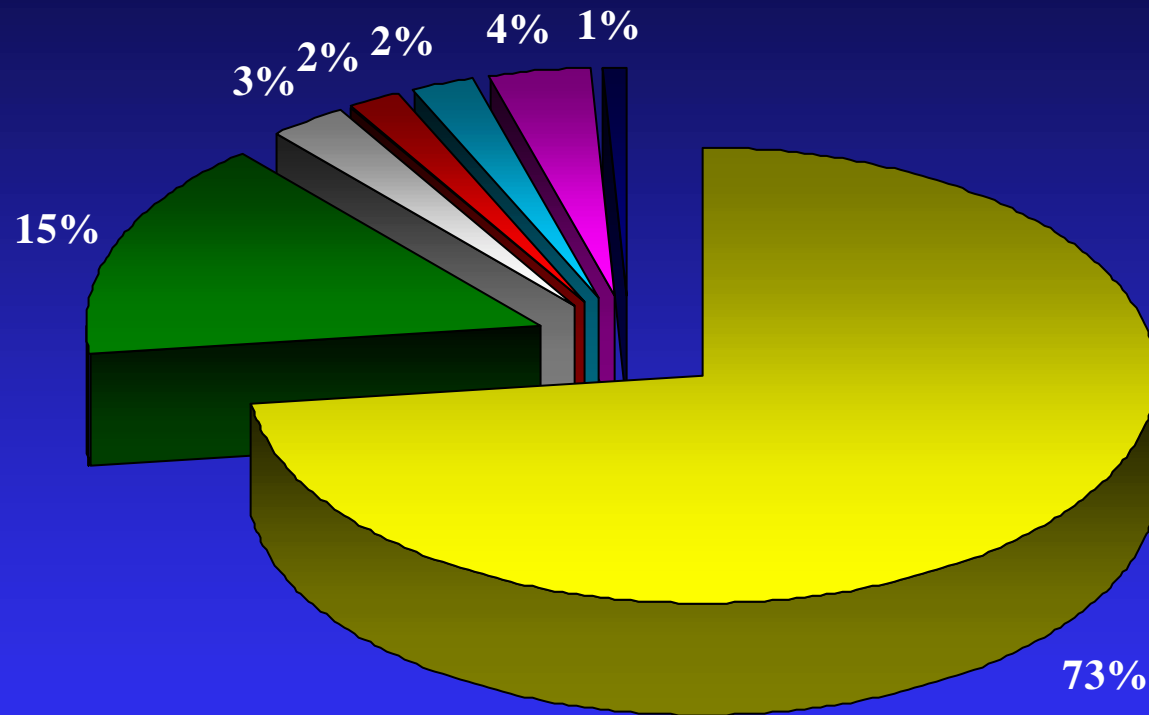
The bulk of services provided are basic outpatient services for mental health and addiction problems.

Distribution of Service Episodes, 2003

Children of All Ages

(% of all service episodes falling into each service category)

(Data Source: CPMS)



■ Outpatient Mental Health

■ Outpatient Drug / Alcohol

■ Mental Health Residential

■ Mental Health Day Treatment

■ Drug / Alcohol Residential

■ Crisis Services

■ All Other Services

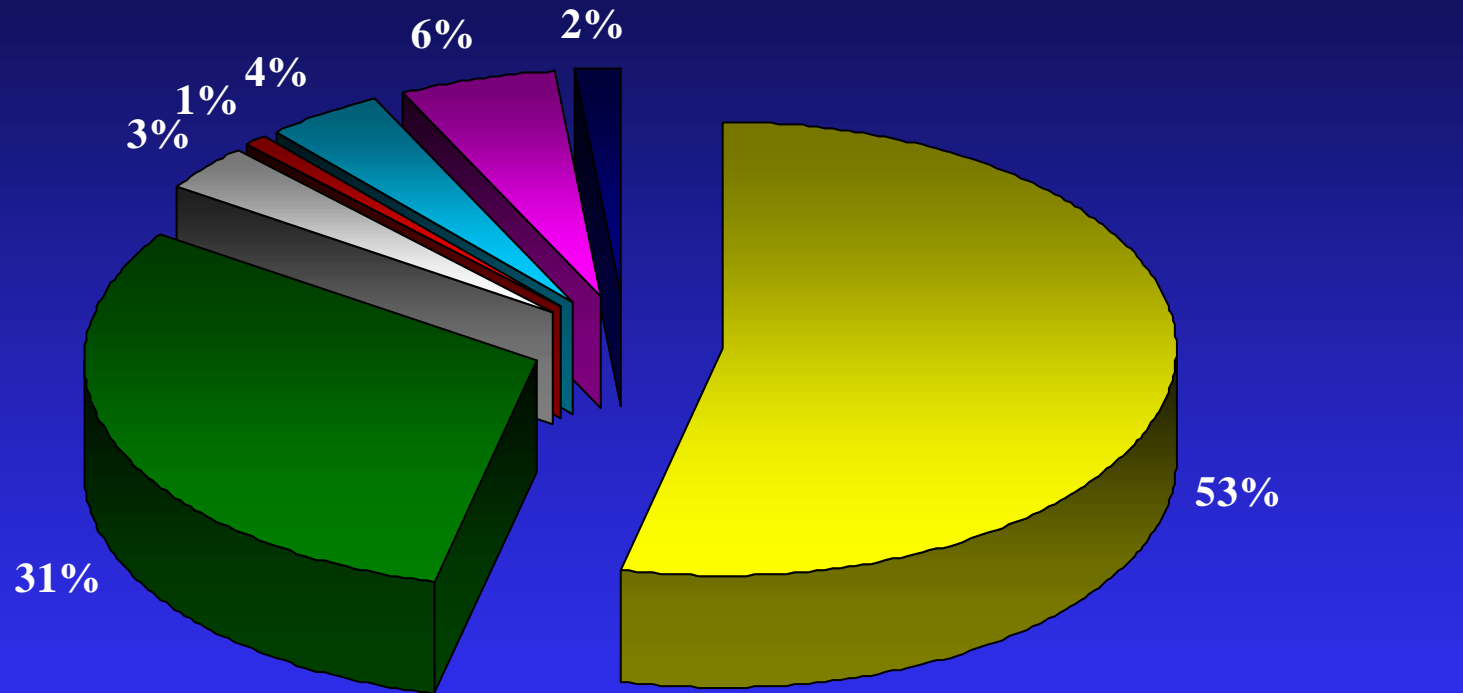
The older children typically receive different services than the younger children.

Distribution of Service Episodes, 2003

Children Aged 13 and up

(% of all service episodes falling into each service category)

(Data Source: CPMS)



■ Outpatient Mental Health

■ Mental Health Residential

■ Drug / Alcohol Residential

■ All Other Services

■ Outpatient Drug / Alcohol

■ Mental Health Day Treatment

■ Crisis Services

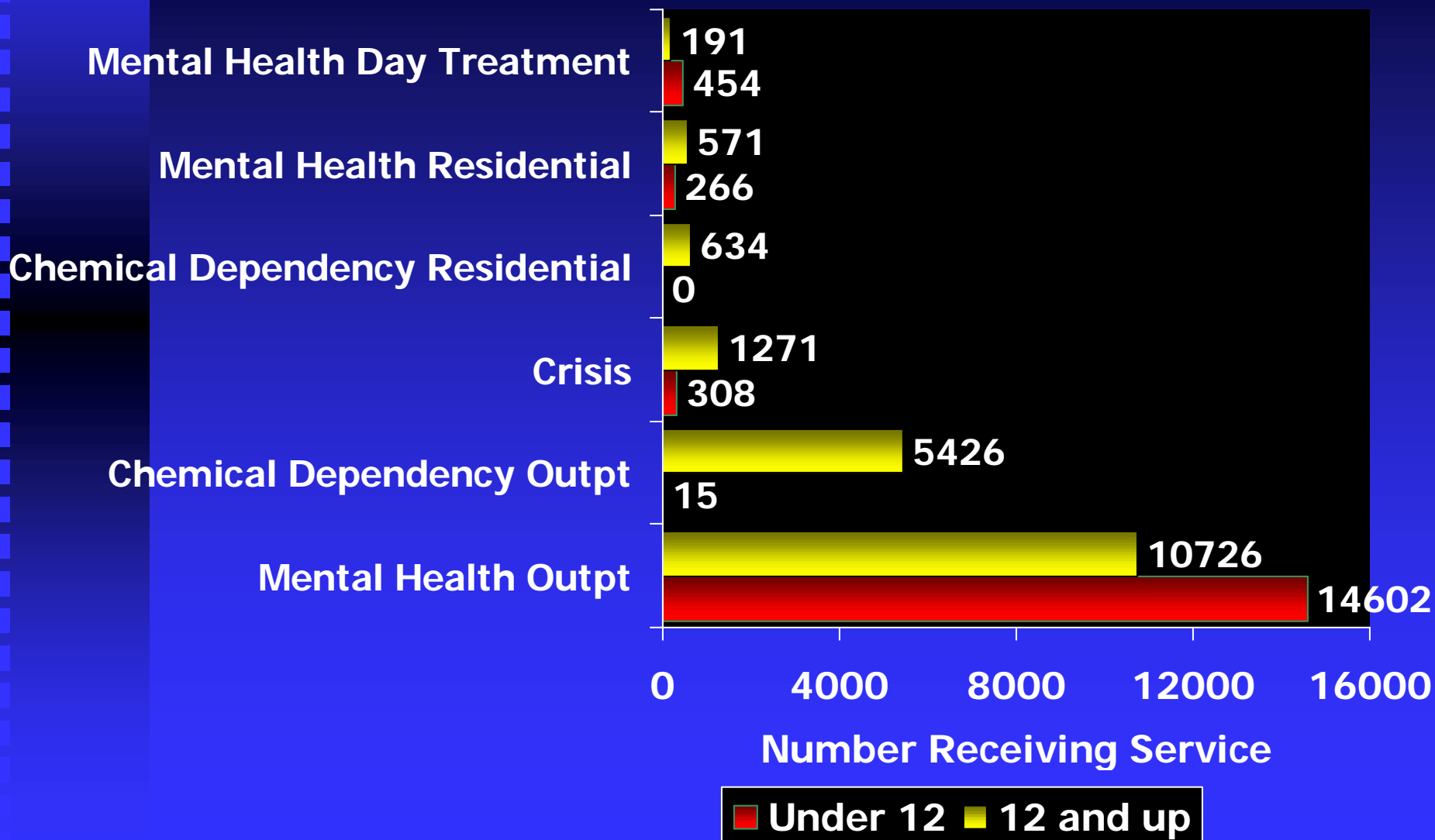
The children receiving mental health outpatient services or psychiatric day treatment services are more likely to be under 12 than over 12.

The children receiving chemical dependency services of any kind, psychiatric residential services, or crisis services are more likely to be over 12 than under 12.

Number of Children Receiving Each Type of Service, 2003

By Age Group

(Data Source: CPMS)

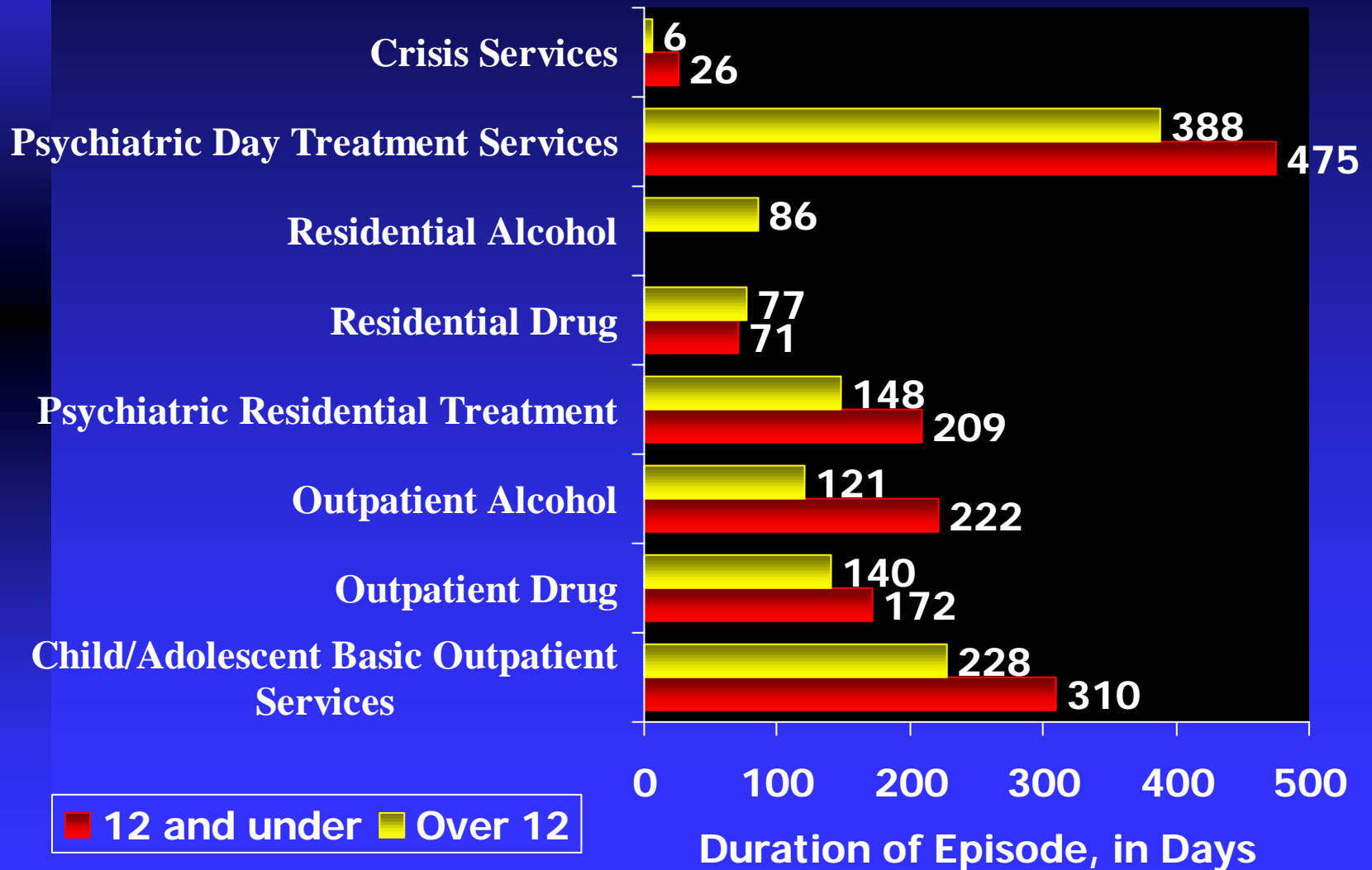


The duration of a service episode typically depends, in part, both on the type of service and on the age of the child.

Mean Duration of Service Episodes Ending in 2003

By Service Type and Age Group

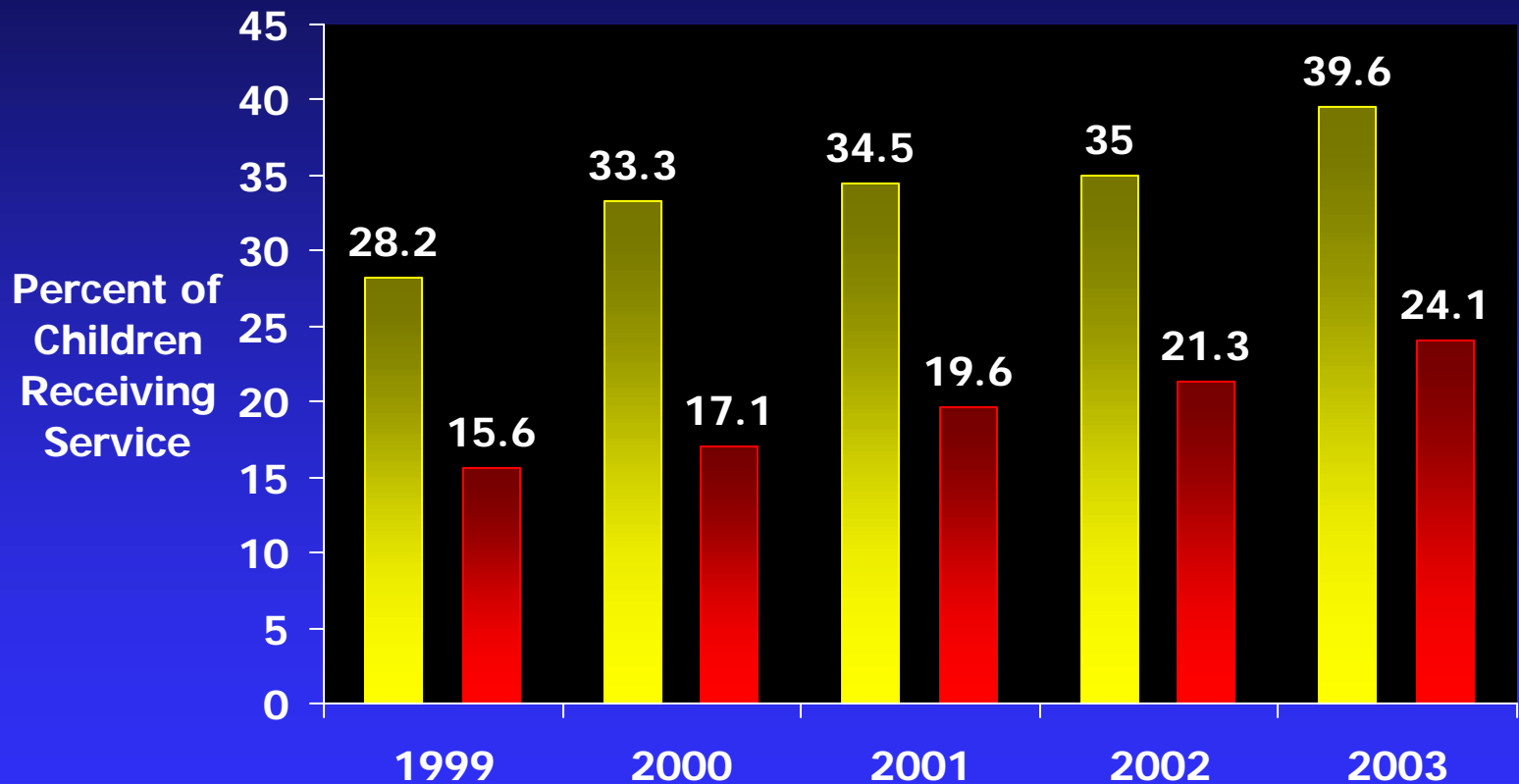
(Open to Close Date. Data source: CPMS)



Has there been any change in the nature or frequency of services provided to children in treatment?

There has been an increase in the frequency with which Medicaid-eligible children receive case management and medication management services through mental health managed care organizations.

Percent of All MHO-Serviced Children Receiving Case Management and Medication Management, 1999-2003 *(Data source: MMIS)*

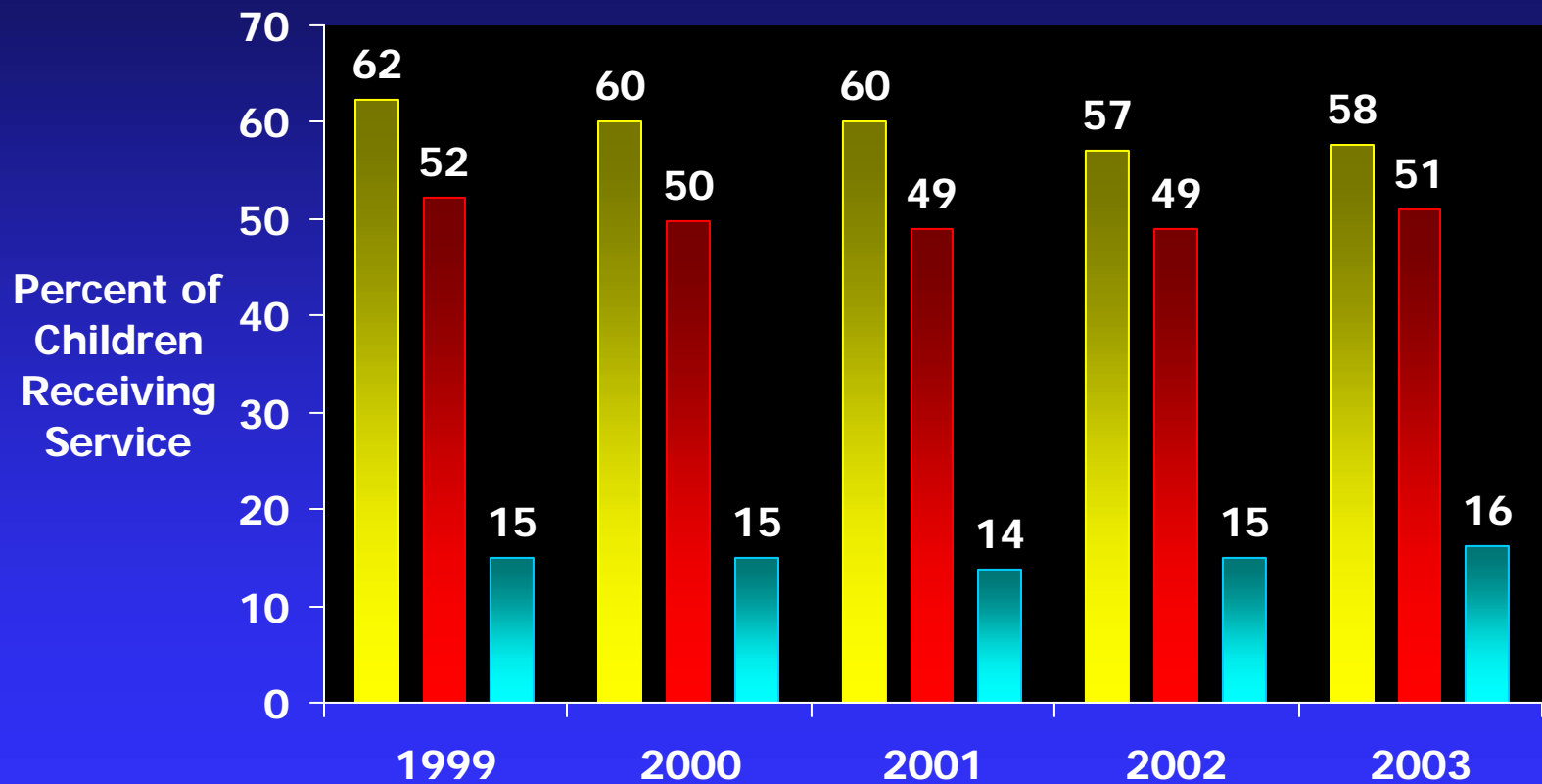


■ % Receiving Case Management

■ % Receiving Medication Management

There has been relatively little change in the frequency with which Medicaid-eligible children receive individual, family, and/or group therapy services through mental health managed care.

Percent of All MHO-Serviced Children Receiving Individual, Family, and/or Group Therapy, 1999-2003 (Data source: MMIS)



■ % Receiving Individual Therapy ■ % Receiving Family Therapy
■ % Receiving Group Therapy

What diagnoses are most common among the children treated in MHO settings?

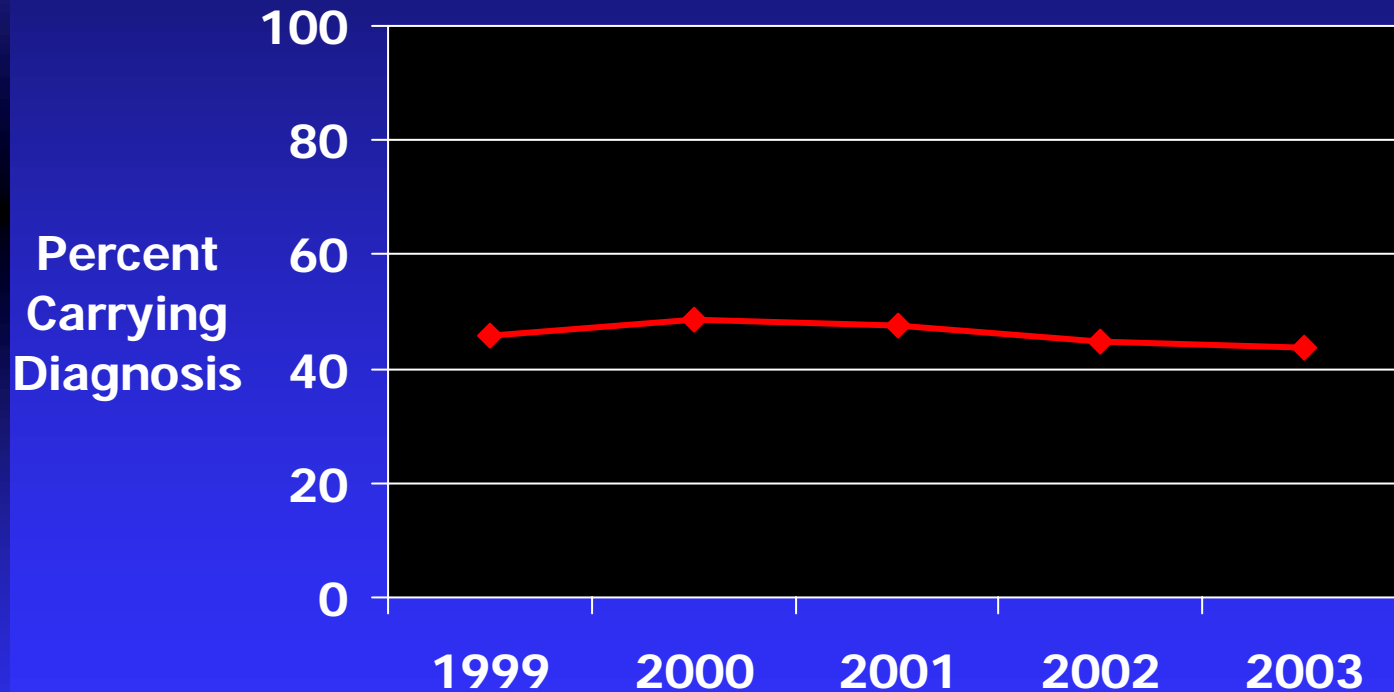
The most common diagnoses are adjustment disorders, conduct / oppositional defiant disorders, ADHD, depressive disorders, and anxiety disorders (particularly PTSD).

The probability that a child carries one of these diagnoses has changed little over the past 5 years. Exception: The frequency with which children are being diagnosed with conduct disorder / oppositional defiant disorder appears to be decreasing.

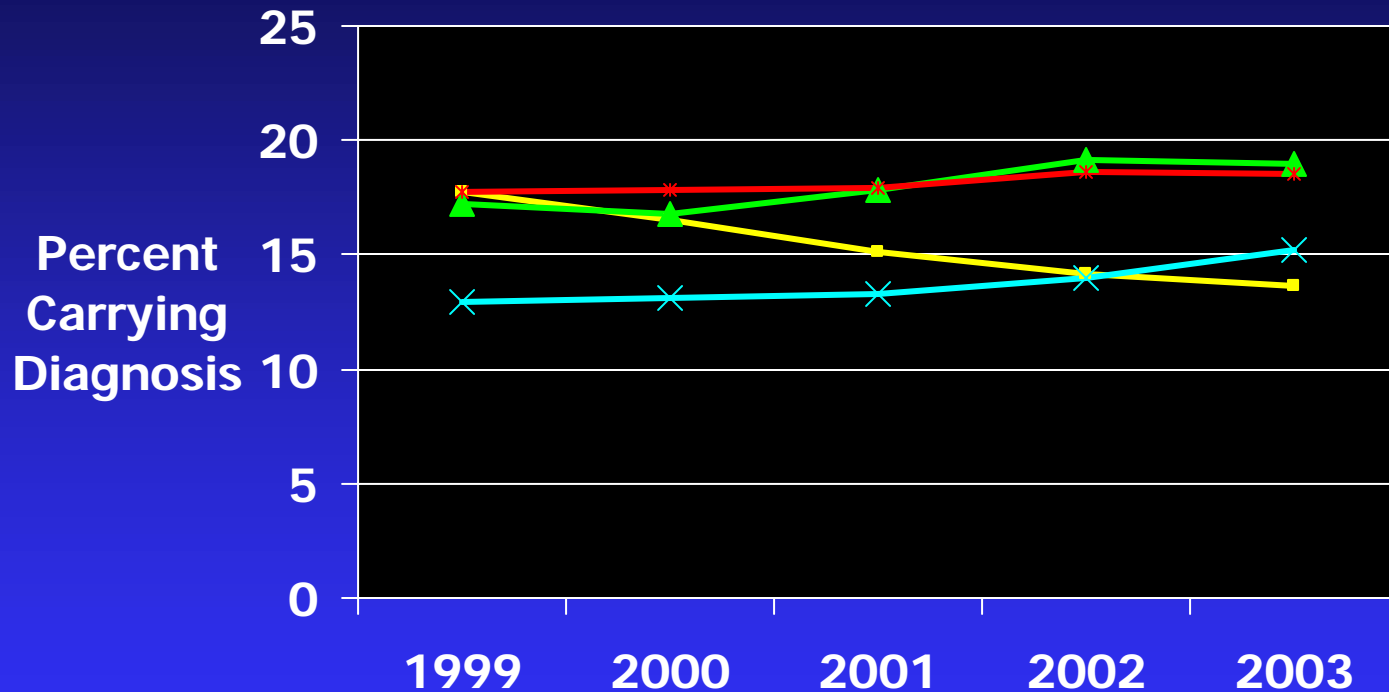
Percent of All MHO-Serviced Children Carrying Diagnoses Related to Adjustment Disorder / Relationship Problems

1999-2003

(Data source: MMIS)



Percent of All MHO-Serviced Children Carrying Other Common Diagnoses 1999-2003 *(Data source: MMIS)*



- % with Conduct Dx / Oppositional Defiant Dx Diagnosis
- ▲ % with ADHD Diagnosis
- × % with Depressive Dx Diagnosis
- * % with Anxiety Disorder Diagnosis

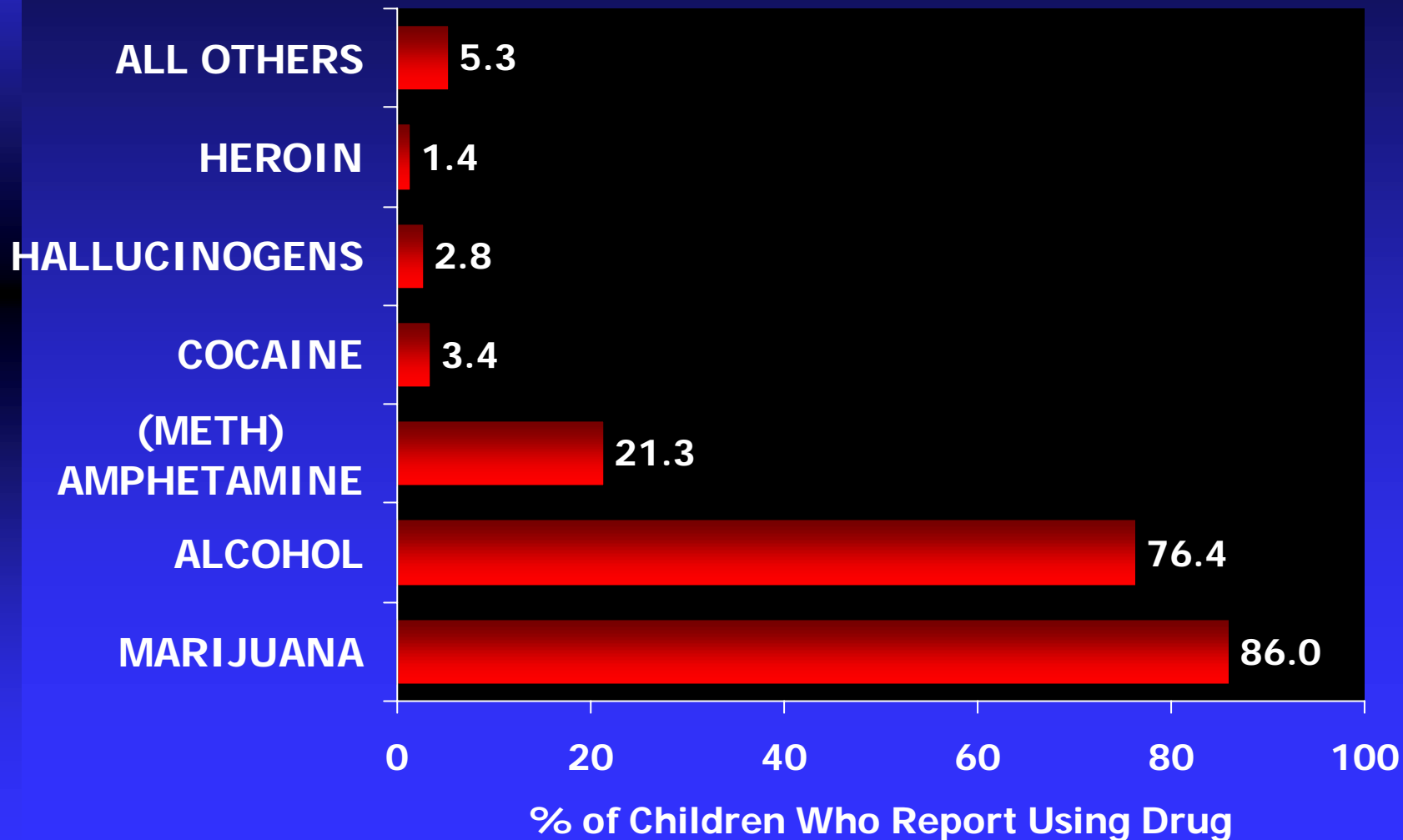
Analyses of data on all children
who received chemical dependency services
between 1/1999 and 12/2003

Marijuana and alcohol are the drugs most commonly used (per report) by children in treatment for chemical dependency.

Methamphetamine is also used by a substantial minority of the children in treatment.

Drugs Reportedly Used by Children in Treatment with a Chemical Dependency Service Provider, 2003

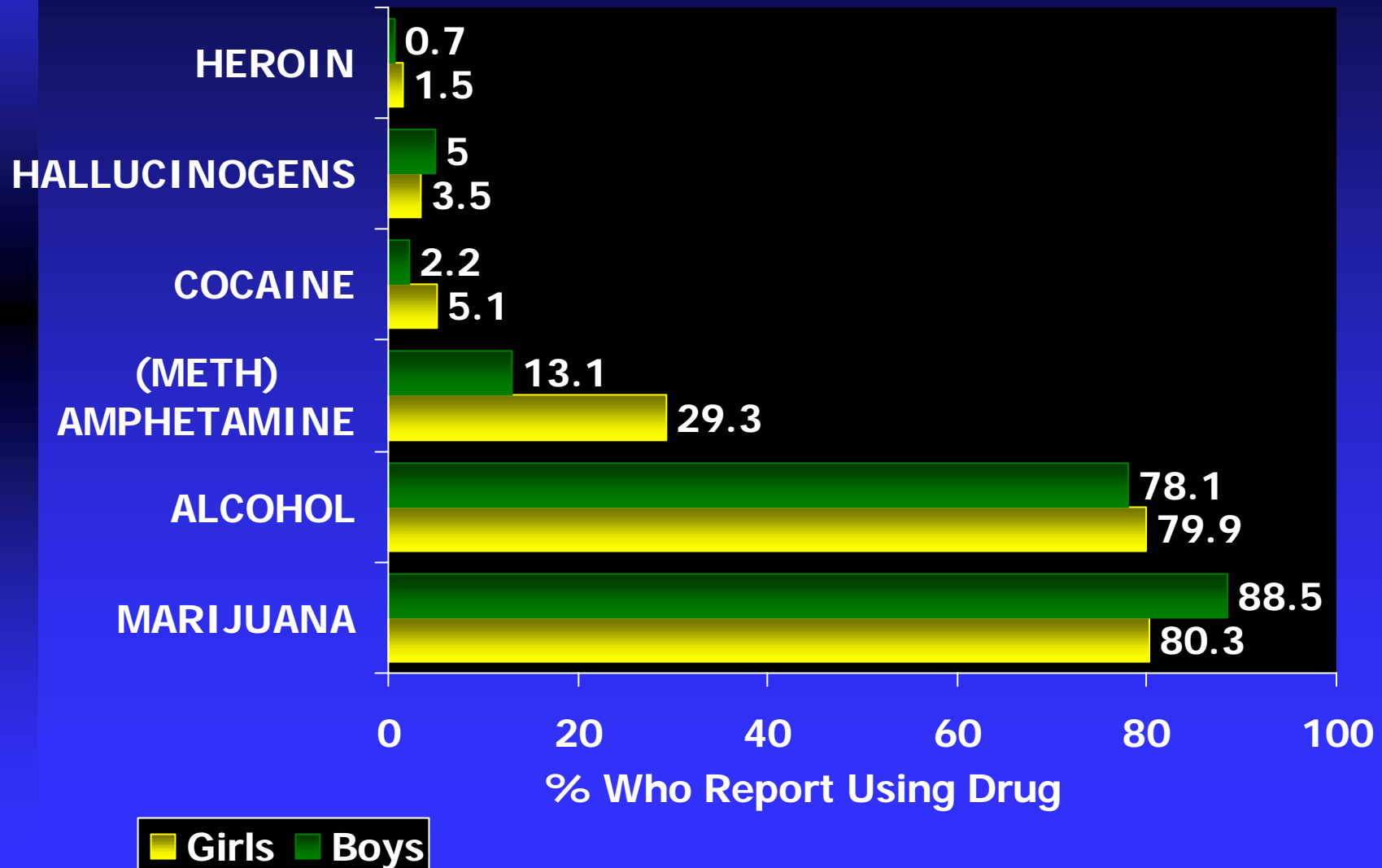
(Data Source: CPMS)



Boys in treatment for chemical dependency are more likely than girls, per report, to have used marijuana and hallucinogens. Girls in treatment for chemical dependency are more likely than boys, per report, to have used alcohol, methamphetamine / amphetamine, cocaine, and heroin.

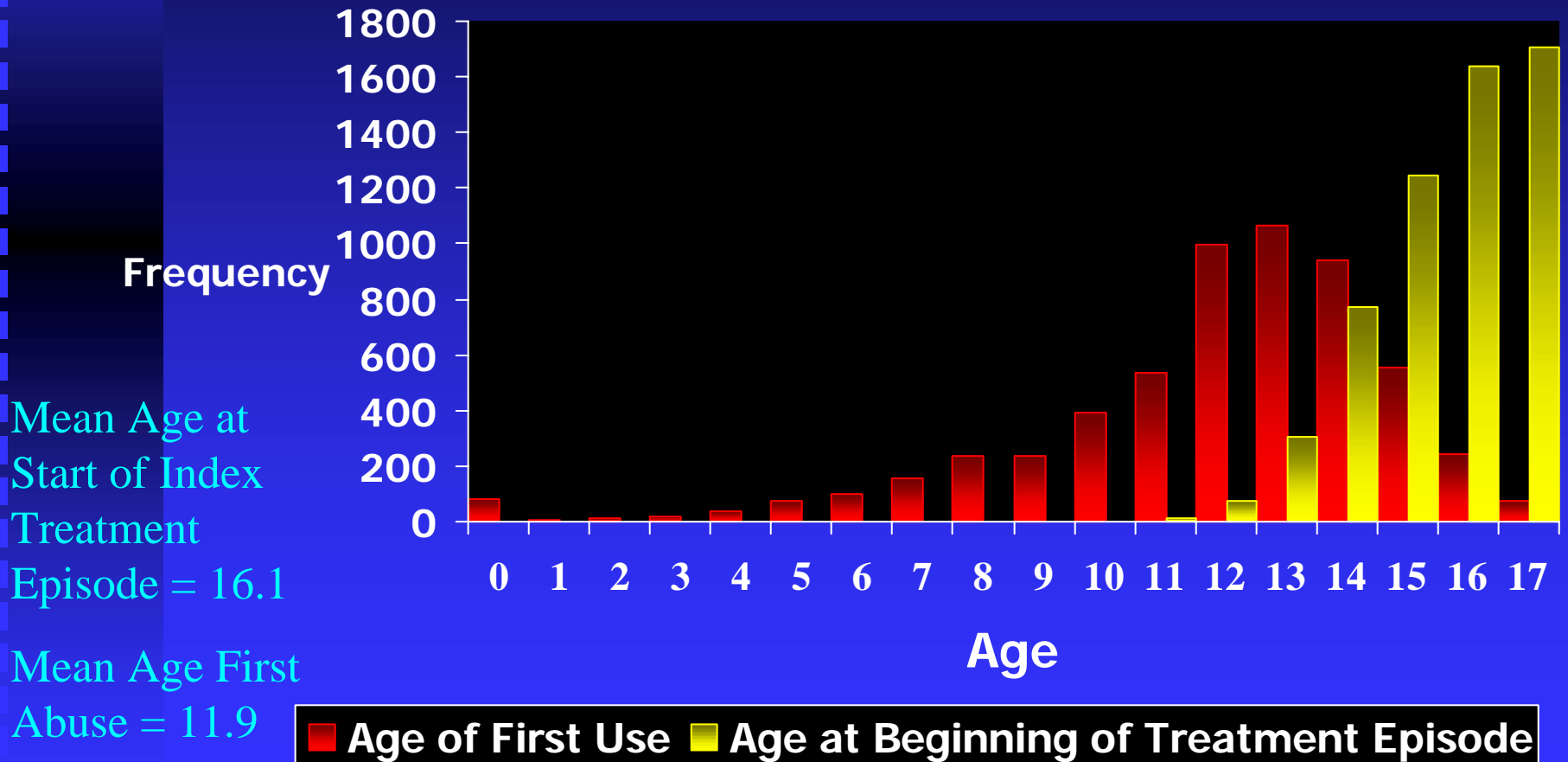
Drugs Reportedly Used by Children in Treatment with a Chemical Dependency Service Provider, 2003

By Gender (Data Source: CPMS)



There is typically a several-year lag between age of first use of alcohol/drugs and age of index treatment for chemical dependency.

Age at Beginning of Index Treatment Episode vs. Age at Onset of Drug/Alcohol Use, Per Report Children in Treatment for Chemical Dependency in 2003 (Data Source: CPMS)



Mean Age at
Start of Index
Treatment

Episode = 16.1

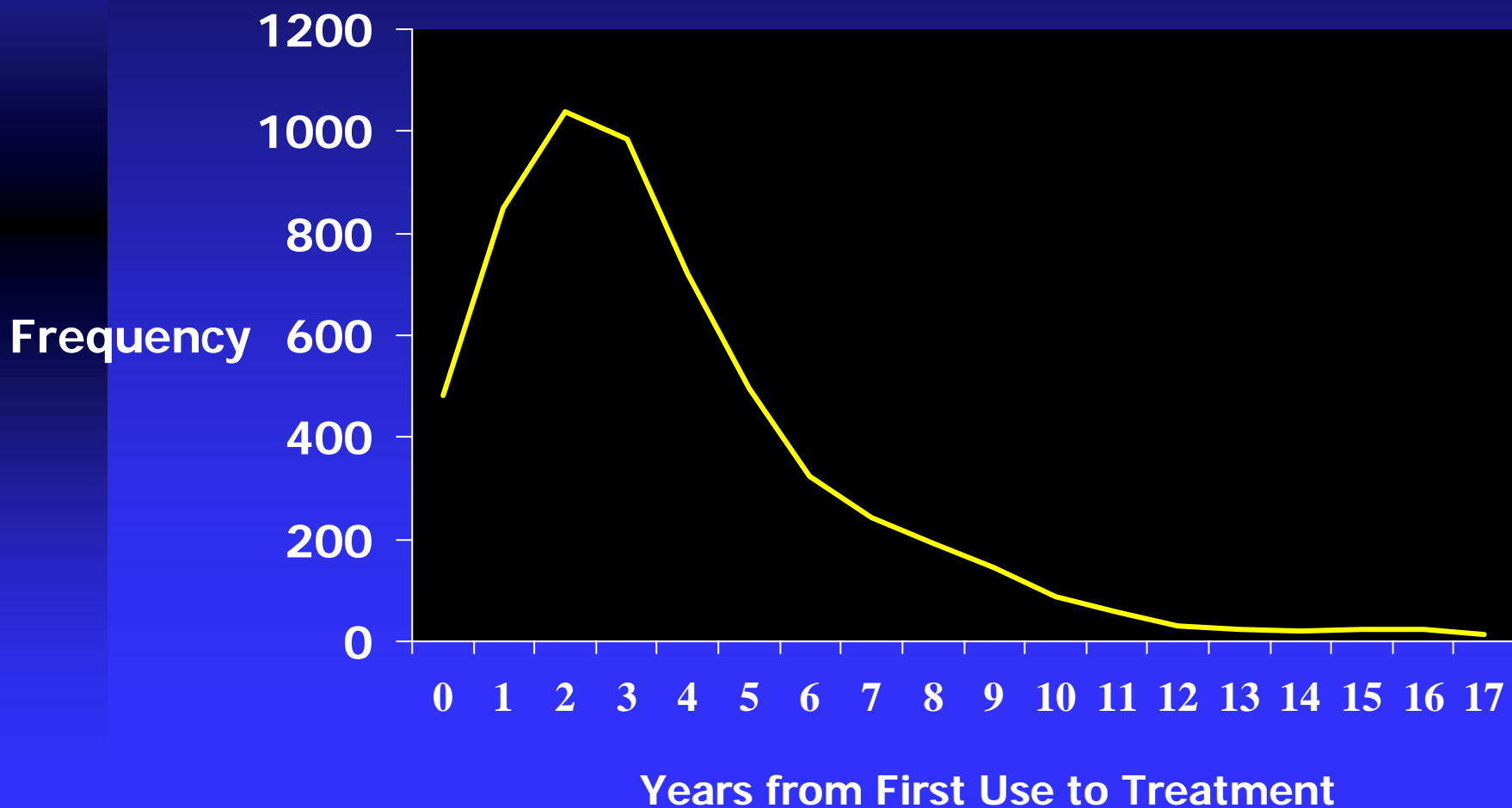
Mean Age First
Abuse = 11.9

Years from First Drug/Alcohol Use, Per Report to Onset of the Index Treatment Episode

Children in Treatment for Chemical Dependency in 2003

(Data Source: CPMS)

Mean time from first abuse to treatment = 4.2 years



The age at which children begin using psychoactive substances (per report) depends in part on the substance being used.

Psychoactive Substance	Number of children reportedly using, of those in treatment in 2003 (per CPMS)	Mean Age, First Use
Barbiturates	4	12.3
Tranquilizers	4	12.5
Alcohol	3643	12.5
Marijuana/Hashish	4057	12.6
Inhalants	64	12.9
Heroin	50	13.0
Other Sedatives/Hypnotics	17	13.1
Non-Rx Methadone	2	13.5

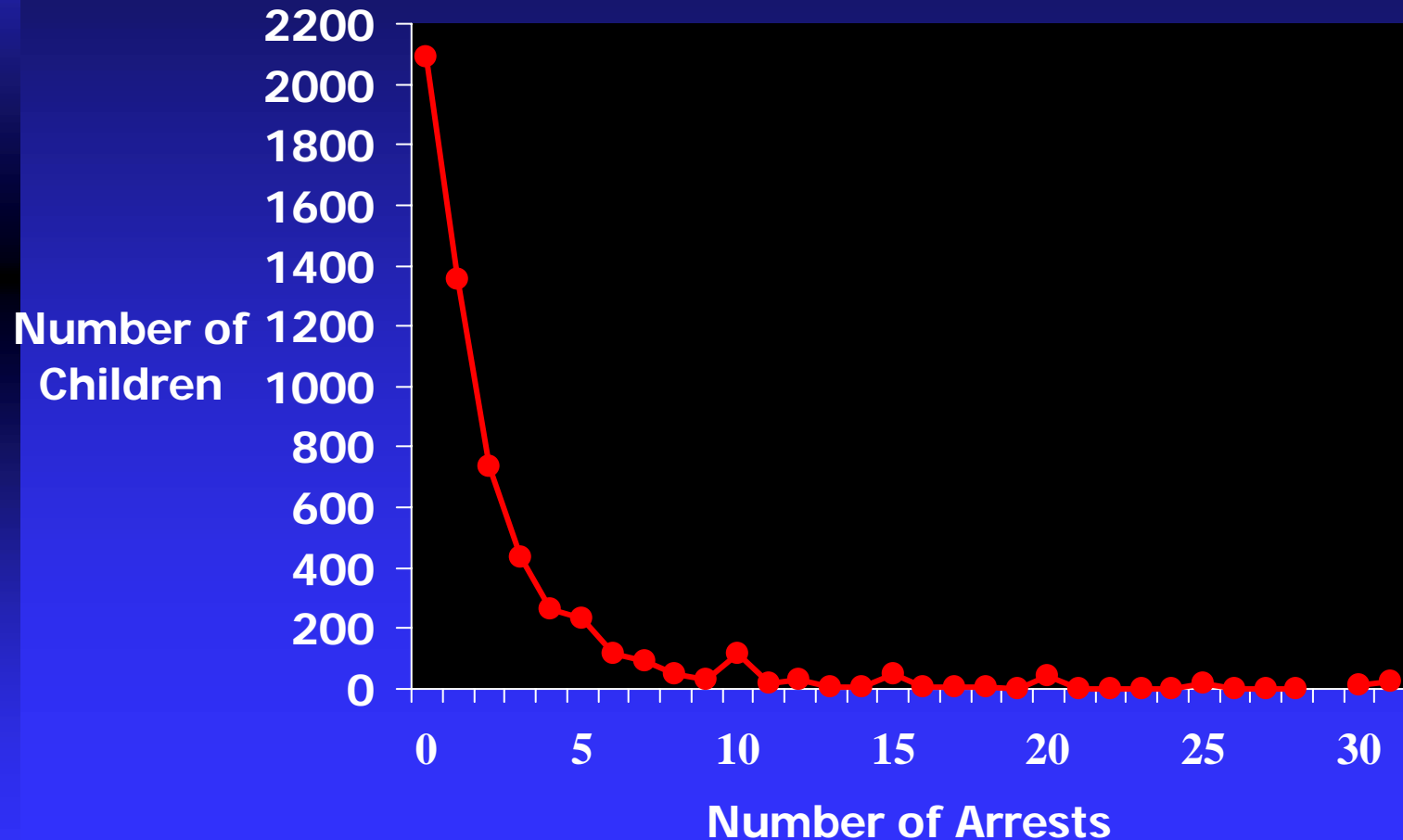
Psychoactive Substance	Number of children reportedly using, of those in treatment in 2003 (per CPMS)	Mean Age, First Use
Hallucinogens	116	13.6
Cocaine	154	13.9
Amphetamines/ Methamphetamines	898	14.0
Other Opiates/Synthetics	71	14.1
OTC	43	14.1
PCP	6	14.5

The typical child in treatment for chemical dependency has been arrested at least once (per report) in the 5 years preceding treatment.

Distribution of Arrests in Past 5 Years for Children in Treatment for Chemical Dependency, 2003

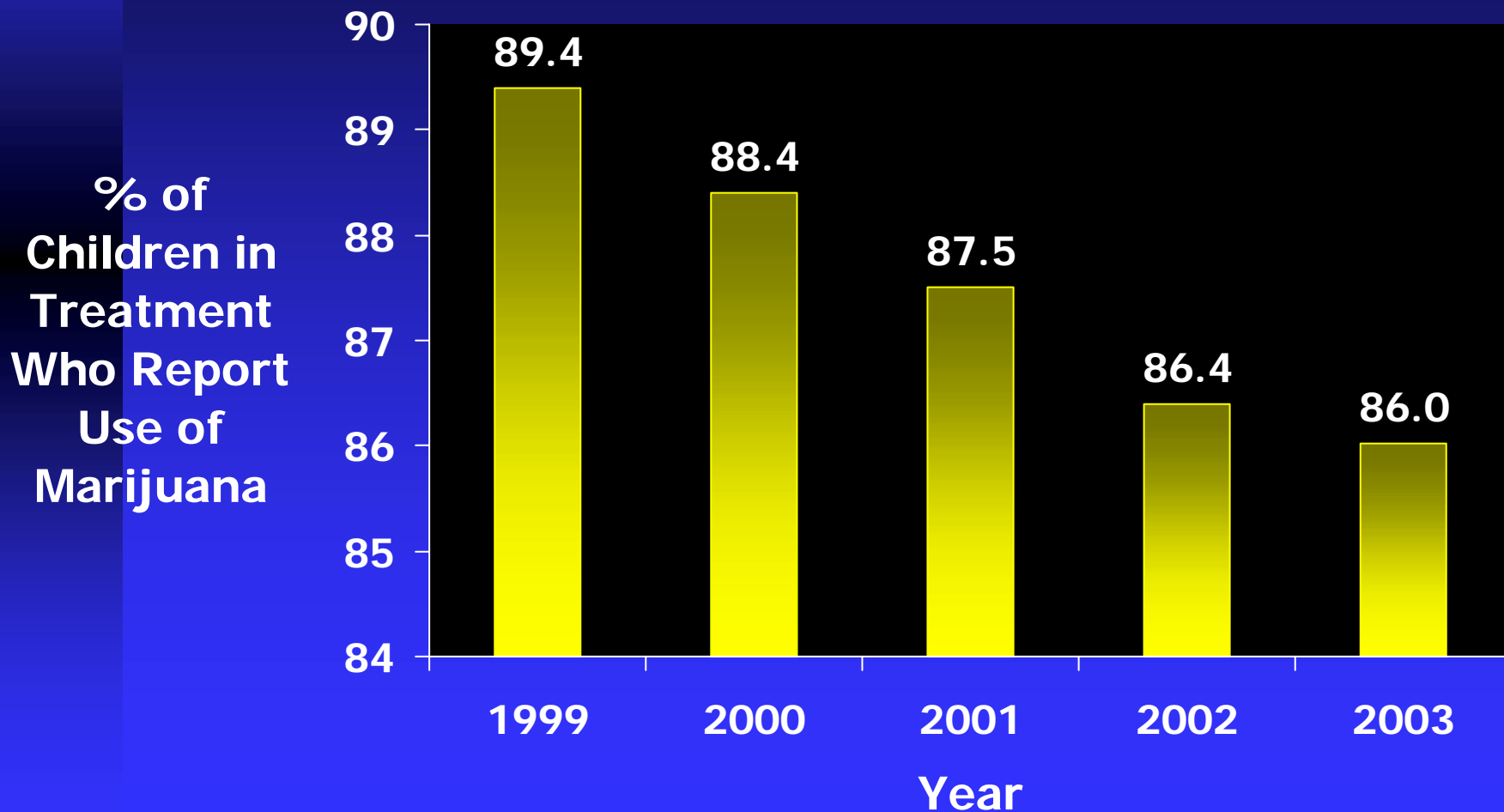
(Mean reported arrests = 2.6 (+/- 6.2); Median = 1)

(Data Source: CPMS)

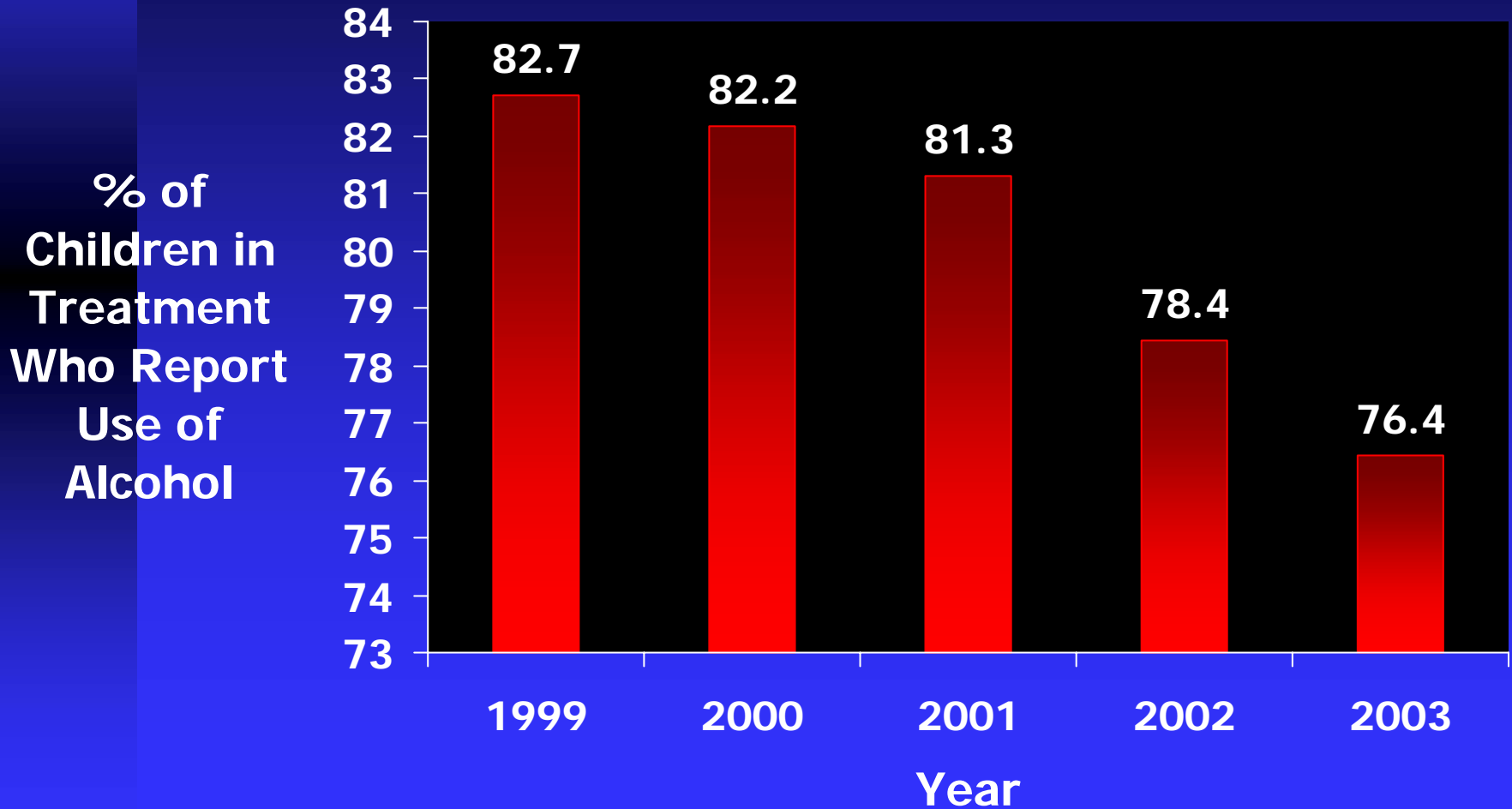


Among children in treatment for chemical dependency, reported use of marijuana, alcohol, hallucinogens, and inhalants has decreased over the past 5 years.

Marijuana Use, Per Report, by Children in Treatment with a Chemical Dependency Service Provider 1999-2003

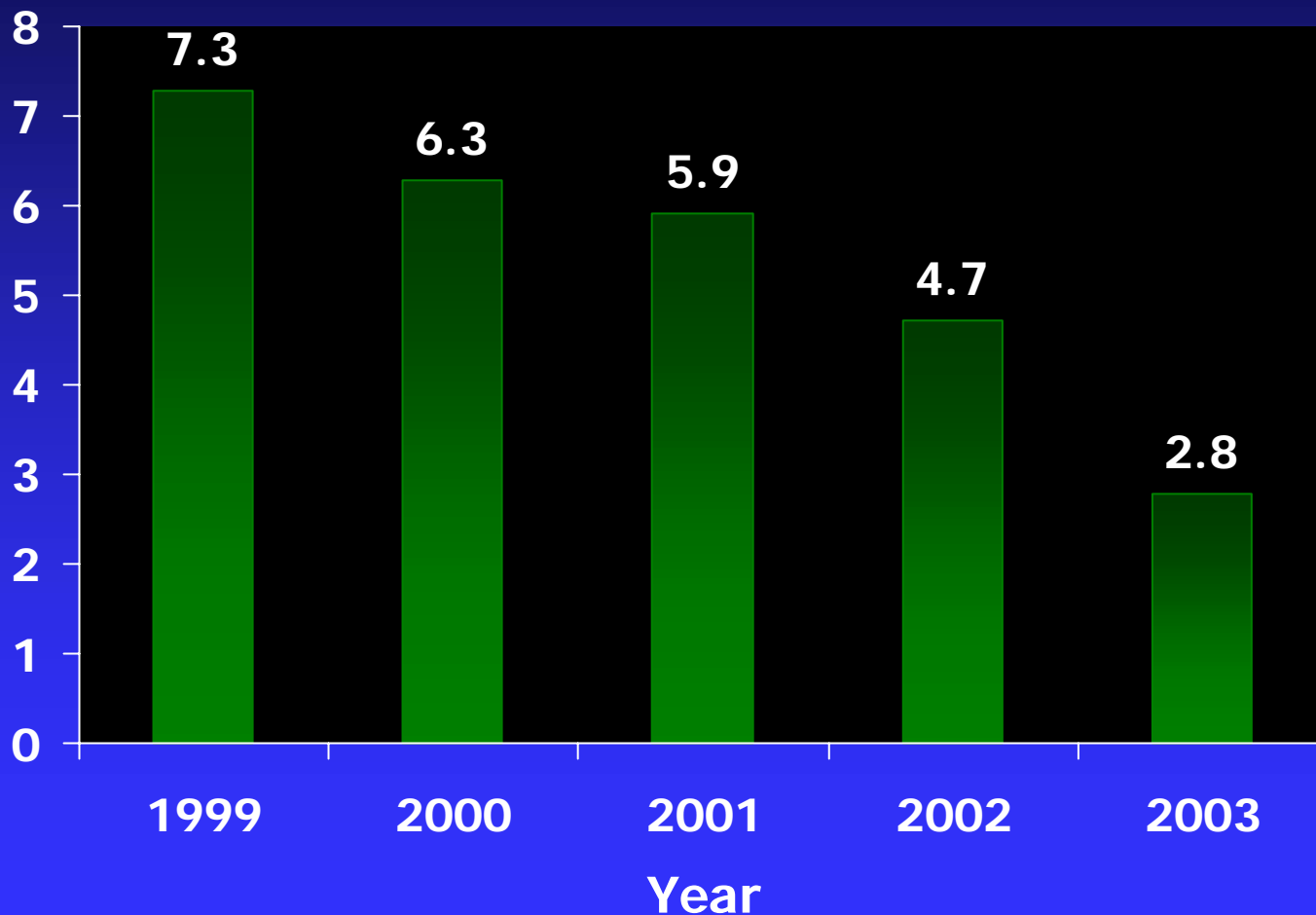


Alcohol Use, Per Report, by Children in Treatment with a Chemical Dependency Service Provider 1999-2003

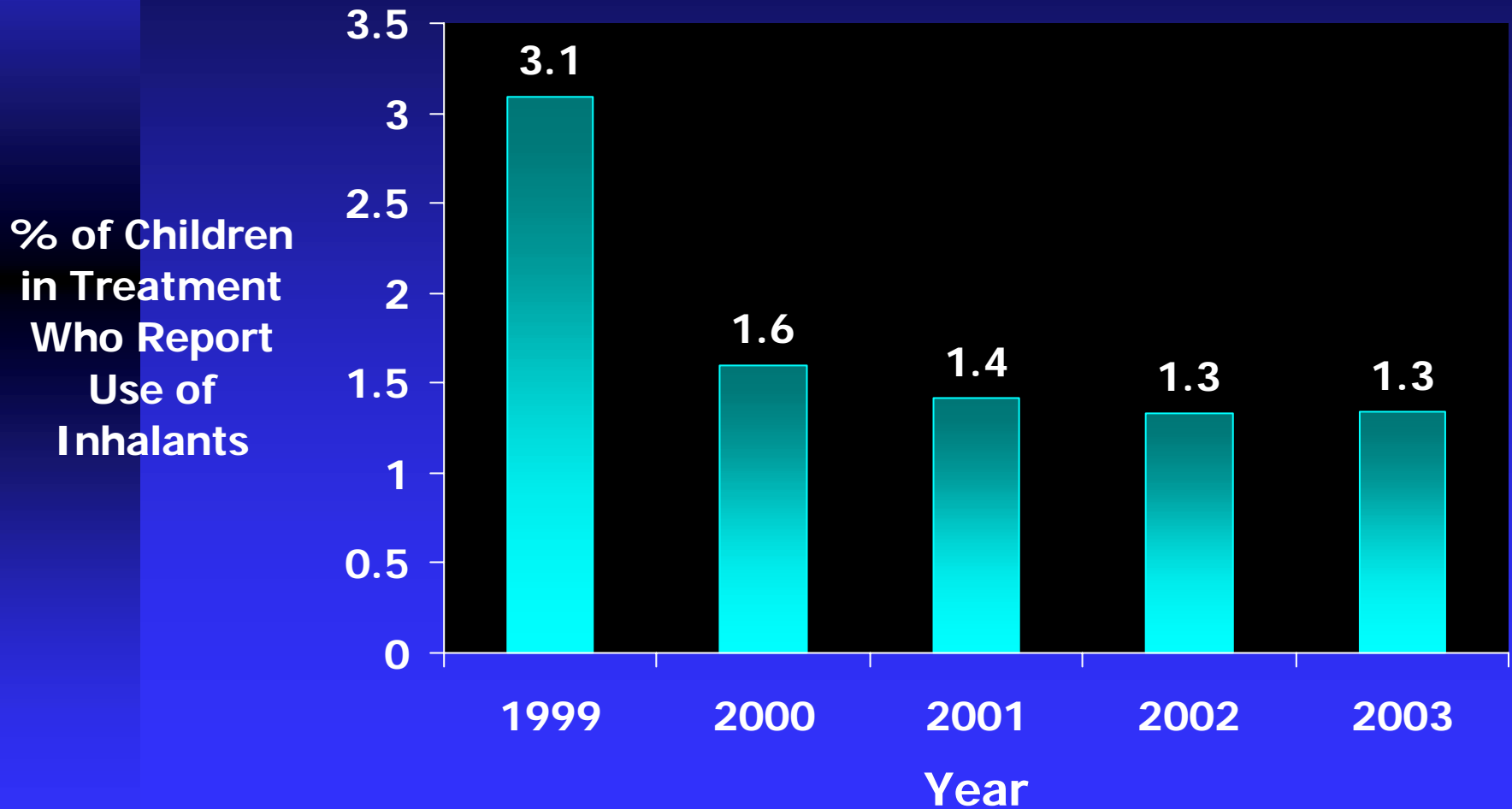


Hallucinogen Use, Per Report, by Children in Treatment with a Chemical Dependency Service Provider 1999-2003

% of Children
in Treatment
Who Report
Use of
Hallucinogens

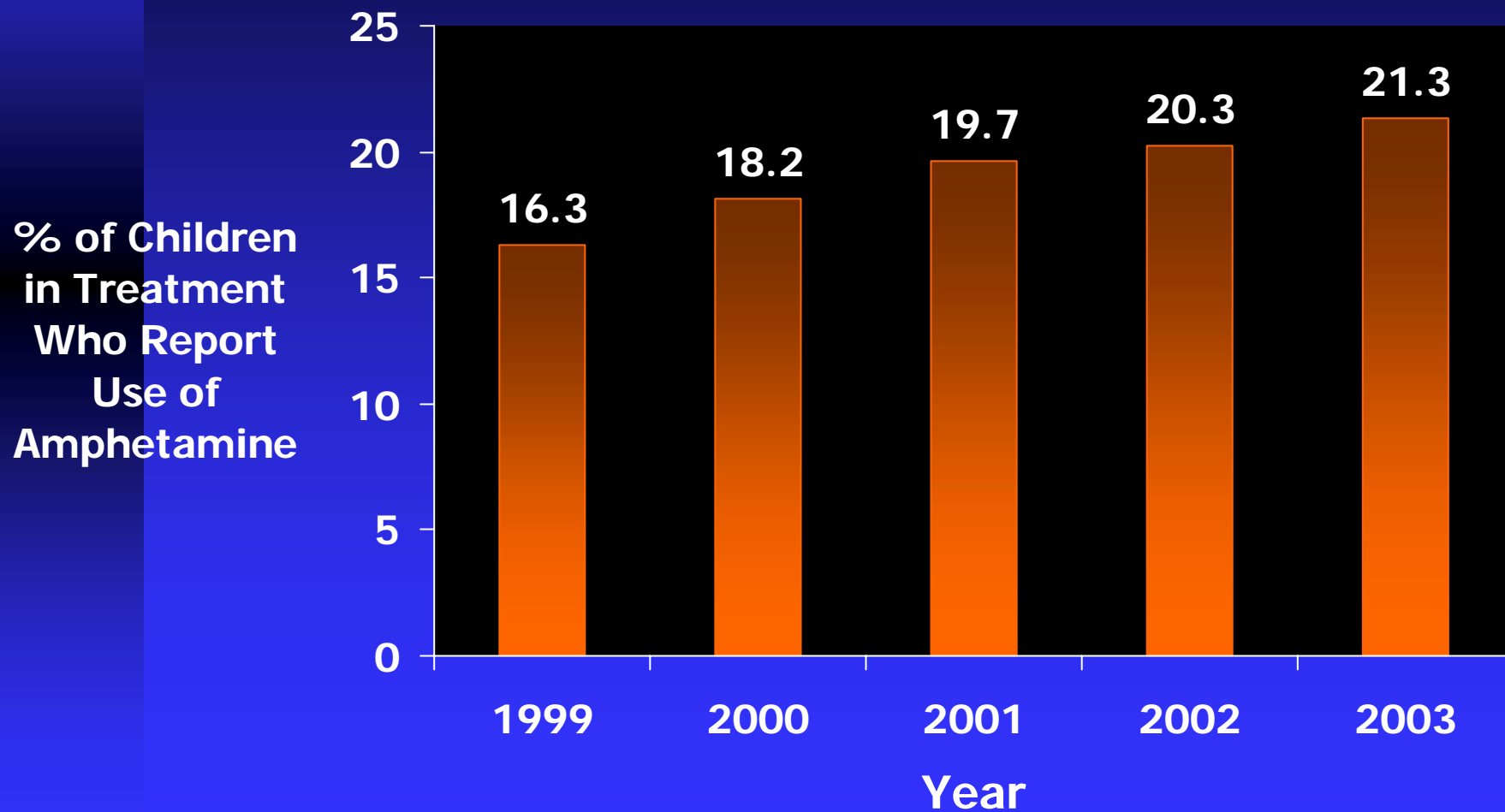


Inhalant Use, Per Report, by Children in Treatment with a Chemical Dependency Service Provider 1999-2003



Among children in treatment for chemical dependency, reported use of amphetamines / methamphetamines has increased over the past 5 years.

Amphetamine/Methamphetamine Use, Per Report, by Children in Treatment with a Chemical Dependency Service Provider 1999-2003



Summary

Each year, per CPMS, as many as 30,000 Oregonian children receive mental health and / or chemical dependency services through the state government.

In a typical year, about 80% of the children are in treatment for mental health problems, 15% for chemical dependency problems, and 5% for both mental health and chemical dependency problems.

The number of children in treatment increases with age, and except among very young children, the number of boys in treatment exceeds the number of girls in treatment.

The children in treatment are older and ethnically more diverse than they were five years ago.

Most services are provided on an outpatient basis. In 2003, almost 90% of service episodes were outpatient mental health services (73%) or outpatient chemical dependency services (15%).

The duration of service episodes ranges widely, from a mean of 6 days (crisis services for children over 12, in 2003) to a mean of 475 days (psychiatric day treatment services for children 0-12, in 2003).

The fraction of children receiving some form of case management in the course of a year has been increasing, from about 28% in 1999 to almost 40% in 2003.

The fraction of children receiving some form of medication management in the course of a year has also been increasing, from under 16% in 1999 to over 24% in 2003.

The fraction of children receiving individual, family, and group therapy in the course of a year has changed little. About 60% of the children in treatment receive individual therapy, about 50% receive family therapy, and about 15% receive group therapy.

There has been little change in the diagnoses carried by children in treatment. About 45% of the children carry a diagnosis of adjustment disorder or parent-child problem. Conduct / oppositional defiant disorders, depressive disorders, ADHD, and anxiety disorders are each diagnosed in about 10 to 20% of the children.

Marijuana and alcohol are the drugs most commonly used by children in treatment for chemical dependency. In 2003, 86% of the children reported use of marijuana, and 77% reported use of alcohol.

Methamphetamines / amphetamines are also used by a substantial minority of the children in treatment. 21% reported use of these drugs in 2003.

In 2003, the boys in treatment for chemical dependency were more likely than the girls to report having used marijuana (88.5% vs. 80%) and hallucinogens (5% vs. 3.5%).

The girls were more likely than the boys to report having used alcohol (80% vs. 78%), amphetamines (29% vs. 13%), cocaine (5% vs. 2%), and heroin (1.5% vs. 0.7%).

Among the children treated in 2003 for chemical dependency, there was, on average, a 4-year lag between first use of alcohol/drugs and the beginning of the index treatment episode.

The age at which children begin using psychoactive substances (per report) depends in part on the substance being used. On average, children begin using alcohol and marijuana at age 12 ½, inhalants and heroin at age 13, hallucinogens at age 13 ½, and cocaine and amphetamines at age 14.

The typical child in treatment for chemical dependency reports having been arrested at least once in the past 5 years (in 2003, mean number of arrests = 2.6, median = 1).

Among children in treatment for chemical dependency, reported use of marijuana, alcohol, hallucinogens, and inhalants has decreased over the past 5 years. Reported use of amphetamines / methamphetamines, however, has steadily increased.

Questions / Comments