Hallucinogens are drugs that disrupt the interaction of nerve cells and the neurotransmitter serotonin to produce profound distortions in a person's reality perceptions. A number of drugs have hallucinogenic properties. The questions assessing hallucinogen use in the *Hawaii Student Alcohol, Tobacco, and Other Drug Use Study* refer to the use of LSD, PCP, and/or psilocybin mushrooms.

The effects of hallucinogens are often unpredictable and can result in both pleasant and unpleasant experiences. Hallucinogens distort movements and shapes, heighten senses, and give rise to the perception that time is standing still. A tolerance to the drug's effects can develop quickly. Long-term effects include flashbacks and persistent psychosis, which result in a diminished capacity of the person to recognize reality and think rationally. For more information on hallucinogens go to:

#### http://www.nida.nih.gov/ResearchReports/Hallucinogens

### Hawaii Prevalence Rates

Over the years, prevalence rates for hallucinogens have typically been substantially higher than other illicit drugs, excluding marijuana, among older students. In 2002, reports of ecstasy use by Hawaii students in grades 10 and 12 surpassed reports of hallucinogen use by students in the In 2003, reports of same grades. hallucinogen use are similar to reports of ecstasy use, both of which are rivaled in popularity only by marijuana and inhalants. Ecstasy, however, is special type of hallucinogen that has both hallucinogenic and stimulant properties. Thus, hallucinogens remain one of the most popular illicit drugs among Hawaii students.

In Hawaii, 0% of 6th graders, 1% of 8th graders, 3% of 10th graders, and 7% of 12th graders have tried hallucinogens at least once in their lifetimes. Hawaii lifetime prevalence reports for use of hallucinogens are much lower than nationwide reports in grades 8 (4%), 10 (7%), and 12 (11%).

Monthly prevalence reports for the use of hallucinogens in Hawaii are 1% in grades 8, 10, and 12. Nationwide, 1% of 8th graders and 2% of 10th and 12th graders reported using hallucinogens in the past 30 days.

# Trends in Use

Lifetime prevalence reports for hallucinogen use in Hawaii were on the rise from 1991 to 1993 across all grades. In 1996, the upward trajectory continued in all grades except grade 10 which witnessed a decrease. However, prevalence reports of 10th graders went back up in 1998. Since that time, lifetime prevalence reports for hallucinogen use started to decline across all grades. In 2003, the decline in hallucinogen use continued with a 1 percentage point decrease in grade 8, a 2 percentage point decrease in grade 10, and a 3 percentage point decrease in grade 12. Reports of monthly hallucinogen use began a downward trajectory in 1998 and have continued to decrease slightly over the years. Declines noted in Hawaii coincide with nationwide trends.

# Hawaii Subgroup Differences

Although sex differences are virtually nonexistent in regards to hallucinogen prevalence rates, ethnic differences over the years have been another story. White students have consistently had the highest hallucinogen prevalence reports. In 2003, a greater proportion of White students in grades 8, 10, and 12 reported they had tried hallucinogens than Chinese, Filipino, Japanese, and Native Hawaiian students in the same grades. In grades 10 and 12, at least twice as many White students reported having tried hallucinogens than students from other prevalent ethnic groups in Hawaii. For instance, in grade 12, 13% of the White students reported trying hallucinogens, compared to 5% of Native Hawaiian students, 4% of Filipino and Japanese students, and 1% of Chinese students.

Over the years, Hawaii County has had among the highest lifetime hallucinogen prevalence rates of all counties, with extreme differences often noted in the 12th-grade level. In 2003, 13% of the seniors in Hawaii County reported having tried hallucinogens, compared to 6% or fewer in all other counties. In grade 10, Maui County has lifetime hallucinogen prevalence rates that are as high as Hawaii County (5% each) and both are higher than the City & County of Honolulu (3%) and Kauai County (2%). In grade 8, Hawaii County has three times as many students reporting they have tried hallucinogens (3%) as all other counties (1%).

### Harmfulness

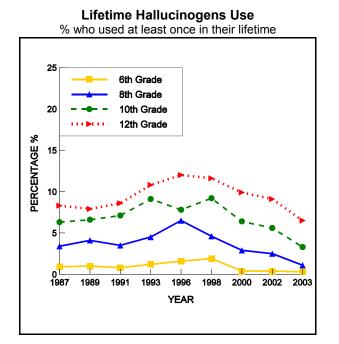
The majority of Hawaii students view the occasional use of hallucinogens as entailing a lot of harm for the user, with 65% of 6th graders, 72% of 8th graders, 75% of 10th graders, and 78% of 12th graders reporting that occasional use of the hallucinogens entails a lot of harm for the user. The percentages of Hawaii students reporting harm associated with using hallucinogens are substantially higher than nationwide percentages in the same grade. Nationwide, 28% of 8th graders, 41% of 10th graders, and 36% of 12th graders associated harm with using hallucinogens occasionally.

The percentage of students associating harm with hallucinogen use was on the rise from 1998 to 2000. In 2002, perceived harm perceptions associated with hallucinogen use continued to increase among 6th graders, but declined among students in all other grades. In 2003, perceived harmfulness perceptions associated with hallucinogen use are higher than 2000 reports in grades 6 and 8, but reports have declined in grades 10 and 12.

## Availability

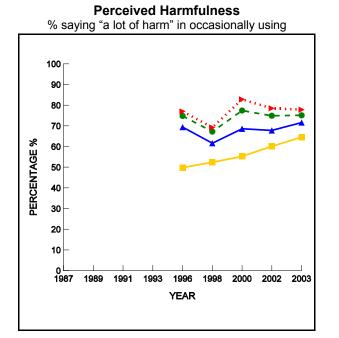
Hallucinogens are viewed as less available by Hawaii students in grades 8 (8%), 10 (17%), and 12 (25%), than by students nationwide in the same grades (14%, 23%, and 47% respectively). Perceived availability of hallucinogens in Hawaii changed very little from 1998 to 2002, but declined substantially in 2003 among students in grades 8, 10, and 12. The current decline in availability perceptions for the drug corresponds with a notable decrease in Hawaii hallucinogen prevalence rates that occurred in 2003.

Hallucinogens Hawaii Trends in Prevalence Harmfulness, and Availability Sixth, Eighth, Tenth, and Twelfth Graders, 1987-2003

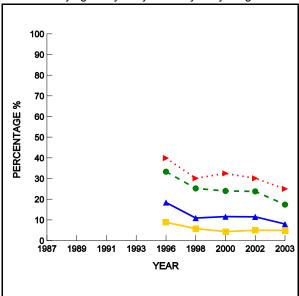


% who used in past 30 days **PERCENTAGE %** YEAR

**30-Day Hallucinogens Use** 



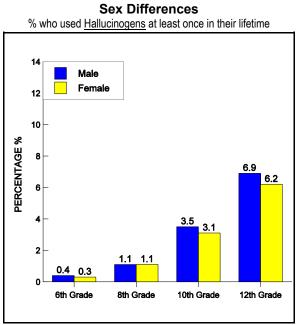
Availability of Hallucinogens

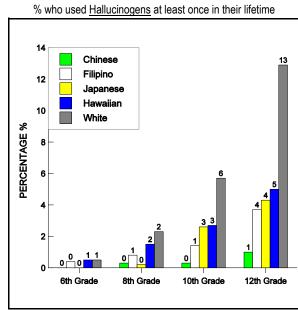


% saying "fairly easy" or "very easy" to get

## Hallucinogens Hawaii Subgroup Differences in Lifetime Prevalence Reports, by Grade, 2003

(Entries are percentages %)





**Ethnic Differences** 

**County Differences (Place of Residence)** 

% who used Hallucinogens at least once in their lifetime 14 13 C&C of Honolulu Hawaii County 12 Kauai County Maui County 10 **PERCENTAGE %** 

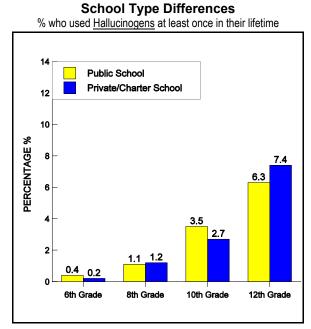
8th Grade

8

6

٥ 0

6th Grade



Notes: County includes public, private, and charter school students who reside in that particular county.

12th Grade

10th Grade

65

5

#### Hallucinogens Table Hawaii Trends in Prevalence, Harmfulness, and Availability Grades 6 through 12, 1987-2003

	Hawaii Results									Nationwide Results
	1987	1989	1991	1993	1996	1998	2000	2002	2003	2003
Lifetime Prevalence <sup>a</sup>										
6th Grade	0.9	1.0	0.8	1.2	1.6	1.9	0.4	0.4	0.3	_
7th Grade	-	-	-	-	-	-	-	-	0.7	_
8th Grade	3.4	4.1	3.5	4.5	6.5	4.6	2.9	2.5	1.1	4.0
9th Grade	-	_	_	_	_	_	_	_	1.9	_
10th Grade	6.3	6.6	7.1	9.1	7.8	9.2	6.4	5.6	3.3	6.9
11th Grade	-	_	_	_	_	_	_	_	4.0	_
12th Grade	8.3	7.9	8.6	10.8	12.0	11.6	9.9	9.1	6.5	10.6
30-Day Prevalence <sup>b</sup>										
6th Grade	0.2	0.3	0.2	0.4	1.0	0.9	0.3	0.2	0.2	_
7th Grade	-	-	_	-	_	_	_	_	0.4	_
8th Grade	1.0	1.6	1.3	1.5	4.2	2.8	1.4	1.3	0.7	1.2
9th Grade	-	_	_	_	_	_	_	_	0.7	_
10th Grade	1.9	2.8	2.9	3.4	4.3	3.6	2.2	1.8	1.0	1.5
11th Grade	-	-	_	-	_	_	_	_	0.9	_
12th Grade	2.2	2.6	2.8	3.5	5.3	3.1	2.0	1.7	1.1	1.8
Perceived Harmfulness <sup>c</sup>										
6th Grade	-	-	_	-	49.8	52.4	55.2	60.1	64.5	_
7th Grade	-	_	_	_	_	_	_	_	66.7	_
8th Grade	-	-	_	-	69.4	61.6	68.6	67.8	71.6	27.9
9th Grade	_	_	_	_	_	_	_	_	72.6	_
10th Grade	_	_	_	_	74.8	67.2	77.4	74.9	75.1	40.8
11th Grade	-	_	_	_	_	_	_	_	79.9	_
12th Grade	-	-	_	-	77.0	69.2	82.8	78.5	77.8	36.2
Perceived Availability <sup>d</sup>										
6th Grade	-	_	_	_	8.8	5.8	4.3	5.0	4.9	_
7th Grade	-	_	_	_	-	-	-	_	6.4	_
8th Grade	-	_	_	_	18.4	10.9	11.6	11.5	8.0	14.0
9th Grade	-	-	_	-	_	-	-	-	12.7	_
10th Grade	-	_	_	-	33.3	25.2	24.0	23.8	17.4	23.1
11th Grade	-	-	_	-	_	-	_	-	19.0	_
12th Grade	-	_	_	_	39.9	30.1	32.5	30.1	25.0	47.2

(Entries are percentages %)

(a) <u>Lifetime Prevalence</u> is the % using hallucinogens at least once in their lifetime.

(b) <u>30-Day Prevalence</u> is the % using hallucinogens at least once in the past 30 days.

(c) Perceived Harmfulness is the % reporting a "lot of harm" associated with occasional hallucinogens use.

(d) <u>Perceived Availability</u> is the % reporting "fairly easy" or "very easy" to get hallucinogens.