

The DASIS Report

July 20, 2001

Heroin— Changes In How It Is Used

In Brief

- Between 1993 and 1998, there was a growing tendency to inhale rather than inject heroin.
- Heroin inhalers sought treatment sooner than did injectors.
- Heroin inhalers were less likely than injectors to receive methadone treatment.

The National Household Survey on Drug Abuse found that the age-specific rate of first heroin use among 12 to 17 year olds increased from less than 1 per 1,000 person-years during most of the 1980s to almost 2 per 1,000 person-years from 1996 to 1998.¹ A large proportion of these new users smoked, sniffed, or snorted the drug.

Data on substance abuse treatment admissions from the Treatment Episode Data Set (TEDS), 1993 to 1998, provide a way to monitor changes in the way drugs were used by the population. These data support the conclusion that inhaling heroin was a new and growing problem among young adults in the mid-to late 1990s. Further, these data suggest that users may have progressed from inhalation to injection as the addiction took hold.

Heroin Treatment Admissions

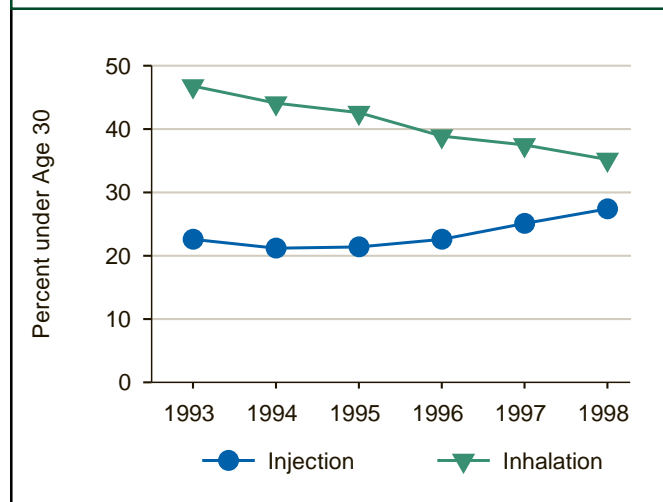
In the 1990s, there were about 1.6 million annual admissions for substance abuse treatment in publicly funded facilities. Of these, the proportion who sought treatment for heroin addiction increased from 12 percent in 1993 to 14 percent in 1998.

**Table 1.
Heroin Admissions,
by Route of Administration: 1993 to 1998**

	1993	1994	1995	1996	1997	1998
Heroin Admissions (in Thousands)	193	212	221	217	221	230
<i>Route of Administration</i>	<i>Percent</i>					
Injection	74.2	73.2	69.6	69.4	67.5	66.2
Inhalation	22.5	23.3	26.7	26.4	27.9	29.0
Smoking	1.7	1.9	2.2	2.4	2.7	2.7
Other	1.7	1.6	1.6	1.7	1.8	2.0
Total	100.1	100.0	100.1	99.9	99.9	99.9

Totals may not sum to 100.0 due to rounding.

**Figure 1.
Heroin Admissions Under Age 30,
by Route of Administration: 1993 to 1998**



Source: 1999 SAMHSA Treatment Episode Data Set (TEDS).

Historically, people treated for heroin addiction have injected the drug; in 1998, 66 percent of the people treated for heroin addiction were injectors (Table 1). However, this estimate reflects a decline from 74 percent in 1993. On the other hand, inhalation of heroin increased: in 1998, 29 percent of people treated for heroin addiction inhaled the drug, an increase from 23 percent in 1993.

Age at Admission

People who inhaled heroin and sought treatment tended to be younger than those who reported injecting heroin at the time of admission. However, the difference in age between these two groups decreased (Figure 1). In 1993, 47 percent of admissions for heroin inhalation were under 30 years of age. Only 23 percent of those injecting heroin at the time of admission were under 30.

By 1998, however, 27 percent of those reporting heroin injection were under 30, compared with 35 percent of those admitted for inhaling heroin. One explanation is that those who began by inhaling the drug eventually went on to inject it.

Duration of Use before Seeking Treatment

Those who inhaled heroin sought treatment sooner than heroin injectors (Figure 2). The median duration of use before seeking treatment was about 6.5 years for inhalers and about 11 years for injectors. There are two possible reasons for the difference. First, heroin inhalation was relatively new compared to injection; people had less opportunity to inhale heroin than to inject it. Second, people may have progressed from inhalation to injection before first seeking treatment.

First Treatment Episode

As a new drug or route of administration is introduced, it attracts a new user group, people who have not been in treatment before. A high proportion of treatment admissions for the new drug will be entering treatment for the first time. As time goes on, however, admissions will include proportionally more long-term users (who have been in treatment before) and fewer new users.

The proportion of heroin injectors entering treatment for the first time was steady from 1993 to 1998, at 18 to 19 percent (Figure 3). But there was a decline in the proportion of inhalers entering treatment for the first time. This pattern suggests that heroin inhalation was relatively new.

Figure 2.
Duration of Heroin Use Before Seeking Treatment, by Route of Administration: 1998

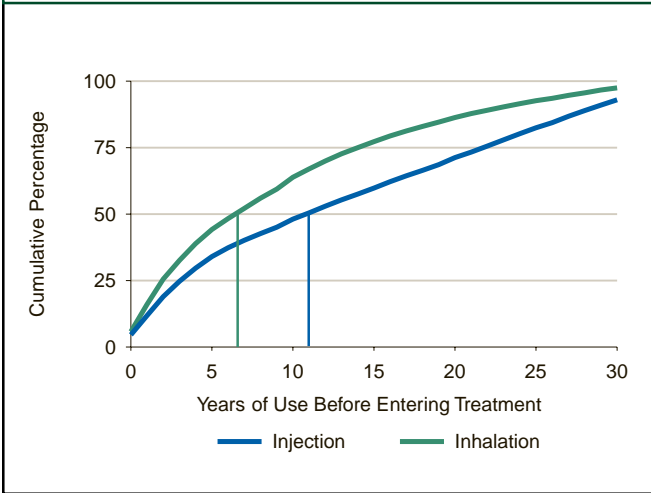
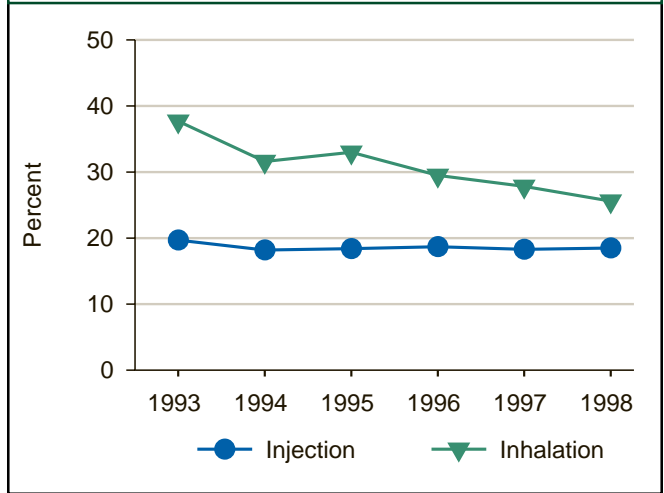


Figure 3.
First-Time Heroin Treatment Admissions, by Route of Administration: 1993 to 1998



Methadone Treatment

Heroin inhalers were less likely than heroin injectors to receive methadone treatment (Figure 4). The use of methadone as part of treatment generally declined for both heroin injectors and inhalers

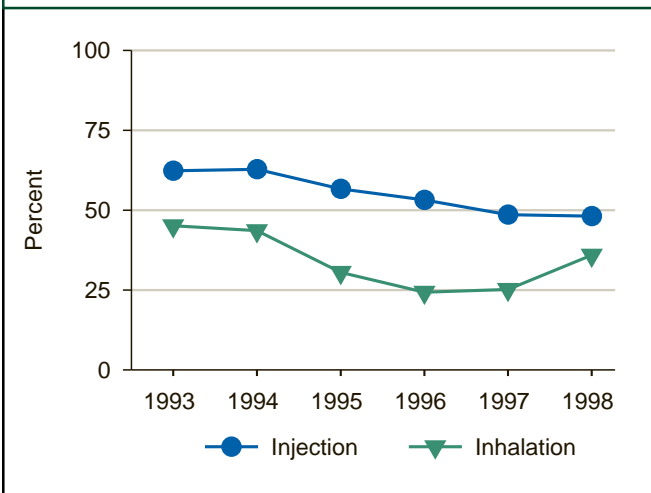
from 1993 to 1997. In 1996 and 1997, only one in four heroin inhalers was placed in methadone treatment, compared with about half of heroin injectors. In 1998, however, about one in three heroin inhalers was placed in methadone treatment.

End Notes

¹The numerator of each rate is the number of persons in the age group who first used the drug in the year, while the denominator is the person time exposure measured in thousands of years.

Substance Abuse and Mental Health Services Administration (2000). *Summary of findings from the 1999 National Household Survey on Drug Abuse* (DHHS Publication No. SMA 00-3466, NHSDA Series H-12). Rockville, MD: Author.

Figure 4.
Heroin Admissions Receiving Methadone, by Route of Administration: 1993 to 1998



The Drug and Alcohol Services Information System (DASIS) is an integrated data system maintained by the Office of Applied Studies, Substance Abuse and Mental Health Services Administration (SAMHSA). One component of DASIS is the Treatment Episode Data Set (TEDS), a national-level dataset comprising State administrative data from treatment facilities receiving public funds. The TEDS system includes records for some 1.6 million substance abuse treatment admissions annually. TEDS records represent admissions rather than individuals, as a person may be admitted to treatment more than once.

The DASIS Report is prepared by the Office of Applied Studies, SAMHSA; Synectics for Management Decisions, Inc., Arlington, Virginia; and RTI, Research Triangle Park, North Carolina.

Information and data for this issue are based on data reported to TEDS through April 16, 2001.

Access the latest TEDS reports at:
www.DrugAbuseStatistics.SAMHSA.gov

Access the latest TEDS public use files at:
www.icpsr.umich.edu/SAMHDA/teds.html