

Cocaine, Heroin, Morphine & MDMA Deaths, 2004-2006

During the years of 2004 through 2006, there were 1,828 drug deaths (excluding alcohol-only deaths) in Virginia; the majority were Virginia residents (94.7%) resulting in a residential rate of 7.6 drug deaths per 100,000. A range of drugs was responsible for these deaths including prescription, illegal, and over-the-counter drugs. The majority of these cases were whites (82%), males (63%), and accidents (78%). This review will focus on 3 illegal drugs: cocaine, heroin and methylenedioxymethamphetamine (MDMA) and one potentially illegal drug metabolite, morphine. Morphine is included in this review because while it can be legally prescribed by a physician it is also a metabolite of heroin. The presence of morphine and additional heroin metabolites often allows differentiation between heroin use and prescription morphine, but this is not always the case.

Cocaine, heroin, morphine and MDMA (CHMM) were completely responsible for or combined with other drugs to be responsible for 779 deaths (Table 1). The vast majority were accidental deaths (Figure 1), male (Figure 2), and white (Figure 3). Resident males died from CHMM at a rate over 2.6 times that of resident females (4.7 versus 1.8 per 100,000 VA population). A racial difference was seen in that blacks had the highest rate of illegal drug deaths (4.3 per 100,000), which was 1.4 times that of whites, 3.4 times that of Hispanics and over 12 times for Asians.

Table 1. Combination of Drugs Causing Death

Drug Combination	Deaths
Cocaine	404
Heroin	127
Morphine	129
MDMA	4
Cocaine & Heroin	91
Cocaine & Morphine	23
Cocaine & MDMA	1
Total	779

Figure 1. CHMM-Related Deaths by Manner, 2004-2006

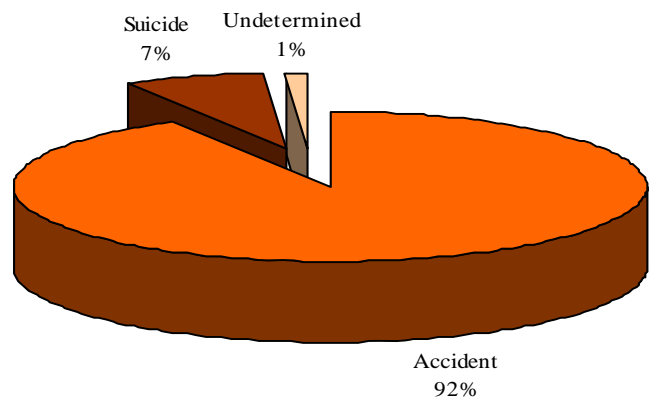


Figure 2. CHMM-Related Deaths by Gender, 2004-2006

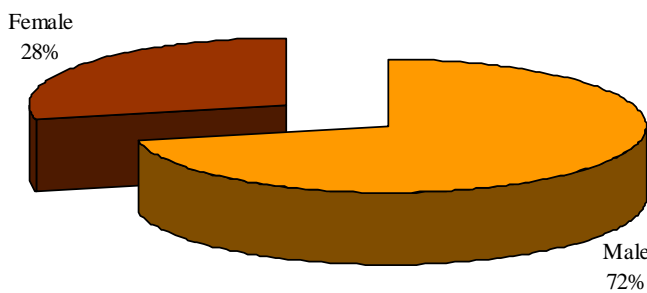
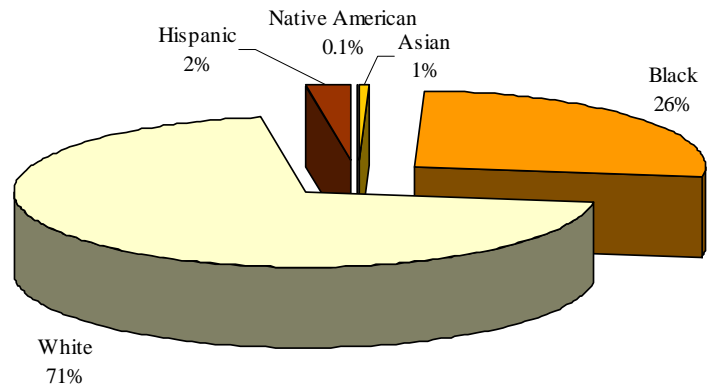


Figure 3. CHMM-Related Deaths by Race/Ethnicity



The age group with the highest CHMM deaths was the 35-44 age group (Figure 4). Residential rates followed the same pattern seen in Figure 4 in that the 35-44 age group had the highest rate with 7.1 per 100,000 VA population. An age bias was seen after the 35-44 age group was removed from the analysis. The older age groups tended to lethally use cocaine and morphine more than the younger groups while the younger groups lethally used heroin. MDMA was lethally involved in just a few cases but all were found in the younger age groups.

Figure 4. CHMM-Related Deaths by Age Group, 2004-2006

