

Nervousness over tranquilizers

In a recent movie, Burt Reynolds portrayed a man having an anxiety attack in a busy department store. As Reynolds crouched into a ball of fear, his brother asked the sizeable crowd of onlookers if anyone had a Valium — immediately, almost all of the surrounding women reached into their handbags and produced Valium bottles. Though fictional, the scene may not have been too far off the mark in reflecting the scope of prescription tranquilizer usage in the United States. In pill form, such tranquilizers (benzodiazepines) are taken at the rate of 5 billion a year and prescribed to 68 million individuals a year, according to the Food and Drug Administration. And a 1973 study reported that 97 percent of general practice physicians prescribe tranquilizers. Concerned over such figures, the FDA has announced that some drug companies manufacturing benzodiazepines have agreed to routinely inform physicians that the drugs should be prescribed primarily in acute or severe cases of anxiety and should not be used for “the stress of everyday life.”

Despite the possibility of addiction and other potential problems of long-term use, tranquilizers generally are not regarded with the same alarm as are narcotics. However, a study reported in the July *AMERICAN JOURNAL OF PSYCHIATRY* suggests that long-term use of benzodiazepines can trigger significant nervous system difficulties, while therapeutic doses of narcotics (for pain) do not. Moreover, the researchers say it is not known whether such changes disappear or remain once a person stops taking the tranquilizer.

Johns Hopkins Hospital scientists administered three separate tests measuring cognitive and psychomotor performance and intelligence, along with EEG brainwave measurements, to patients among 106 consecutive admittances to the hospital's Chronic Pain Treatment Center. While, according to the researchers, it has “never been demonstrated” that benzodiazepines do anything to alleviate chronic pain, 43 percent of the clinic's patients take prescribed tranquilizers. And though long-term use of narcotics is “contraindicated” even in chronic pain patients, 80 percent of those at the clinic also receive these drugs.

In comparing the cognitive performance of those taking either tranquilizers or narcotics, the researchers found “a significant impairment in cognitive functioning among persons taking benzodiazepines compared with the patients not taking drugs or [taking] narcotics.” They found, further, that:

- Regardless of EEG outcome, 10 of the 13 patients taking benzodiazepines alone had

signs of cognitive impairment, compared with 4 of the 13 taking narcotics alone.

- None of the 13 taking narcotics alone exhibited any EEG changes, compared with 8 of the 13 tranquilizer group members.

- None of the narcotics patients exhibited both EEG and cognitive impairment, while seven of the benzodiazepine group did.

“By comparing two populations that were mutually exclusive...one could conclusively state that benzodiazepines were far more likely to produce cognitive impairment, with concomitant EEG changes, than were narcotics,” report the researchers, headed by Nelson Hender of Johns Hopkins and the Mensana Clinic in Stevenson, Md. “It is apparent that any cognitive impairment noted in the patient receiving both narcotics and benzodiazepines is far more likely to be due to benzodiazepines...”

While neither type of drug should be used on a long-term basis, the researchers urge specifically — in line with an FDA suggestion — that “benzodiazepines be limited to short-term use” — a course of action underscored by the still-unknown answer to “the question of reversibility of the benzodiazepine effect.” □

EPA's new twist in chemical-dump suits

The federal government has taken a new tack in its war on chemical polluters. Should charges that were filed in a lawsuit this month stick against 10 of the nation's largest chemical manufacturers, a powerful precedent will have been established making not only chemical dumpers but also chemical-waste generators responsible for improper disposal practices and for any environmental degradation that results.

The case chosen to test the precedent involves two Louisiana chemical-dump sites owned and operated by Petro Processors of Louisiana Inc. The Justice Department claims that Petro Processors deliberately discharged chemicals from one site — 54.5 acres known as Brooklawn — into Bayou Baton Rouge. Another 8.5-acre Scenic Highway site has not received wastes since 1974. But the government alleges that due to improper burial, runoff from erosion and flooding has contaminated surrounding regions with dangerous concentrations of chlorinated hydrocarbons, heavy metals and other chemicals.

In addition to naming Petro Processors a defendant in this case — developed by the Environmental Protection Agency — Justice has also cited 10 chemical manufacturers for “contributing” to waste-disposal violations. Justice argues that since Petro Processors appears to have had a long history of hazardous dumping practices, the waste generators “knew, or should have known” that their wastes

were being handled improperly — especially after a private landowner named all but one of the firms (U.S.S. Chemical) in a 1969 suit over contamination from one of the two sites named in this case.

The manufacturers named as defendants include American Hoechst Corp., Allied Chemical Corp., Copolymer Rubber and Chemical Corp., Dow Chemical Co., Ethyl Corp., Exxon Chemical Co., Rubicon Chemical Corp., Shell Chemical Co., Uniroyal Inc. and U.S.S. Chemical Co. □

Chick's death haunts condor program



Healthy condor chick, measured June 28.

Births nearly always occasion celebration. But when the baby is a California condor, one of the world's rarest birds, each birth becomes a major event. With only 20 to 30 of the majestic vultures surviving it is understandable why ornithologists waxed jubilant on May 15 as news circulated of the direct observation, for the first time ever, of a hatching condor chick. Soon scientists learned of another, adding to their enthusiasm. But a pall fell June 28 when one of the chicks died while being measured — in the hands of a condor researcher — presumably of fear-induced stress.

“This is just a real rarity,” said John Borneman of the California Condor Research Center in Ventura, Calif. These creatures “are known to be hardy,” he explained, and the researcher handling the 13-pound chick did so correctly. Awaiting autopsy results, several researchers have offered possible explanations for the death, ranging from a calcium-phosphorus deficiency to pesticide poisoning. Borneman recounted a similar incident involving a brown pelican. Its death was later shown to have occurred when stress pumped high levels of dieldrin, a pesticide that had been stored in its fat, into the bird's bloodstream.

Because little is known about the condor and its decline, each chick became the