

Israel program and recommended that it be expanded (SN: 12/21/68, p. 621). The great majority of the more than 500 addicts admitted to the methadone-maintenance program at that time were free of heroin addiction, the figures showed.

Although such statistics account for the widening acceptance of methadone-maintenance programs, whether the treatment amounts to a cure depends partly on the definition of cure. The Beth Israel program does not admit addicts with obvious psychopathology, and Dr. Nyswander argues (SN: 2/4/67, p. 116) that the main problem of most addicts is a physical one.

Other scientists regard a physical dependence on heroin as merely part of a larger, mainly psychological problem. Drs. Albert E. Myers, Geraldine Fink and Caleb Davis of Brookdale Hospital Center in Brooklyn told the annual meeting of the Eastern Psychological Association in Atlantic City last week that a methadone-maintenance cure should be regarded only as a social cure.

"The fact that a person is off heroin and is no longer out on the street mugging and shoplifting to support his habit is gratifying," says Dr. Fink, a psychiatrist in charge of the Brookdale methadone-maintenance program, "but it does not necessarily mean he is healthy."

Deprived of the insulation from reality heroin affords, a patient on methadone will usually be found to be suffering from tremendous psychological pain when examined at close range, Dr. Fink states.

The result is often that he switches to another drug.

An evaluation of the methadone program at the Morris J. Bernstein Institute at Beth Israel published this month in the *AMERICAN JOURNAL OF PSYCHIATRY* indicates that 20 percent of the patients there are using drugs such as alcohol, amphetamines and barbiturates. The proportion of patients at Brookdale with nonheroin drug problems, especially alcohol, is closer to 50 percent, Dr. Fink reports. She attributes these problems to the addicts' continued psychological desire to get high, a desire not cured simply by blocking the possibility of getting high on heroin.

"To be really cured, the addict usually needs psychotherapy," Dr. Fink concludes, "and he needs to be moved from methadone treatment into drug-free treatment."

In addition to these therapeutic caveats, Dr. Davis says that methadone is a potential source of social problems too. Two months ago the methadone program operated by the Blackman's Development Center, the largest such program in Washington, D.C., was temporarily closed when Federal offi-

cials claimed the center was failing to take enough precautions against the leakage of methadone to persons not part of the treatment program. The center quickly reopened, but the authorities made it clear they were worried about the increasing abuse of methadone.

Methadone may indeed become a serious drug problem in many communities, says Dr. Davis. Novice drug abusers who are not full-fledged heroin addicts and have not built up a tolerance for methadone are quite capable of getting high from the drug, he points out.

It is also possible to use methadone as a euphoric agent by injecting it into a vein instead of taking it orally, the

way the treatment centers prescribe. Many blacks in ghetto areas where illegal methadone is becoming available blame government officials for introducing yet another narcotic into their neighborhood, Dr. Davis reports.

Scientists at Brookdale Hospital are not claiming that the possible social problems and therapeutic inadequacies of methadone are sufficient reason for jettisoning all methadone-maintenance programs. If there are problems with methadone, there are also problems with every other kind of treatment for heroin addiction.

"Everyone knows the good points about methadone," says Dr. Davis. "We just think it's time to start talking about the other side of the picture." □

PROTESTS OVER TESTS

Rerun on Amchitka



AEC

Crumbling shores caused by Milrow.

When the Atomic Energy Commission touched off a nuclear device of at least one megaton 4,000 feet below the surface of remote Amchitka Island last October (SN: 10/11, p. 323), the shock waves sent gushers of mud and water from streams and lakes squirting 50 feet into the air and turned the surrounding sea to froth.

But nothing much else happened. Slight ground motion generated by the blast was felt at Adak Naval Station 175 miles to the east. But there was no damaging earthquake or tidal wave, no radiation escaped, and the 4-by-42 mile island's best known residents, an estimated 3,000 North Pacific sea otters, apparently were not particularly disturbed.

Nonetheless, many Alaskans, for whom earthquakes and tidal waves are not distant happenings but fresh memories, remain edgy about what the AEC is up to in one of the world's most seismically active areas. Their nervous-

ness found expression this legislative session in a joint resolution introduced by state Rep. Carl Moses, a Republican who lives in the village of Unalaska, a settlement of 300 persons in the Aleutians about 500 miles east of Amchitka.

The resolution urged the AEC to discontinue plans for tests larger than the one detonated last year.

The State Affairs Committees of the State House and Senate scheduled a public hearing on the resolution and invited the AEC to testify. The agency showed up in force last week, with a 10-man delegation headed by Robert Miller, chief of the Nevada Operations Office.

What the legislators got was five and a half hours of minutely detailed reasons why they shouldn't worry about an even bigger device, dubbed Cannikan, which the AEC hopes to detonate in the fall of 1971.

For the usual security reasons, the AEC declined to say exactly how big this second of a proposed series of three shots would be. But Dr. Harry L. Reynolds, associate director of the Lawrence Radiation Laboratory, said, "We do not expect the effects of Cannikan to be significantly different from those of Milrow," the first test.

The reason was that the second shot would be detonated at 6,100 feet, compared with 4,000 for Milrow. As a result Dr. Reynolds says, ground acceleration and maximum water pressures should actually be lower than they were in the initial test. Since the second device will be larger, however, the shock forces will affect a wider area.

"The yield of Cannikan will be somewhat higher," says Miller, "but within our ability to predict the effects with accuracy."

The effects predicted were more gushers from lakes and streams and

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perhaps a "very few" injured or killed sea otters. But no earthquakes or tidal waves, no radiation release, no damage to commercially valuable fish in surrounding waters, no major harm to the sea otters.

Not everyone was willing to accept the AEC's assurances. Sen. Mike Gravel (D-Alaska), who has been battling the AEC over Amchitka since he took office in 1969, submitted a 10-page statement that was highly critical of the agency.

In the first test, says Gravel, "the odds were against damage or injury. That does not mitigate against the fact, however, that there was risk involved to all who live in coastal areas and beyond, along the Pacific rim."

Dr. Marvin Kalkstein, a nuclear chemist who teaches at the State University of New York at Stony Brook, agreed. No one, he told the committee, is in a position to come to an "unequivocal conclusion" that the potential hazards of nuclear testing on Amchitka are negligible. "Though the probability is small, you should consider the awesome dangers if what you're concerned about comes to pass," he said.

NEWSBRIEFS

NSF; Water pollution

The White House has announced the end of a half-year search for candidates to fill four newly created assistant directorships of the National Science Foundation. The posts were created as part of a reorganization of the administrative structure of the Foundation mandated by amendments to the National Science Foundation Act.

The four candidates, whose names will be sent to the Senate for confirmation, are:

Dr. Edward C. Creutz, vice president in charge of research and development at Gulf General Atomic in San Diego, Calif.

Dr. Lloyd E. Humphreys, professor of psychology at the University of Illinois.

Dr. Louis Levin, now executive associate director of the Science Foundation.

Dr. Thomas B. Owen, a rear admiral in the Navy, who is now chief of naval research. □

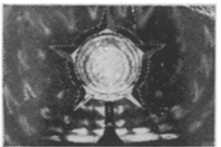
A new water pollution control bill that provides clear assignments of liability without proof of negligence to the source of an oil spill (SN: 3/14, p. 263) was signed into law by President Nixon last week.

The new law also provides staffing for the President's new Council on Environmental Quality. And it would add pesticide levels to the factors involved in formulating all new water quality criteria. □

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