



# the sunshine project

NEWS RELEASE  
www.sunshine-project.org

## Pentagon Program Promotes Psychopharmacological Warfare

*In The Futurological Congress (1971), Polish writer Stanislaw Lem portrayed a future in which disobedience is controlled with hypothetical mind-altering chemicals dubbed "benignimizers". Lem's fictional work opens with the frightening story of a police and military biochemical attack on protesters outside of an international scientific convention. As the environment becomes saturated with hallucinogenic agents, in Lem's tale the protesters (and bystanders) descend into chaos, overcome by delusions and feelings of complacency, self-doubt, and even love.*

**If the Pentagon's Joint Non-Lethal Weapons Directorate (JNLWD) has its way, Lem may be remembered as a prophet.**

(Austin and Hamburg, 1 July 2002) - *The Advantages and Limitations of Calmatives for Use as a Non-Lethal Technique*, a 49 page report obtained last week by the Sunshine Project under US information freedom law, has revealed a shocking Pentagon program that is researching psychopharmacological weapons. Based on "extensive review conducted on the medical literature and new developments in the pharmaceutical industry", the report concludes that "the development and use of [psychopharmacological weapons] is achievable and desirable." These mind-altering weapons violate international agreements on chemical and biological warfare as well as human rights. Some of the techniques discussed in the report have already been used by the US in the "War on Terrorism".

The team, which is based at the Applied Research Laboratory of Pennsylvania State University, is assessing weaponization of a number of psychiatric and anesthetic pharmaceuticals as well as "club drugs" (such as the "date rape drug" GHB). According to the report, "the choice administration route, whether application to drinking water, topical administration to the skin, an aerosol spray inhalation route, or a drug filled rubber bullet, among others, will depend on the environment." The environments identified are specific military and civil situations, including "hungry refugees that are excited over the distribution of food", "a prison setting", an "agitated population" and "hostage situations". At times, the JNLWD team's report veers very close to defining dissent as a psychological disorder.

The drugs that Lem called "benignimizers" are called "calmatives" by the military. Some calmatives were weaponized by the Cold War adversaries, including BZ, described by those who have used it as "the ultimate bad trip". Calmatives were supposed to have been deleted from military stockpiles following the adoption of the Chemical Weapons Convention in 1993, which bans any chemical weapon that can cause death, temporary incapacitation, or permanent harm to humans or animals.

Calmative is military, not medical, terminology. In more familiar medical language, most of the drugs under consideration are central nervous system depressants. Most are synthetic, some are natural. They include opiates (morphine-type drugs) and benzodiazepines, such as Valium (diazepam). Antidepressants are also of great interest to the research team, which is looking for drugs like Prozac (fluoxetine) and Zoloft (sertraline) that are faster acting.

**Biochemicals and Treaties:** Many of the proposed drugs can be considered both chemical and biological weapons banned by the Biological and Toxin Weapons Convention (BTWC), and the Chemical Weapons Convention (CWC). As a practical matter, biological and chemical "calmatives" must be addressed together. As the agents are explicitly intended for military use, and are intended to incapacitate their victims, they do not fall under the CWC's domestic riot control agent exemption. Toxic products of living agents – such as the neurotoxin botulinum – are considered both chemical and biological agents. Any weapons use of neurotransmitters or substances mimicking their action is similarly covered by both arms control treaties. The researchers have developed a massive calmatives database and are following biomedical research on mechanisms of drug addiction, pain relief, and other areas of research on cognition-altering biochemicals. For example, the JNLWD team is tracking research on cholecystokinin, a neurotransmitter that causes panic attacks in healthy people and is linked to psychiatric disorders.

**Powerful Drugs:** The drugs have hallucinogenic and other effects, including apnea (stopped breathing), coma, and death. One class of drugs under consideration are fentanyls. The report's cover features a diagram of fentanyl. According to the US Drug Enforcement Administration (DEA), the biological effects of fentanyls "are indistinguishable from those of heroin, with the exception that the fentanyls may be hundreds of times more potent." The report says that the drugs' profound effects may make it necessary to "check for the occasional person who may stop breathing (many medical reasons in the unhealthy, the elderly, and very young...)", as well as victims who "go to sleep" in positions that obstruct their airway".

**Failed Drugs:** The report points out that pharmaceutical candidates that fail because of excessive side-effects might be desirable for use as weapons: "Often, an unwanted side-effect... will terminate the development of a promising new pharmaceutical compound. However, in the variety of situations in which non-lethal techniques are used, there may be less need to be concerned with unattractive side-effects... Perhaps, the ideal calmative has already been synthesized and is awaiting renewed interest from its manufacturer."

**Chemical Cocktails:** As of March 2002, the team was researching a mix of pepper spray ("OC") and an unidentified caltative agent. Pepper spray is the most powerful chemical crowd control agent in use, and has been associated with numerous deaths. Adding a pharmacological "caltative" to OC would create a hideous concoction. The report prioritizes Valium and Precedex (dexmedetomidine) for weaponization, and it is possible that these are the agents that could be mixed with OC. The researchers also suggest mixing ketamine with other drugs (see below). The chemical cocktail proposals bear a resemblance to South Africa's apartheid-era weapons research, whose director claimed under oath to have attempted to develop a BZ and cocaine mixture for use on government enemies.

**Torture:** Precedex is sedative approved for use in the US on patients hospitalized in intensive care units. The report draws attention to an "*interesting phenomenon*" related to Precedex use – the drug increases patients' reaction to electrical shock. The researchers suggest sensitizing people by using Precedex on them, followed by use of electromagnetic weapons to "*address effects on the few individuals where an average dose of the pharmacological agent did not have the desired effect.*" Obviously, such a technique might be considered torture, and certainly could be used to torture. To add to hypnotic and delusional properties, the researchers suggest that psychopharmaceutical agents could be designed to have physical effects including headache and nausea, adding to their torture potential.

The researchers suggest that transdermal patches and transmucosal (through mucous membranes) formulations of Buspar (buspirone) under development by Bristol-Myers Squibb and TheraTech, Inc. "*may be effective in a prison setting where there may have been a recent anxiety-provoking incident or confrontation.*"

**Use in the War on Terrorism:** Of course, uncooperative or rioting prisoners would be extraordinarily unlikely to accept being drugged with a transdermal patch or most conventional means. Any such application of a "caltative" would likely be on individuals in shackles or a straightjacket. The US has admitted that it forcibly sedates Al-Qaida "detainees" held at the US base in Guantanamo, Cuba. Former JNLWD commander and retired Col. Andy Mazzara, who directs the Penn State team, says he has sent a "Science Advisor" to the US Navy to assist the War on Terrorism.

**Modes of Delivery:** A number of weaponization modes are discussed in the report. These include aerosol sprays, microencapsulation, and insidious methods such as introduction into potable water supplies and psychoactive chewing gum. JNLWD is investing in the development of microencapsulation technology, which involves creating granules of a minute quantity of agent coated with a hardened shell. Distributed on the ground, the shell breaks under foot and the agent is released. A new mortar round being developed could deliver thousands of the minute granules per round. The team concludes that new delivery methods under development by the pharmaceutical industry will be of great weapons value. These include new transdermal, transmucosal, and aerosol delivery methods. The report cites the relevance of a lollipop containing fentanyl used to treat children in severe pain, and notes that "*the development of new pain-relieving opiate drugs capable of being administered via several routes is at the forefront of drug discovery*", concluding that new weapons could be developed from this pharmaceutical research.

**Dart Guns:** The researchers express specific interest shooting humans with guns loaded with carfentanil darts. Carfentanil is a veterinary narcotic used to tranquilize large, dangerous animals such as bears and tigers. Anyone who has watched wildlife shows on television is familiar with the procedure. In the US, carfentanil is not approved for any use on human beings. It is an abused drug and a controlled substance. Under US law, first time offenders convicted of unlicensed possession of carfentanil can be punished by up to 20 years in prison and a \$1 million fine.

**Club Drugs:** Most of the JNLWD team's weapon candidates are controlled substances in most countries. Some are widely used legitimate pharmaceuticals that are also drugs of abuse, such as Valium and opiates. The Pentagon team advocates more research into the weapons potential of convulsants (which provoke seizures) and "club drugs", the generally illegal substances used by some at "rave" and dance clubs. Among those in the military spotlight are ketamine ("Special K"), GHB (Gamma-hydroxybutyrate, "liquid ecstasy"), and rohypnol ("Roofies"). The latter two in particular are called "date rape drugs" because of incidences of their use on victims of sexual and other crimes. Most are DEA Schedule I or II narcotics that provoke hallucinations and can carry a sentence of life imprisonment. For example, according to the DEA, "*Use of ketamine as a general anesthetic for humans has been limited due to adverse effects including delirium and hallucinations... Low doses produce vertigo, ataxia, slurred speech, slow reaction time, and euphoria. Intermediate doses produce disorganized thinking, altered body image, and a feeling of unreality with vivid visual hallucinations. High doses produce analgesia, amnesia, and coma.*"

**Action:** The Sunshine Project is calling for immediate termination of this research and urges Parties to both the Chemical Weapons Convention (CWC) and the Biological and Toxin Weapons Convention (BTWC) to quickly condemn this research and to approve decisions reiterating the ban on these weapons. For the CWC, opportunities to act will arise at the Conference of the States Parties, to be held in The Hague beginning on October 7th of this year, and the 1st Review Conference of the CWC, to begin on April 28th 2003. For the BTWC, Parties should make proposals at the 5th Review Conference, to begin in Geneva this November, and place biological and toxin "caltatives" on the agenda of the next Conference of States Parties or other multilateral group(s) created at the Conference.

This news release is a first report on this disturbing research program. Additional information, on relationships between these weapons and protection human rights, medical ethics, and drug research is forthcoming. A summary of the report is available on the Sunshine Project website ([www.sunshine-project.org](http://www.sunshine-project.org)).