# The Early Days of the HIV/AIDS Epidemic in the Former Soviet Union

By
Dr. Murray Feshbach, PhD
Senior Scholar
Woodrow Wilson International Center for Scholars

(with the assistance of Amanda Murphy)

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### **Background**

Like so many other problems in the final years of the USSR, incongruity between state practices and reality fueled the spread of HIV. Denial of the existence of promiscuity, homosexuality, drug use and prostitution in the Soviet Union created for Soviet citizens an atmosphere of ignorance about the danger that these practices presented in intersection with the worldwide spread of HIV. In October 1985 (prior to the first recorded case of HIV in the USSR), Pyotr Nikolayevich Burgasov, USSR Deputy Minister of Public Health, Chief State Public Health Physician, and member of the USSR Academy of Medicine, made a statement where he spouted the "party line" on social propaganda, but, at the same time, admitted that HIV was a dangerous problem that needed to be addressed:

"AIDS is a dangerous disease; it must not be underestimated. No cases of this disease have been reported here in our country. The reason for this is that the problem is largely a social one, since it is connected with sexual promiscuity – this, alas, is tolerated in certain circles in the West, but it is unnatural for our society... Nevertheless, we are carefully studying all aspects of the new disease, for we do not live in isolation in the world."

His statement is quite confusing because, if the USSR had indeed been separated from the West by its social practices, then it really would have been, in a way, isolated from the world. D.J. Peterson of *Radio Liberty*, writing in 1990, spoke to the issue of the Soviet Union's isolationist policies before perestroika, as limiting the contact of its citizens with foreigners and, thus, delaying the onset of the HIV infection in the USSR.<sup>2</sup>

If the Soviets had superior social mores, then HIV would not have spread to the USSR, but it did. In fact, although the existence of social problems was officially denied, they clearly existed in reality. There were prostitutes, promiscuous persons and drug users, but they were hidden from view by a layer of propaganda. Even if individual citizens saw that these problems really existed, official denial of these facts created a false sense of security, as well as confusion

and fear. Could they trust their own observations if everything they heard and read contradicted them?

When officials did admit that some of these problems really existed in the Soviet Union, they relied on blaming foreigners and Western countries for infecting Soviet citizens, contaminating Soviets with their social ills, and, according to a disinformation campaign, producing the HIV virus in a laboratory to attack the world. At the same time, HIV was spreading throughout the country and the world. The forces of imposed silence and scapegoating created an explosive combination, one of ignorance, anger and fear. As soon as a mistake was made due to ignorance (a result of silence and denial), the person who made the mistake was blamed and punished (scapegoating). Silence, denial, and scapegoating led Soviet citizens, most notably officials and specialists, to respond with ambivalence, avoidance, and confusion.

The most shocking statement was made in 1987 by 16 young graduates of a medical institute in a letter to the AIDS Research Group led by Dr. Vadim Pokrovskiy at the Central Epidemiology Research Institute (within which he headed the already-formed Federal AIDS Center). They stated their conviction in refusing to treat persons with AIDS, since they believed that this disease would do away with all the unsavory elements of society:

"Dear colleagues: We graduates of a medical institute are categorically opposed to combating the new 'disease' AIDS! And we intend to do everything in our power to impede the search for ways to combat that noble epidemic. We are convinced that within a short time AIDS will destroy all drug addicts and prostitutes. We are confident that Hippocrates would have approved of our decision. Long live AIDS!"

Quoted in an article by A. Nivikov, which appeared in *Komsomol'skaya Pravda*, on August 1, 1987,<sup>3</sup> the problems with the point of view expressed in the letter are myriad. Most outstanding, however, is the authors' assumption that HIV/AIDS is a disease that will remain isolated within certain deviant groups rather than spreading throughout society as a whole. Given that these individuals were supposed to be medical professionals, they should have realized that the HIV

infection does not remain isolated, but spreads to innocent victims: children, spouses, blood transfusion recipients and so on. If HIV/AIDS were to kill off all the prostitutes and drug addicts, then it would also eliminate anyone in their spheres of contact. Despite the hatred and ignorance pronounced in the letter from the 16 young physicians, it does greatly differ from many statements from government officials at the time, who simply denied the existence of HIV and related social problems in the Soviet Union. In reaction to the letter, Nivikov wrote:

"Strangely enough, the pernicious delusion of these 16 new physicians was once shared, to all appearances, by the former leaders of our public health service. How else can one explain the fact that, in the early 1980s, when AIDS was already raging in many countries, peace and quiet reigned in our country? Our medicine maintained its stubborn silence. And when that silence became altogether untenable, it began limiting itself to reassuring medical and philosophical pronouncements, saying that their was no social base in the Soviet Union for the appearance of AIDS, and that we therefore had nothing to worry about....
"Drug abuse and homosexuality are not essential to its spread, though we have our share of both phenomena...

"The public was deprived of information and hence of the ability to prepare itself, to learn the extent of the danger and realize that the loathsome disease would soon make its way to our country. Such is the harm that deliberate silence has caused! Soviet people's knowledge about AIDS, until recently at least, was at the level of wisecracks and jokes..."

When the Soviet government tried to do something about the spread of HIV, its own policies stood in the way. People did not understand the scope of the problem or how it affected them. The stigma and discrimination propagated by these doctors and by the society and government of a quarter-century ago persists to this day.

### Early Cases - Child - Blood Transfusion

The first case, as reported by Dr. Viktor Zhdanov, Director of the Ivanovsky Institute of Virology in Moscow, at the Second International Conference on AIDS in June 1986, was in a 14-year-old girl who was infected by a blood transfusion in 1975 and diagnosed in 1984. Her case, however, quickly disappeared from the records, perhaps because of the shame of having infected a child because of a medical mistake. After the tragedy in Elista, people infected by

medical mistakes, especially children, became a much larger group and there was no longer any denying that such mistakes were made and that children suffered because of them.

# <u>Military Translator in Africa – Homosexual Contacts</u>

The promiscuous bisexual translator who spread the illness in the Soviet Union upon his return represents a more stereotypical risk group encountered in Russia. His case is variously reported as being recognized in March 1986 according to Pokrovskiy, but another source says his status was revealed in December 1985 in Sovetskaya Kul'tura.<sup>8</sup> This is also confusing due to contradictory information as to his profession, as well as the putative dates prior to March 1, 1987, the official date of the first case of HIV in the Former Soviet Union. Due to the novelty of the epidemic, Pokrovskiy and his colleagues were able to do detailed contact tracing and uncover the impact that this one infection had in the USSR. All the same, not all of his sexual partners could be tested. Of his 22 male sexual partners, 5 were found to be HIV-positive. 3 of his partners' 24 female sexual partners were found HIV-positive, along with a child of one of these women. Several of his infected partners were blood donors. They infected five people (of which 2 were children) by blood transfusion. (See Appendix A for contact tracing chart). Although initially such a person may not seem a threat to, for instance, a heterosexual woman, contact tracing in this case reveals that women were infected either by blood donations from those he infected or by contact with their (secretly) bisexual male partners. Not only were women infected in this way; they passed the infection onto their children. Early on, before the blood supply was actively and properly tested, an HIV-positive blood donor could also pollute a pool of unsuspecting persons in this way. Contact tracing reveals that a promiscuous bisexual male who had been living abroad could well infect a wide range of people who are not aware of the danger he may present.

## Olga Gayevskaya - Prostitute - Sexual Transmission

The prostitute, Olga Gavevskava, the first official Soviet AIDS casualty, represents the risk group of promiscuous persons who have contact with foreigners. The secrecy surrounding her death, as revealed by an argument in the media about her cause of death and the gradual presentation of information, such as her name. 10 suggest that her death was most likely not the first AIDS death in the USSR, although it was the first such death reported. Andrey P. Kozlov, Director of the AIDS Clinical Laboratory, noted that: "I doubt Leningrad really had the first AIDS death. We were just brave enough to declare it. 11, Her case is interesting from a historical and medical perspective because of the inefficiency in diagnosing her illness, the possible number and range of people she infected, and the fact that, despite being quite ill, she was an active prostitute until her death. She was only diagnosed with AIDS post-mortem, although she had been tested for HIV in August of 1988, the results were a false negative, a result of inadequate test systems and a shortage of diagnostic equipment. Since there was not enough reagent to test the samples separately, her blood serum sample had been combined with those of several other patients. 12 Despite this fact, the doctors who eventually diagnosed her with AIDS were accused of complacency and blamed for not noticing the problem earlier. <sup>13</sup> The uproar in the press when she finally was diagnosed itself reveals the reason why the doctors may have been reluctant to make such a diagnosis, rather than complacency or neglect on their part. The fact that they made the diagnosis opened them up for such criticism. If they had left 'acute pneumonia' as the cause of death on her death certificate, they would not have had to suffer such attacks in the print media and possible legal consequences. Their incentive to cover up AIDS cases and deaths was, thus, perhaps greater than their incentive to identify these cases and deaths.

## **State Preparation - Infrastructure**

The state found itself caught between two mutually exclusive approaches. Its attempts to prevent the spread of HIV undercut its socialist propaganda, while its propaganda stood in the way of prevention. The insistence that HIV was a Western problem made any attempts to combat the spread of the disease in the Soviet Union seem unmotivated. If these preventative measures were motivated, then this created a fear that perhaps the problem was bigger than officials were admitting. In this way, the Soviet Union's two contradictory approaches to the spread of HIV created confusion, misunderstanding and fear. Nonetheless, even amidst this atmosphere, the Soviet government took initial steps to provide an infrastructure for the prevention and treatment of the disease, disseminating information, building hospitals, establishing diagnostic laboratories, conducting AIDS research, and supplementing the pay of medical personnel who worked with HIV-positive persons (PLWHA).

### Legislation

As with their attempts to produce necessary infrastructure, the Soviet government's legislation for HIV/AIDS prevention was counterproductive. The law passed in August 1987 sacrificed human rights for HIV prevention and focused primarily on punitive measures, requiring foreigners living in the USSR for more than 3 months to undergo an HIV test, requiring Soviet citizens returning home after a month or more in a foreign country to be tested, enabling Soviet physicians to test anyone whom they suspected may be infected, and prescribing sentences of up to 8 years in prison to those who knowingly infected others. As described by Zhores A. Medvedev in April 1990, this initial anti-HIV legislation created tension and fear between possibly infected people and medical authorities. Patients were afraid of being found

HIV-positive because of discrimination they might face and medical personnel were terrified of being accused of accidentally infecting patients:

"The previous emphasis on punishment of infected people and the lack of any respect for their rights made cooperation between those at risk and the medical authorities impossible... The new legislation was intended to provide complete confidentiality of diagnosis, protect the rights of all patients, and provide some form of compensation if hospitals were responsible for the infection." <sup>15</sup>

At the same time, Medvedev goes on to reveal that, while trying to create this new legislation, officials were committing further human rights abuses, isolating infected children and their mothers in a hospital in Moscow. In the end, the new HIV law, released in 1990, had many of the same problems as the first, and was replaced in February 1995.

#### **Finance**

The state's financial allocations for dealing with the spread of HIV provided inadequate resources for coping with the problem. For instance, in 1990, the state budget provided only 53 million (current) rubles for AIDS-related research and treatment; <sup>16</sup> in comparison to spending by other nations to combat HIV/AIDS (for example, the \$1.6 billion annual allocation in the United States), this amount was very limited. The USSR relied on residual healthcare planning, despite the warnings by experts. <sup>17</sup> Beyond the low figure budgeted for HIV/AIDS research and prevention, the lack of concern shown by G. N. Khlyabich, the USSR Deputy Minister of Public Health and Chief State Sanitary Physician in February of 1987 reveals that residual planning is what they planned to use to cover HIV/AIDS costs: the "Epidemiology Inspectorate has adequate resources. As far as the money we need is concerned, public health will continue to act as a family does when needing to buy something, simply redistributing its budget so that no inconvenience would be felt. <sup>18</sup>,

On all counts, financial, legislative and infrastructural, the state's preparation for preventing the spread of HIV was misguided and greatly underestimated the dangers and rapid

growth in the number of infections. Having created a social taboo about the subject of sex and denied the existence of "Western" social problems, the Soviets shot themselves in the foot when HIV appeared on the scene and the Soviet people's lives depended on their discussing sex and real-life social problems. Moreover, combined with the imposed ignorance of Soviet citizens about sex, punitive policies for those responsible for transmitting HIV created an atmosphere of discrimination against people with the disease (PLWHA) and medical professionals further interfered with their attempts to control the spread of the disease. Instead of informing its citizens, the Soviet Union terrified them, did not provide sex education in schools, and created a scandal over each case transmitted.

# **Disinformation Campaign**

The Soviet disinformation campaign further undermined the measures they had adopted to combat the spread of the disease. According to a detailed article published in the U.S. Department of State's Foreign Affairs Note in July 1987, the Soviets claimed that the AIDS virus had been 'manufactured' by the CDC and the Pentagon at Fort Detrick, Maryland. 19 The alleged first such article appeared in a letter from a 'well-known American scientist and anthropologist' to the editor of the Indian daily newspaper Patriot in mid-1983, after which it was cited extensively in Soviet sources. It was determined that the letter had been cited at least 32 times in the first six months of 1987.<sup>20</sup> Further research on the exact date on which the letter was published in *Patriot* reveals that, most likely, no such letter was ever published in the newspaper.<sup>21</sup> It is a type of ghost source, buried in the past, in some distant land, too difficult for Soviets and others in the world to trace... or so they had hoped. To give additional weight to their claims, the Soviet government had an East German biophysicist, Jacob Segal, issue a report arguing that the AIDS virus had been synthesized from two existing viruses, VISNA and HTLV-1.22 The claims made by Soviet and Soviet-sponsored sources proved to have no scientific grounds, horrifying Soviet scientists who were involved in the actual struggle against HIV. For

in Moscow and a top AIDS expert, whether or not the United States had developed the virus, he replied resentfully: "That is a ridiculous question. Perhaps it was the Martians.<sup>23</sup>", Likewise, in April 1989 Andrey P. Kozlov, Director of the AIDS Clinical Laboratory, denounced the disinformation campaign and gave his assurance that Soviet scientists never believed this preposterous claim: "Soviet scientists never supported the idea that this virus was created in the United States. It is necessary for the Americans to know that we were not responsible for this stupidity.<sup>24</sup>",

## **Sexual Behavior**

As mentioned above, discussions of sex and sexual behavior were greatly stigmatized in the USSR. Little was actually known about the sexual behavior of Soviet citizens, creating a greater risk for the transmission of HIV to go unnoticed and a greater difficulty in identifying people who may be at risk. For example, even in 1990, research on the actual sexual behavior of Soviet citizens was only conducted in big cities.<sup>25</sup> Early studies revealed a lack of precautionary measures among Soviet citizens. For instance, an early survey of homosexual and bisexual men in Moscow, which revealed a low level of condom use: of 53 men surveyed "29 (56 percent) never used condoms, 17 (32 percent) used them from time to time, and no one used them all the time.<sup>26</sup>, Moreover, sources from the time indicate that private treatment may be a cause of the limited knowledge of the patterns of growth of Sexually Transmitted Diseases (STDs) in the Soviet Union and may have even aided their spread. Given the taboo of having an STD, many people with such infections consulted private doctors, which resulted in their being excluded from official registered numbers, creating an artificially low number of reported cases.<sup>27</sup> As infection with STDs serves as a major indicator of HIV risk groups, the limited knowledge of people who had been infected with these diseases constrained attempts to prevent the spread of HIV. Along with limited knowledge of sexual behavior and persons infected with STDs, the

Soviet government knew little about other risk groups, such as homosexuals, prostitutes and drug users. Other than denying that Soviet citizens engaged in the deviant sexual practices of the West, little was known about this side of life. In reality, much went on behind closed doors that was not openly discussed and not officially recognized. In the end it seems that the practices of Soviet citizens were not really so different from those of the 'deviant' West.

## Homosexuals

Within the realm of sexual behavior, particularly little was known about homosexuality in the Soviet Union. Beyond the typical policy of keeping quiet about questions of sexual behavior, homosexuality was prohibited by law in the Soviet Union. As such, until glasnost', the Soviets claimed that there were no homosexuals living in the USSR. Given the punitive measures for homosexuality, homosexuals (men having sex with men) most likely developed complicated ways of hiding their personal sexual orientation, which made it more difficult to identify them when the time came for analyzing risk groups for HIV detection. The Soviets knew extremely little about the actual lifestyle of homosexuals, as revealed by a March 1990 statement that prisons are a breeding ground for homosexuals: "It is known that penitentiaries for minors serve as a center for the spreading of homosexuality.<sup>28</sup>, At the same time, multiple contact-tracing studies in homosexual populations that were conducted at the time revealed that this group was actually quite large and was made up of persons from various social spheres, as one may expect. In 1988, it was estimated that perhaps 1 in 100,000 of the population was homosexual. Whatever the accuracy of that measure, a most important indication of homosexuality's prevalence in the Soviet Union before 1990 is a Soviet statement concerning one individual who returned from assignment in Tanzania infected with the HIV virus, which he, ultimately, passed on to at least 14 other individuals, including women and children. (See appendix A for the contact tracing of this case). Whatever the implications for the prevalence of HIV, such evidence implies that

homosexuality may well have been quite widespread in the general population as well as in the military.<sup>29</sup> Even with the knowledge from contact tracing, homosexuals had long since learned to fear discrimination. This fear of discrimination would have made them even less likely to go for testing or, if they were to be tested, to hide their true risk factor.

## **Prostitutes**

Another illegal practice, prostitution, went long unrecognized in the Soviet Union.

Sources published before 1990 reveal that little was known about the scope of prostitution, although it was growth was quite visible. A statement made at the Spring Research Forum in March 1990 clearly defines the problem with government denial of prostitution:

"Prostitution in the last few decades has become a very widespread phenomenon, among adolescents as among other groups. In the USSR there is no institution of bordellos nor an industry of prostitution. However, as a functioning phenomenon, prostitution is widespread and virtually unmonitored. (Police vice squads exist in only two cities). 30,

In the atmosphere of denial, this activity grew widely and was relatively unmonitored, creating uncertainty as to how widespread prostitution had grown and which individuals were involved. In the beginning of 1987, it was estimated that there were 3,500 prostitutes living in Moscow alone. This number has since grown exponentially, but its roots reach into the Soviet past. According to a Fall 2004 report, there are currently between 50 and 200 thousand prostitutes in Moscow alone, who earn a total of \$5 million daily. As in the case of homosexuals, turning a blind eye to prostitution left Soviet officials uncertain when it came time to test risk groups. Moreover, denying the existence of prostitution in the USSR contributed to the distrust in official information. People could see the problem growing around them.

# **Drug Users**

As with prostitution and homosexuality, the Soviet Union long denied the existence of drug users within its borders. Their denial of drug use extended beyond even that of the other risk groups. For example, even as late as October of 1988 Dr. Valentin Pokrovsky, a chief AIDS researcher and scientist, emphasized the low incidence of drug use in the USSR: "the incidence of [intravenous] drug abuse... is very low in the Soviet Union.<sup>33</sup>," By 1990, however, the number of registered drug addicts was admitted to be approximately 300,000, which was proclaimed artificially low, due to an inadequate counting method. Police estimated actual drug addiction to be an order of magnitude higher than reported. Injecting drug use was already quite high, with an estimated 60,000 addicts. With a short supply of syringes and needles (as will be discussed below), IDUs were at considerable risk due to reuse of these syringes.<sup>34</sup> The state's long-term denial of this problem and their inadequate methods for identifying drug addicts reduced their knowledge of who belonged to this risk group or how to help them.

## **Education – Sex Education Measures**

Despite the Soviet Union's puritanical policies on the subject of sex, they did take a number of measures to educate people about the dangers of HIV and the risks of transmission, under the Ministry of Education's "State Program for the Prevention of the Spread of AIDS," adopted in July 1987 for the years 1987 to 1995. Before 1990, this included the issuing of 4 brochures on HIV/AIDS (a total of 12 million copies for a country of approximately 280 million people), the distribution of the newspaper "Anti-SPID," beginning in October 1989 (with a distribution of 4 million copies), and a fifteen-minute-long program "Attention:AIDS," shown on Moscow television on April 2, 1988. These educational measures were quite limited and had mixed results. At the very minimum, however, the increased demand for condoms revealed that Soviet citizens had, in fact, learned something about preventing the spread of HIV, as noted by

Peterson.<sup>38</sup> Beyond this fact, misinformation, discrimination, and panic reveal that the educational measures adopted by the Soviets were not far-reaching enough.

# **Shortage of Condoms**

The Soviet Union had great difficulty in meeting the demand for condoms. Even if the people had understood the meaning of 'safe sex,' they would be hard-pressed to find a way to practice it, given the extremely limited availability of condoms and the high demand for them. Of the estimated 1 billion condoms needed in 1988, only 220 million were produced (an annual average of only three for each adult male), <sup>39</sup> forcing the Soviet health authorities to buy condoms abroad using hard currency, according to Chazov. 40 A countrywide search for condoms done by the staff of *Meditsinskaya gazeta* in late 1989 found serious shortages of condoms, euphemistically called 'Article No. 2,' across the Soviet Union. 41 In 1990, the estimated demand for condoms went up to 4 billion for the 170 million people of reproductive age, but this demand was only satisfied by one-third. 42 Although in 1988, Pokrovskiv made the argument that condom production would not be given priority in the USSR, since contraception use ran counter to the country's efforts to increase its (Russian) population, the Soviet authorities did succeed at greatly increasing condom production from 220 million in 1988 to 1,280 million in 1990. 43 Despite such production successes by the end of 1990, condom demand in the Soviet Union far exceeded supply. The problem was exacerbated by the failure of the command economy as seen in the inability of the Ministry of the Fishing Industry to produce enough foil packaging for the required number of condoms. 44 As a result of the increased demand for condoms and their limited supply, they were a hot item on the black market at the time, selling for much more than their official price of 10 kopecks, with estimates given from 10 to 30 times<sup>45</sup> and 100 to 300 times<sup>46</sup> the official price. The appearance of condoms on the black market further limited their

availability through legal channels. When such profit was available, it created incentive for speculation and lower quality as well.

# **Misinformation**

Despite the distribution of pamphlets and other measures for sexual education, courses about limited aspects of sexual life were first introduced in schools in 1989, and then only as *electives*. No mandatory courses were introduced and there were no textbooks or materials on the subject adapted to younger age groups. Moreover, the atmosphere of glasnost' did not improve the problem. Although the media was freer to discuss sexual life, they strictly avoided discussing its 'dark side.' As Peterson explained in June, 1990:

"Today, the Soviet media is presenting the public with paradoxical and counterproductive messages about sexuality... For the many that are concerned about AIDS, the mass media has never dared to tell them in clear and explicit terms how and when they may contract the disease. The term 'safe sex' has not entered the public health vocabulary yet.<sup>48</sup>",

The Soviet people could not count on their educational institutions or the mass media to tell them how to avoid contracting the HIV virus. A 1989 article from the *Los Angeles Times* reported that it was even difficult to recruit medical professionals to work with HIV-positive persons in the Soviet Union, given the lack of knowledge about the risk factors for transmission even among educated Soviets. Because of their lack of information and education on the HIV-infection and how it is spread, many people, even among educated classes, did not understand that the disease cannot be transmitted by casual contact, such as a sweaty handshake. Given their ignorance and fear of contracting HIV, rumors were rampant. In the early days of HIV/AIDS in the USSR, the anonymous clinic in St. Petersburg encountered long lines of people waiting to be tested each day, among which there was a group of about 50 people who returned to be tested repeatedly, although many of them did not engage in risky behaviors. The members of this group of 50 were panicked because they did not know how HIV was *not* transmitted: among them, one woman was

afraid that she could catch HIV on the metro and one man feared that he had been infected in a fistfight.<sup>51</sup> The spread of such rumors and the resultant discrimination against infected persons prompted *Literaturnaya gazeta* (No. 18, 1989) to accuse health education institutions of 'criminal inactivity' for not telling Soviet citizens how the disease is *not* transmitted, a problem which resulted in 'witch hunts.'<sup>52</sup>

## **Discrimination**

Discrimination against PLWHA in the USSR had many faces and was largely due to the general lack of knowledge concerning how HIV is spread. This problem was complicated by the lack of confidentiality in medical processes at the time. In September 1989, Dr. Mikhail Narkevich pointed out that doctors still listed AIDS and other socially significant illnesses on the medical slips patients had to submit to their employers, violating the patient's confidentiality.<sup>53</sup> There are many accounts showing how PLWHA suffered from discrimination due to the lack of confidentiality and to the ignorance of their fellow citizens. One of the most illustrative testimonials is from a patient from Leningrad who was essentially thrown out by the other inhabitants in his communal apartment:

"Normally, I live in a room in a communal apartment in Leningrad. But when I return, I will live with friends. [But when the others] in the apartment found out I am infected... they cut off the water coming to my room. They cut off my light. They don't let me into the bathroom. They don't permit me to use the stove. I've sold practically all my things from my place; I will sell my furniture and, probably, my room too, since they won't let me live there. 54,

If this patient's apartment-mates had understood that they could not catch HIV by sharing the same kitchen or bathroom with this person or even if they had not been able to find out his HIV-status, then he could have at least lived out the rest of his life in peace in his old apartment.

Discrimination against high-risk individuals and PLWHA manifested itself in many ways. Sometimes this discrimination benefited the high-risk individual and endangered society. For example, in April 1990, Medvedev reported that the AIDS scare made the police less willing to

deal with high-risk individuals because they, too, were afraid to contract HIV through casual contact. One result was that prostitutes were observed working out in the open without any police interference in downtown Moscow and Leningrad.<sup>55</sup> In this case, a group who presented no medical danger to the police was allowed the opportunity to infect Russians and foreigners because the police were mistakenly afraid of approaching them.

# **Medical Industry**

The Soviet ill-preparedness for the spread of HIV was not merely ideological, but also economic and practical. As the contradictory and limited informational response to the appearance of the HIV-infection revealed inadequacies in the Soviet Union, so did their limited material response. Sources from the period are replete with statements about the lack of necessary medical supplies. Although the need for such supplies appeared all of a sudden, the planners could not adapt to satisfy this new demand. Even by buying foreign production equipment, they did not come close to meeting their own production plans, let alone the actual need for these products in the Soviet Union. There were many problems in trying to implement the production of new medical products. Production equipment sat unused. Materials and semi-fabricates from various parts of the USSR were not delivered on time. Units produced were of such low quality that they were unusable.

#### **Needles and Syringes – Shortage**

Beyond the problem with an inadequate supply of disposable needles and syringes, even before the onset of HIV, the USSR suffered from an inadequate supply of *reusable* needles and syringes, creating a problem with transmission of disease in hospitals. For example, a 950-bed hospital in the Krasnodar region was allotted only 200 needles for the first 6 months of 1982, roughly 1 needle per day.<sup>56</sup> At one needle per day, it would be physically quite difficult for medical personnel to make sure that the needle and the syringe connected to it were sterilized

before each use. According to *Meditsinskaya Gazeta*, to deal with this shortage of needles, hospitals "straightened, sharpened, and removed the rust" from needles that had been used again and again.<sup>57</sup> When HIV began to spread, the need to insure needle safety came on quickly. Following world experience, the Soviets found that the only way to insure that a needle was sterile was to use a single-use hypodermic. Before 1990, the Soviet Union produced very few disposable syringes, although they had already been manufactured in the West for a long time. With the onset of HIV, the Soviets initially had to buy these needed supplies from abroad with hard currency,<sup>58</sup> but it amounted to a major shortfall in meeting the demand for them.

# Needles and Syringes - Production Plans versus Demand

Estimated annual need for disposable needles and syringes was around 6 billion each,<sup>59</sup> the Soviet Union developed a plan to try to produce 3.9 billion disposable needles and 3.25 billion disposable syringes annually by 1991.<sup>60</sup> These plans were not met. For the year 1988, however only 4.5 million disposable needles were manufactured in the Soviet Union, according to Minister of Health Chazov.<sup>61</sup> The production of disposable syringes was also a failure. Of the 400 million syringes planned for 1988, only 35 million were produced (less than 10% of the number planned).<sup>62</sup> By March of 1990, the situation had scarcely improved; only 25% of demand for disposable syringes was met, 5% by domestic production and 20% by import.<sup>63</sup> These shortages in disposable syringes and needles plagued the period. Production planning was ineffective in responding quickly and efficiently to demand. As a result, the spread of HIV in hospitals from dirty needles and syringes was all but inevitable.

#### The Elista Outbreak

Elista was a sad, but possibly inevitable intersection of ignorance, negligence, and illpreparedness. An outbreak in the small city of Elista (population 85,000) in the Kalmyk Autonomous Soviet Republic occurred in late January, 1989, due to the multiple reuse of an unsterilized syringe. Because of the hospital's remote location and because it treated only children, it is likely that the medical personnel there were not expecting to encounter a patient with HIV. In this case, it is likely that characterizations of HIV-positive individuals as drug users and promiscuous persons who have contact with foreigners and live in big cities deterred them from expecting that HIV could appear in such a place. It only took one infected child, whose father had contracted the disease through a blood transfusion or homosexual contact while living in Africa (although this information is somewhat suspect) to eventuate in the initial infection of 27 others. Soon these numbers increased as the infection spread further. By May 1990, 75 children had been infected in Elista. These infected children went on to infect their mothers, who were breastfeeding them. Initially 5 such cases were discovered. By May 1989, 9 mothers had been infected in this way.

According to reports at the time of the initial outbreak in Elista, the nurse changed the needles, but she kept using the same syringe without sterilizing it, enabling the transfer of HIV. Apparently 20 infectious doses can remain in the chamber of the syringe if it is not sterilized. Although most likely, as insisted at the time by such experts as Drs. Vadim Pokrovskiy and (his father) Valentin Pokrovskiy, this was merely a case of pure negligence, the fact that the nurse changed the needles at all suggests that there may have been more complex contingencies at hand. Her changing of the needles suggests some level of precaution. It is likely that she reused one syringe because it was the only one available and time was short. Thus, if the needed supplies had been at hand, this problem could have been prevented. However, the children's hospital in Elista was somewhat notorious for its poor record of sterilization. In 1988 alone, the head of the children's hospital was fined by the local sanitary and epidemiological station 13 times, there were outbreaks of salmonellosis and hepatitis, 123 children died there, and an estimated 14 percent of all syringes used there were not sterilized.

While these reports reveal that the children's hospital in Elista had a particularly poor record, the continued spread of the infection from Elista to hospitals in other areas reveals a deep structural problem in the universal lack of disposable, sterile syringes and the reuse of unsterile syringes. As the children were moved from one hospital to another, outbreaks began to occur in the other hospitals for the same reason: re-using unsterilized syringes. As of May 1990, similar mass infections of children were reported in Volgograd oblast' (46 victims), Rostov oblast' (63), and Stavropol' kray (13). As such, the Elista incident revealed the failings of the Soviet Union's educational, legislative, economic social, and financial efforts against the spread of HIV.

# Medical Practices - Availability of Needed Supplies and Equipment

Medical personnel found themselves lacking many other necessary disposable supplies besides needles and syringes. These included, but were not limited to: disposable tubing for transfusions, dental instruments<sup>75</sup> and even examination gloves. As such, with the lack of necessary supplies and equipment, doctors were required to improvise on a daily basis to try to prevent the spread of HIV. In fact, the discrimination of doctors against patients with HIV in this period was not completely without cause, given that the protective gloves furnished to medical personnel (when available) could be pierced by a needle, subjecting doctors to a risk of infection.<sup>76</sup> Shortages in supplies and equipment also affected the ability of medical personnel to sterilize the reusable needles and syringes available. To be effective, sterilization must occur in conditions of over 57 degrees Celsius or approximately 130 degrees Fahrenheit. In the Soviet Union, effective sterilization was impeded not just by the reported shortage of autoclaves for the national dispensarization program initiated in 1982, but also by the officially announced nonavailability of hot water in 65 [sic] percent of rural hospitals.<sup>77</sup> The production of high quality medical supplies and maintenance of the medical industry were not given high enough priority. This became painfully clear when doctors were ill equipped to fight the spread of HIV. In the

medical industry, if improvisation is necessary, it should be an exception to the rule rather than par for the course, as it had become in the Soviet Union.

# Trust in Medicine, Hospitals and Medical Personnel

While doctors were not given all the supplies and information they needed, cases of negligence among medical personnel destroyed the public's trust in medicine's ability to stem the growth of HIV in the USSR. The press of this period consists of a series of outcries against the medical industry. Apparently, a joke going around at the time was: "AIDS warns that the Health Ministry can be dangerous to you. Although medical personnel were often made undeserving scapegoats for larger problems in these situations, in many cases, they were neglectful of their duties. Given the limited monitoring systems at the time and the prejudice that HIV was a Western problem, it is understandable how medical personnel in distant parts of Russia could have spread HIV to patients through ignorance.

Even though their working conditions were less than ideal and they lacked the necessary equipment, many commentators of the time were correct in claiming that the problem rested on the fact that sterilization was inadequately regulated and monitored. Improperly sterilized equipment was responsible not only for the spread of HIV, but also for the high rates of infant mortality and hepatitis in the Soviet Union. Despite the fact that criminal responsibility for medical personnel who violated rules of sterilization was established in 1988, the consequences for improperly sterilizing equipment were minimal. For example, 83 instances of improperly sterilized medical equipment were reported in the Volgograd oblast in the first four months of 1990. Each time the responsible party was fined only 10 rubles, although he/she could have infected several patients with HIV and other deadly diseases. Medvedev correctly identified the need for a reform of the entire medical system to raise standards and reduce the incidence of blood-borne infections. This type of reform would require substantial input of funds and

effort. Only then could the public sense renewed trust in medical personnel's ability and desire to protect them from disease; it has never been fully realized to this day.

# **Personal Demand for Supplies**

Given the growing distrust in medical personnel, personal demand for syringes grew in the Soviet Union. Since people were afraid that they or their family members would become infected by an unsterilized syringe, they went looking for their own supplies to insure that they had clean syringes. Buying syringes at regular pharmacies was illegal for all but a few persons with specific medical conditions. Thus, people tried to purchase them on the black market at severely inflated prices. In 1990, syringes on the black market in Volgograd sold for ten to twenty rubles each, quite a large sum in that day. Black market speculation for needles and syringes further fueled the deficit in these goods in hospitals, since it created great incentive for medical personnel with access to these supplies to steal them and sell them on the black market. In October 1989, there were no syringes in Leningrad pharmacies, but plenty of them on the Leningrad black market, even though the city was the location of the largest producer of disposable syringes in the country, the 'Lenmedpolimer' factory. Bernard of the country of them on the country of them on the country of them on the country of the country of them on the country of the country

# **Blood Safety**

As in other countries, donated blood began to be screened after several people were infected by blood transfusions. In October 1988, Chazov announced that all blood and tissues donated in the USSR were tested for HIV.<sup>89 90</sup> Although all donor blood was supposed to be tested, by 1990, the quality of the test systems for the blood was called into question,<sup>91</sup> creating a question about the quality and results of blood tested. Was the blood really 'safe?'

# **Diagnostic Kits**

As with other equipment, the Soviet Union was troubled by the unavailability and low quality of HIV test kits. The Soviets developed their own test kits in 1987 and although they were initially "found to be identical to foreign ones in terms of sensitivity and effectiveness, 92, these kits were later deemed unreliable and new kits were developed for mass production in 1988. In fact, the Soviet-produced diagnostic kits had a very high error rate (10 to 18 percent). Moreover, shortages of kits were not infrequent. In 1988, only 65 percent of the requested test kits were received by testing centers, according to Aleksander I. Kondrusev, the Chief Sanitary Inspector of the Soviet Union, as cited in *Meditsinskaya gazeta*. Combined with the high error rate in test kits, and due to shortages in test kits, several tests were simultaneously done on each kit, yielding an even higher margin of error. Given the inaccuracy of Soviet test kits, a positive result from a domestic kit was reportedly always checked with an imported test kit. This process only accounted for false positives. False negatives went unchecked, as in the case of Olga Gavevskaya, the Soviet Union's first official AIDS mortality (see above).

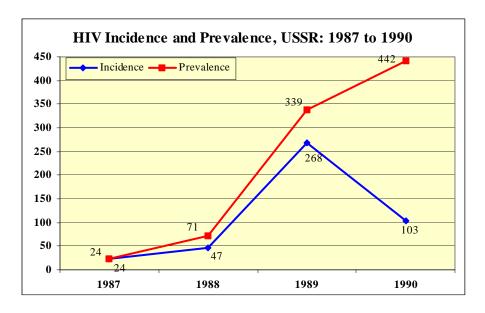
# **Groups Tested**

Although over 55 million Soviet citizens were reported to have been tested for HIV by April 1990, officials at the time estimated that repeat blood donors, who had been double- and triple-counted, accounted for half of this number, making the actual number of people tested much smaller. Moreover, the high number of blood donors tested reveals the low number of persons tested from high-risk groups, whose members feared the stigma of a positive diagnosis. The lack of knowledge about persons from the individual risk groups, as mentioned above, likely accounts for the small numbers of these people in the official prevalence figures for the USSR from 1987 to 1990 (see pages 26 and 27). Furthermore, limited testing of risk groups reveals

itself in the small number of people who tested positive for HIV in 1987 to 1990 in the Soviet Union.

# **Prevalence – Officially Reported and Estimates**

The number of HIV cases reported in the USSR between 1987 and 1990 was artificially low, as recognized by all, including leading Soviet health officials, such as Leonid Ionin of the Academy of Sciences, 99 and Chazov. 100 Although the cumulative number of reported cases over the period was in the 100s (442 by the end of 1990 to be exact, as shown in the table immediately below), it should have been in the 1000s, according to Pokrovskiy in February 1989. 101 The low recorded incidence and prevalence of HIV in the Soviet Union was a result of inadequate testing of persons from risk groups and of doctors who were afraid to diagnose patients with HIV for political reasons (as noted previously by Andrey P. Kozlov, the first AIDS research scientist to publicly identify an AIDS case in the Soviet Union). 102 Indeed, the problems with inadequate testing of risk groups and unwillingness by medical personnel to diagnose HIV have continued in Russia today.



Note: The figures shown in the chart are only for the years 1987 to 1990. There is evidence that before 1987 there were HIV cases from blood transfusions. Thus, the "prevalence" figures are a bit deceiving. They only account for the cumulative total official figures between 1987 and 1990.

Source: VICh-Infektsiya. Informatsionnyy byulleten', No. 8, 1997: 10.

### Kaposi's Sarcoma

At the time, estimates of HIV prevalence were complicated by the issue of whether or not Kaposi's Sarcoma (KS) necessarily signified AIDS when it appeared in young people, since in 1983 at the Aarhus Conference it was agreed that KS in persons under 60, in the absence of any underlying cause of immune deficiency was, by definition, AIDS. This definition has been found not to be the case, but given that studies in this period found large numbers of KS patients under 60 in the Soviet Union, this may be one reason why the estimated prevalence figures for the period differ so greatly from the reported figures, in addition to the obvious undercounts.

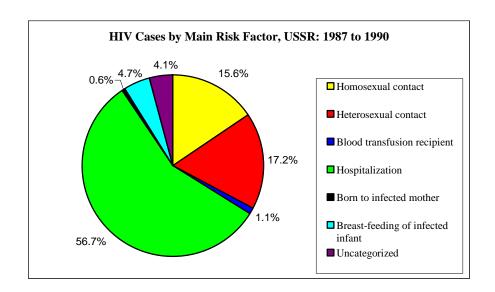
## **Prognoses**

Prognoses made at the time range from high to absurdly inflated. These numbers may have added to the atmosphere of fear, distrust, and panic, rather than ameliorating the uncertainties of the time. As part of its "Anti-AIDS campaign," Ogonyok published an estimate that 50 million people would carry the HIV virus by 2006. That would be more than one-third of the total population of the Russian Federation today (143.2 million). Looking back, this extreme estimate exceeds the fall 2004 estimated number of cases of HIV by more than 50 times (according to the Feshbach and Galvin January 2005 HIV/AIDS in Russia report). Other projections, such as those calculated at the N.F. Gamaleya Scientific-Research Institute of Experimental Medicine and cited by Academician V.I. Pokrovskiy, while still high, more closely correspond to current estimates of HIV and AIDS prevalence. Predicting 1,045,000 cases of HIV infection and 30,000 AIDS cases by the year 2000, <sup>104</sup> these mathematical projections are a bit premature, but not entirely out of the ballpark. Although projected for 2000, these numbers most likely correspond to the situation that will exist with HIV/AIDS in Russia in the next several years or so. However, considering that these projections were made for the *entire* territory of the USSR, if the estimated prevalence figures for 2000 were added up from all the

former territories of the USSR (not just the Russian Federation), the actual number of cases may more closely match up to those of the Gameleya Institute.

## **HIV Risk Groups in USSR – Official Numbers**

As noted in Peterson's *Radio Liberty* article, the main transmission routes for HIV in the Soviet Union from 1987 to 1990 differed greatly from those in the West. In comparison with the West where the main routes of transmission were homosexual contact and injecting drug use, the majority of the (early) reported HIV cases in the Soviet Union were from medical accidents and sexual contact with foreigners, with a higher share for heterosexual contact than for homosexual contact. Despite the stigma surrounding drug use, the fact that none of the cases reported in this period were listed as being due to injecting drug use shows a significant difference between the reported Soviet figures and the figures in the West. This distribution becomes especially interesting when one considers how HIV has spread to the present day, when IDUs account for the majority of HIV cases in Russia. The following table and chart show the official annual incident numbers by main risk factor, as published in the Federal AIDS Center's *Information Bulletin*.



HIV Cases by Main Risk factor, Annual Incidence, USSR: 1987 to 1990											
	1987		1988		1989		<u>1990</u>		1987 to 1990 Total		
Main Risk Factor	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Homosexual contact	10	41.7	20	42.6	17	6.4	22	21.4	69	15.6	
Heterosexual contact	9	37.5	20	42.6	29	10.8	18	17.5	76	17.2	
Blood transfusion											
recipient	4	16.7	0	0.0	1	0.4	0	0.0	5	1.1	
Hospitalization	0	0.0	5	10.6	201	75.0	45	43.7	251	56.7	
Born to infected mother	0	0.0	1	2.1	0	0.0	2	1.9	3	0.6	
Breast-feeding of											
infected infant	0	0.0	1	2.1	14	5.2	5	4.8	20	4.7	
IDU	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
Uncategorized	1	4.1	0	0.0	6	2.2	11	10.7	18	4.1	
<b>Total Annual Incidence</b>	24	n/a	47	n/a	268	n/a	103	n/a	442	n/a	

Note: n/a = not applicable

Source: VICh-Infektsiya. Informatsionnyy byulleten', No. 8, 1997: 10.

## **Medical Transmission**

According to *VICh Infektsiya* Number 8, issued in 1997, the main recorded method of HIV transmission in the USSR between 1987 and 1990 was medical mistakes made during hospitalization: 56.7 percent of all new HIV cases recorded during the period were transmitted during hospitalization through inadequately sterilized needles. In 1989, the year of the Elista tragedy, 201 (or 75.0%) of the 268 newly recorded cases of HIV were transmitted in this way. Another 14 cases in that year occurred when babies who had contracted HIV in the hospital transferred the disease back to their breast-feeding mothers. The spin-off from the Elista and other related tragedies extended into 1990, with another 45 cases of in-hospital transmission and another 5 cases of transmission through breast-feeding. The uproar raised by the press and the public about medical safety was not without cause; the main mode of HIV transmission in their country was the same as in the Third World, <sup>106</sup> but the USSR was a major world power. At the same time, these numbers show that the blood supply in the USSR was more or less safe by 1988, although in earlier periods, blood transfusions were a main factor of transmission in the USSR, accounting for 11 cases of HIV recorded before 1988.

### Children

To make a bad situation worse, according to the elder Pokrovskiy and others the great majority of those accidentally infected in clinics and hospitals at this time were children, <sup>108</sup> although the numbers published in VICh-Infektsiya do not reveal the ages of those infected in this early period. Detailed age distributions begin only in later years. In fact, a detailed study, published in FBIS in February 1990 reveals the overwhelming number of HIV cases in children versus adults in a number of regions. At this time it was reported that in the Kalmyk Autonomous SSR 75 of 92 PLWHA were children; in Volgograd oblast' 46 of 59 PLWHA were children; in Rostov on Don 63 of 69 PLWHA were children and in Stavropol kray 13 of 15 PLWHA were children. 109 Thus, in these 4 territories alone there were 235 HIV-infected children, accounting for over half of the 446 reported HIV cases at the time. Again, the uproar about medical practices in the USSR was not without cause, especially with the consequences it presented for children. In recent years, infection from medical mistakes has decreased substantially, as has the spread of the infection among children. As of September 1, 2004, children accounted for only 3.7 percent of all PLWHA (of the 291,512 reported cases of HIV, only 10,802 are among children). 110

## **Promiscuous persons**

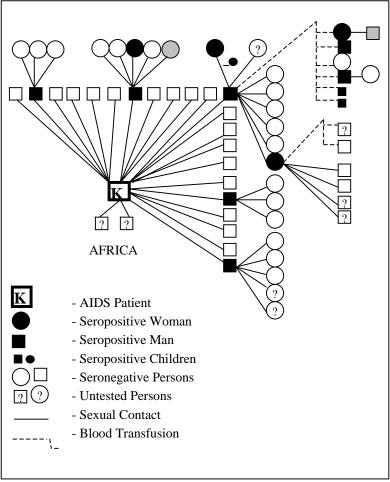
Between 1987 and 1990, sexual contact accounted for 32.8 percent of all recorded cases of HIV, of which homosexual contact accounted for 15.6 percent and heterosexual contact accounted for 17.2 percent. Outside of medical accidents, sexual contact accounted for the majority of HIV cases identified during this period. At the time, V.V. Pokrovskiy speculated that perhaps these numbers were not higher because the virus was still absent in a number of promiscuous subpopulations. Nonetheless, these populations were bound to come into contact with HIV in the future, especially given the increase in travel abroad and the easing of rules

governing contact with foreigners during perestroika.<sup>112</sup> Sexual contact with people from places where the HIV prevalence was much higher introduced a greater chance of infection with HIV into the USSR. At the same time, as pointed out by Peterson, although the infection was brought in from abroad, concentrating on blaming contact with foreigners was a way of turning attention away from the behavior of the indigenous population.<sup>113</sup> Once HIV had entered the USSR, one did not have to have sex with a foreigner to catch it. Short of extensive contact tracing it would be difficult to uncover the origins of all the HIV-infections as they spread in the USSR, but the fact was that, as in other places worldwide, Soviet citizens needed to learn to take precautions for themselves to protect themselves from HIV, even if they never even met a foreigner.

## **Afterword**

Medical, economic, political and ideological ill-preparedness exacerbated the spread of HIV in the early days of HIV/AIDS in the USSR. To this day, the atmosphere of denial, fear, and scapegoating surrounding HIV/AIDS continues to exist in the Russian Federation. Today, however, the need to address the problem has become all the more urgent. In 1990, outside of radical prognoses, no one expected HIV prevalence to spread as far as it has, even according to official figures. Although, the pattern of the main groups affected by the virus may have changed, HIV still plagues the younger population in Russia today. Whereas in 1990, children under 15 years of age accounted for at least 50 percent of PLWHA in the Soviet Union, today young adults, ages 15 to 29, account for over 80 percent of PLWHA in Russia (see pages 4 and 30 of the January 2005 report on *HIV/AIDS in Russia*). The current age distribution of HIV-infection in Russia threatens to produce severe demographic consequences if it remains unchecked.

# **Appendix A: Contact Tracing Chart**



Source:

V.V. Pokrovskiy, Z.K. Yankina, V.I. Pokrovskiy (1987) "Epidemiological Investigation of the First Case of the Acquired Immunodeficiency Syndrome (AIDS) Detected in the USSR," *Zhurnal Mikrobiologii*, No. 12: 6-10.

Note:

"The penetration and spread of infection caused by human immunodeficiency virus has been detected in the USSR. The infection was brought by a homosexual who got infected in East Africa in 1982. In the USSR, he infected 5 out of his 22 sexual partners who, in their turn, transferred the infection to 3 women by heterosexual intercourse. One of these women gave birth to a seropositive child. As the result of blood transfusion from a donor infected via a homosexual contact, 5 blood recipients were infected."

<sup>&</sup>lt;sup>1</sup> (October 30, 1985) "Portrait of an Insidious Enemy," *The Current Digest of the Soviet Press*, XXXVII (40): 27 cites (October 6, 1985) *Trud*, 4.

<sup>&</sup>lt;sup>2</sup> Peterson, D.J. (June 7, 1990) "USSR – The Soviet Experience with AIDS," *Radio Liberty*: 2,5.

<sup>&</sup>lt;sup>3</sup> Cited in Feshbach, M (1988) "Is There an AIDS Problem in the USSR?" Paper presented at the World Political Science Association Conference, 30 August, Sheraton Washington Hotel, Washington, DC.

<sup>&</sup>lt;sup>4</sup> Ibid.

<sup>&</sup>lt;sup>5</sup> (July 1987) "The U.S.S.R.'s AIDS Disinformation Campaign," *Foreign Affairs Note*: 6 cites Zhdanov at "The Second International Conference on AIDS," Paris, June 23-25, 1986. See also *Spectator*, "Bohdan Nahaylo Finds the Soviet Press Nervous in Dealing with the Disease," October 4, 1986: 1.

<sup>&</sup>lt;sup>6</sup> Albergo, G.A. (December 12, 1988) "The Soviet Approach to the AIDS Epidemic," Term Paper for Demography of the USSR with Dr. Murray Feshbach, Georgetown University, 12.

<sup>&</sup>lt;sup>7</sup> Altman, L. (June 4, 1989) "Health Official Traces Virus Trail," New York Times.

<sup>&</sup>lt;sup>8</sup> (July 1987) "The U.S.S.R.'s AIDS Disinformation Campaign," Foreign Affairs Note: 8.

<sup>&</sup>lt;sup>9</sup> Medvedev, Zh. A. (April 7, 1990) "Evolution of AIDS policy in the Soviet Union. II. The AIDS epidemic and emergency measures," *BMJ*, 300: 932.

<sup>&</sup>lt;sup>10</sup> Trehub, Aaron. (October 19, 1988) "Soviet Media Report First Soviet AIDS Death," *Radio Liberty Research*, 470/88: 1.

<sup>&</sup>lt;sup>11</sup> Hamilton, M. (April 22, 1989) "Soviets Acknowledging AIDS as More Than Western Problem," Los Angeles Times.

<sup>&</sup>lt;sup>12</sup> Trehub, Aaron: 6 cites *Meditisnskaya gazeta* October 12, 1988.

<sup>&</sup>lt;sup>13</sup> (November 1988) *GDSR RPT 11*: 5.

<sup>&</sup>lt;sup>14</sup> Trehub, Aaron: 5 cites "O merakh profilaktiki zarazheniya virusom SPID," *Izvestia*, August 26, 1987 and "Pravila meditsinskogo osvidetel'- stvovaniya na vyvavlenie zarazheniya virusom SPID, *Meditsinskaya gazeta*, September 2, 1987.

<sup>&</sup>lt;sup>15</sup> Medvedev, Zh. A.: 934.

<sup>&</sup>lt;sup>16</sup> Ibid.: 934.

<sup>&</sup>lt;sup>17</sup> Such as A. Blyuger from the Latvian Academy of Sciences, the Scientific Director of the Republic Center for Birth Control and AIDS. (March 13, 1990) "Latvian Academician's Report on AIDS," *JPRS-UPA-90-013*: 81-82 cites (January 11, 1990) "AIDS: Averting Catastrophe," *Sovetskaya Latvia* (in Russian).

<sup>&</sup>lt;sup>18</sup> Albergo, G.A. cites L. Zagalsky, "AIDS-The Plague of the 20th Century?," *Literaturnaya gazeta*, February 25, 1987.

<sup>&</sup>lt;sup>19</sup> "The U.S.S.R.'s AIDS Disinformation Campaign": 1-14.

<sup>&</sup>lt;sup>20</sup> Ibid.: 1.

<sup>&</sup>lt;sup>21</sup> Ibid.: 3.

<sup>&</sup>lt;sup>22</sup> Ibid.: 2.

<sup>&</sup>lt;sup>23</sup> Ibid. cites Reuters, AP and UPI, June 25, 1986

<sup>&</sup>lt;sup>24</sup> Hamilton, M.

- <sup>25</sup> Cited in Kolokol (Bell) Council of Experts(March 1990) "AIDS in the USSR," *The Moscow Interlegal Research Center's Postfactum Special Information Release "Bell"* (hereafter cited as *Bell*). Paper presented at the Spring Research Forum, 15-17 March, 1990, Boston, MA: VI.
- <sup>26</sup> (December 11, 1990) "Penetration and Spread of Human Immunodeficiency Virus in Homosexual Population in Moscow," *JPRS-ULS-90-021*: 12-15 cites Pokrovskiy, V.I. and Yeramova, I. Yu. (May 1990), *Zhurnal microbiologii epidemiologii i immunologii*, 5: 14.
- <sup>27</sup> (October 12, 1989) "Georgian VD Specialist Interviewed on AIDS Threat," *JPRS-UPA-89-057*: 17-19 cites (May 17, 1989) "It's Time to Wake Up! AIDS and Venereal Diseases Are More Than Merely A Medical Problem," *Komunisti* (in Georgian): 4. An interview with Professor Luba Shetsiruli.
- <sup>28</sup> "AIDS in the USSR," Bell: VI.
- <sup>29</sup> Cited in Feshbach, M.
- <sup>30</sup> "AIDS in the USSR," Bell: VII.
- <sup>31</sup> Cited in Feshbach, M.
- <sup>32</sup> Vasil'eva, L. et al. (November 9, 2004) "Moskovskiye prostitutki zarabatyvayut v den' \$5,000,000," *Komsomol'kaya Pravda*, No. 211p: 18.
- <sup>33</sup> Trehub, Aaron: 3 cites *AP* (Washington), October 13, 1988.
- <sup>34</sup> "AIDS in the USSR," *Bell*: VII.
- <sup>35</sup> Cited in Feshbach, M.
- <sup>36</sup> "AIDS in the USSR." Bell: VIII.
- <sup>37</sup> Albergo, G.A.: 9.
- <sup>38</sup> Peterson, D.J.: 9.
- <sup>39</sup> Medvedev, Zh. A.: 933.
- <sup>40</sup> Trehub, Aaron: 5.
- <sup>41</sup> Peterson, D.J.: 7 cites *Meditisnskaya gazeta* (December 1, 1990).
- <sup>42</sup> "AIDS in the USSR," *Bell*: VII-VIII.
- <sup>43</sup> Cited in Feshbach, M.: 21-22.
- <sup>44</sup> Peterson, D.J.: 8.
- <sup>45</sup> Ibid.: 8 cites *Nedel'va*. No. 20, 1989 and *Sovetskava kul'tura*, December 26, 1990[sic].
- <sup>46</sup> "AIDS in the USSR," Bell: VII-VIII.
- <sup>47</sup> Ibid.: VII
- <sup>48</sup> Peterson, D.J.: 8
- <sup>49</sup> Hamilton, M.

- <sup>50</sup> Ibid.
- <sup>51</sup> Ibid.
- <sup>52</sup> Peterson, D.J.: 10 cites *Literaturnaya gazeta* No. 18, 1989.
- <sup>53</sup> Ibid.: 11.
- <sup>54</sup> Ibid.: 10 cites *Sotsialisticheskaya industriya*, November 18, 1989.
- <sup>55</sup> Medvedev, Zh. A.: 933.
- <sup>56</sup> Seale, J.R. and Medvedev, Zh.A. (May 1987) "Origin and transmission of AIDS. Multi-use hypodermics and the threat to the Soviet Union: discussion paper," *The Royal Society of Medicine*, 60: 304.
- <sup>57</sup> Cited in Feshbach, M.
- <sup>58</sup> Remnick, D. (January 30, 1989) "Unwashed Needles Infect 27 Infants with AIDS; Soviet Hospital Failed to Sterilize Syringes," *Washington Post*.
- <sup>59</sup> Trehub, Aaron: 5 cites *Ogonek*, No. 28, 1988: 14 and Peterson, D.J.: 6.
- <sup>60</sup> (May 23, 1989) "Ministries Fail to Provide Needed AIDS Equipment," *FBIS-SOV-89-098*: 76 cites Blagodarov, S. (May 6, 1989), "Multiple Injections," *Sovetskaya Rossiya*: 2.
- <sup>61</sup> Trehub, Aaron: 5.
- <sup>62</sup> "Ministries Fail to Provide Needed AIDS Equipment," cites Blagodarov, S. (May 6, 1989), "Multiple Injections," *Sovetskaya Rossiya*: 2.
- 63 "AIDS in the USSR," Bell: VII.
- <sup>64</sup> Albats, Ye. (1989) "Beware," *Moscow News*, 8: 13. (an interview with A.I. Kondrusev, Deputy Minister of Public Health of the USSR and Chief Sanitary Physician) says he was in the Congo, while Altman, L. says that he was infected in Guinea.
- <sup>65</sup> Peterson, D.J.: 6 cites *Novosti*, May 23, 1990.
- 66 Medvedev, Zh. A.: 932.
- <sup>67</sup> Albats, Ye. "Beware": 13 and "Georgian VD Specialist Interviewed on AIDS Threat": 17-19 cites (May 17, 1989) "It's Time to Wake Up! AIDS and Venereal Diseases Are More Than Merely A Medical Problem," *Komunisti* (in Georgian): 4.
- <sup>68</sup> (February 9, 1989) 'AIDS Expert Urges Universal Preventative Measures,' *FBIS-SOV-89-026*: 78-79 cites (February 8, 1989) *Moscow Television Service*.
- <sup>69</sup> Remnick, D.
- <sup>70</sup> Medvedev, Zh. A.: 932 and Albats, Ye. "Beware": 13.
- <sup>71</sup> Remnick, D.
- <sup>72</sup> Ibid.
- <sup>73</sup> Ballantyne, A. (June 5, 1989) "Russian HIV Chain Trace to One Child," *The Guardian*.
- <sup>74</sup> Peterson, D.J.: 6.

- <sup>75</sup> "AIDS in the USSR," *Bell*: VIII.
- <sup>76</sup> (1990) "Anti-AIDS campaign," *Ogonyok*: 4.
- <sup>77</sup> Cited in Feshbach, M.
- <sup>78</sup> See for instance: Remnick, D.; Albats, Ye. (September, 1989) "Save our children from AIDS!," *Ogonyok*; "Georgian VD Specialist Interviewed on AIDS Threat": 17-19 cites (May 17, 1989) "It's Time to Wake Up! AIDS and Venereal Diseases Are More Than Merely A Medical Problem," *Komunisti* (in Georgian): 4; Peterson, D.J.: 7; (1990) "Anti-AIDS campaign," *Ogonyok*: 2; Medvedev, Zh. A.: 933.
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- <sup>92</sup> Albergo, G.A.: 20.
- <sup>93</sup> Medvedev, Zh. A.: 932.
- 94 Ibid.: 934.
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- <sup>97</sup> Peterson, D.J.: 3 cites *TASS*, May 28, 1990.
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<sup>&</sup>lt;sup>102</sup> Hamilton, M.

<sup>&</sup>lt;sup>103</sup> Seale, J.R. and Medvedev, Zh.A.: 303.

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