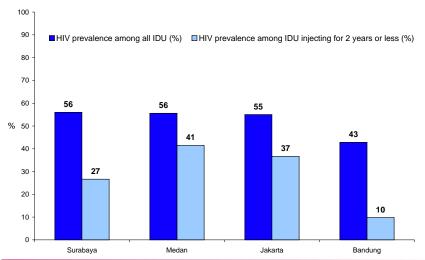
Injecting drug users (IDU) are particularly vulnerable to transmission of HIV because sharing contaminated drug injecting equipment transmits the HIV virus more efficiently than any other mode of transmission. Since initial data indicating 19% prevalence among IDU in 1999, HIV prevalence has been consistently rising in this population sub-group. and represents the highest prevalence of HIV among identifiable population sub-groups in Indonesia. This summary presents key findings of the IBBS 2007 from two (2) cities from which only behavioral survey data were gathered (Semarang and Malang) and four (4) cities from which both biological and behavioral data were gathered (Medan, Jakarta, Bandung, and Surabaya). Official estimates for 2006 indicated there were 190,000 - 248,000 IDU in Indonesia in that year.

Key Finding 1: Between 43%-56% of IDU in four cities were infected with HIV.

IDU continue to have the highest prevalence of HIV among most-at-risk-groups in Indonesia. The prevalence of HIV was 55-56% in the three of the four cities in which biological data were collected, but somewhat lower in Bandung (43%). This homogeneity is not accounted for by mobility of IDU between cities, as few IDU reported having traveled between provinces to inject (see data table).

HIV prevalence among those who injected drugs for two years or less was substantially lower than among those who had injected drugs for more than two years, suggesting that many HIV infections among IDU can be prevented if IDU are reached by interventions early. In Jakarta and Semarang, about a quarter of the IDU have been injecting for less than a year, whereas in Malang only 4% were new injectors (see data table). These variations in turn-over by city are important to understanding the differential potential impact of prevention efforts across cities. Few IDU are female (1-8%).

Figure 1: HIV Prevalence among Injecting Drug Users, by Duration of Injecting Drugs and City



Key Finding 2: Needle exchange programs (NEP) have achieved high coverage in some cities, and these cities tend to have lower prevalence of injection equipment sharing among IDU. However, the number of needles being distributed appears to be insufficient.

The proportion of IDU receiving clean needles and syringes from a Needle Exchange Program (NEP) in the last week, an indicator of NEP coverage, ranged from 98% in Medan to 33% in Surabaya (Figure 2). The cities that have achieved high coverage of IDU through NEP tend to have lower proportions of IDU reporting having shared a needle in the past week. As shown in Figure 3, distribution of clean needles through NEP has risen dramatically since 2004, and other than in Jakarta, substantial reductions in sharing needles have occurred over the same period.

Despite increased coverage, needle exchange programs do not appear to be distributing a sufficient quantity of needles to clients, as 13-72% of IDU (depending upon the city) receiving needles from a NEP in the week prior to the IBBS also reported having sought needles from other sources during that week (see data table). Needles are often discarded unsafely, which puts others persons at risk of HIV infection through accidental needle sticks (see data table).

Key Findings:

- ★ Between 43%-56% of IDU in four cities were infected with HIV.
- ★ Needle exchange programs (NEP) have achieved high coverage in some cities, and these cities tend to have lower prevalence of injection equipment sharing among IDU. However, the number of needles being distributed appears to be insufficient.
- ★ Sizeable numbers of IDU are being reached by methadone substitution programs, but many IDU reached by such programs continue to inject.
- The prevalence of STI among IDU is low compared to other high risk men in Indonesia.
- ★ Less than 30% of IDU in six cities had been tested for HIV in the year prior to the 2007 IBBS survey. Knowledge of HIV status does not seem to have influenced the behaviors of IDU.
- ★ IDU reported having had sex with multiple partners, including regular/permanent partners, casual partners and female sex workers. However, few reported having sold sex.
- Unprotected sex seems to be the norm among IDU, irrespective of type of partner.

The 2007 IBBS among MARG was designed to measure key HIV/AIDS-related biological and behavioral indicators for key population subgroups in Indonesia.

The 2007 IBBS was a collaborative initiative of the following organizations:

- Department of Health (DepKes)
- Statistics Indonesia (BPS)
- US Agency for International Development (USAID)
- National AIDS Commission (KPA)
- Family Health International Aksi Stop AIDS (ASA) Program

Primary financial support for the 2007 IBBS was provided by the US Agency for International Development and the Indonesian Partnership Fund through Family Health International, which also provided technical support to the effort.

Additional financial support was provided by the World Health Organization (WHO) and The Australian Agency for International Development (AUSAID) through the Indonesian HIV-AIDS Prevention and Care Project (IHPCP).

Figure 2: Proportion of IDU Receiving and Sharing Needles in the Past Week, by City

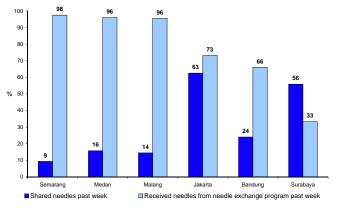
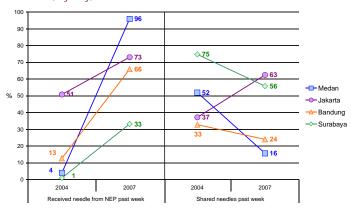


Figure 3: Proportion of IDU Receiving Needles and Sharing Needles in the Past Week, by City, 2004 and 2007



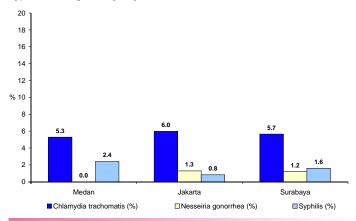
Key Finding 3: Sizeable numbers of IDU are being reached by methadone substitution programs, but many IDU reached by such programs continue to inject.

Methadone substitution programs covered sizeable numbers of IDU in Indonesian cities ranging from 17% in Jakarta to 88% in Malang (see data table). However, most of those who received methadone maintenance therapy (MMT) in the past year were still injecting in the past week, which might reflect irregular supply of methadone at distribution sites, inadequate dosage, or both.

Key Finding 4: The prevalence of STI among IDU is low compared to other high risk men in Indonesia.

IDU have lower prevalence of STIs than other high risk men. However, the prevalence of Chlamydia Trachomatis among IDU was moderately high, ranging between 5 and 6% in the four cities.

Figure 4: Prevalence of Chlamydia Trachomatis, *Nesseiria* Gonorrhea and Syphilis among IDU, by City



Key Finding 5: Less than 30% of IDU in six cities had been tested for HIV in the year prior to the 2007 IBBS survey. Knowledge of HIV status does not seem to have influenced behavior.

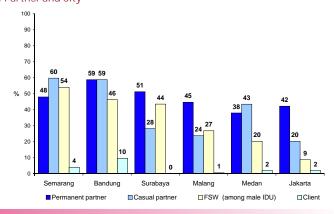


Between 8% (Malang) and 54% (Semarang) of IDU received a HIV test result in the past year (see data table). However, the fact that no differences in behaviors were observed when comparing IDU who had been tested for HIV and those who had not (data not shown) suggests that HIV counseling needs to be strengthened.

Key Finding 6: IDU reported having had sex with multiple partners, including regular/permanent partners, casual partners and female sex workers. However, few reported having sold sex.

In the past year, between 38% to 59% of the IDU in the six cities from which behavioral data were collected had a regular partner with whom they had sex, and 20% to 60% had casual partners. In addition, 9% to 54% of male IDU had sex with a female sex worker (FSW) in the past year. Selling sex was seldom reported by IDU (19% of female and 3% of male IDU).

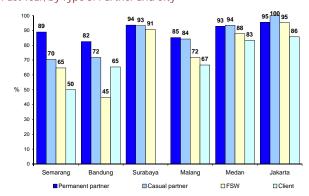
Figure 5: Proportion of IDU Reporting Having Sex in the Past Year, by Type of Partner and City



Key Finding 7: Unprotected sex seems to be the norm among IDU, irrespective of type of partner.

Inconsistent use of condoms was reported by the majority of IDU in all cities and with all types of partners. Through unprotected sex, especially with FSW, IDU contribute in important ways to the spread of HIV in Indonesia. About half of male IDU visited FSW in the year prior to the survey, and those who did so reported having had sex with an average of four (4) FSW. It is estimated that IDU had 380,000 unprotected sex encounters with FSW in the last year, a figure that nearly equals the estimated total number of FSW in Indonesia.

Figure 6: Proportion of IDU Reporting Inconsistent Use of Condoms in the Past Year, by Type of Partner and City



Prevalence of HIV and STI among IDU

	Medan	Jakarta	Bandung	Surabaya
HIV prevalence (%)	55.6	55.02	42.8	56
By duration of drug injection <=2 years >2 years	41.5 58.3	36.6 67.8	9.8 51.3	26.7 62.4
Chlamydia trachomatis (%)	5.3	6.0		5.7
Nesseiria gonorrhea (%)	0	1.3		1.2
Syphilis all (%)	2.4	0.1	0.0	1.6

Drug related behaviors among IDU

	Medan	Jakarta	Bandung	Semarang	Malang	Surabaya
Proportion of female (%)	3	4	8	5	1	2
Injected drugs past week (%)	100	97	91	92	99	95
Injected drug for 1 year or less (%)	9	25	12	21	4	7
Injected heroin past year (%)	78	90	95	97	94	100
Used amphetamine or ecstasy past year (%) Yes injected Used but not injected Not used	8 55 37	36 38 26	2 69 29	7 79 15	6 82 12	4 46 50
Injected in other province past year (%)	1	4	3	21	1	3
Shared needles past week (%)	16	63	24	9	14	56
Received needles from needle exchange program (NEP) past week (%)	96	73	66	98	96	33
Discarded last needle safely (%)	35	43	59	86	85	10
Proportion of clients to NEP who sought neeldes from other source than NEP past week (%)	31	5	22	11	22	20
Received substitution past year (%)	57	17	47	50	88	60
Had abcess at injection site past year (%)	27	52	26	29	48	23
Know that HIV is transmitted through sharing needles (%)	4	30	1	2	3	3
Jailed past year (%)	25	17	31	9	15	18

Sexual behaviors among IDU

3	Medan	Jakarta	Bandung	Semarang	Malang	Surabaya
Had multiple sexual partners past year	40	17	60	84	36	52
Had permanent partner past year	38	42	59	48	45	51
Had casual partner past year	43	20	59	60	24	28
Had sex with FSW past year (among male IDU)	20	9	46	54	27	44
Sold sex past year (%)	2	2	10	4	1	0
Inconsistent condom use with permanent partner past year (%)	93	95	82	89	85	94
Inconsistent condom use with casual partner past year (%)	94	100	72	70	84	93
Inconsistent condom use with FSW past year (%)	88	95	45	65	72	91
Know that sexual transmission of HIV can be avoided by using condom (%)	91	49	96	97	99	92
Received results of HIV test past year (%)	21	27	37	54	8	15

Conclusions and Recommendations

Data from the 2007 IBBS among most at risk groups (MARG) in Indonesia provide insights into the current status of the HIV/AIDS epidemic among intravenous drug users (IDU), as well as data with which to update trends in HIV-related biological and behavioral indicators over time. These data thus contribute to the growing, but still limited, evidence base for decision making concerning HIV/AIDS in Indonesia. Conclusions and key recommendations concerning IDU include the following:

★ In view of very high HIV prevalence among IDU and continued high prevalence of risky injecting and sexual behaviors, harmreduction interventions need to be expanded and intensified as a matter of high priority.

There are more injecting drug users infected with HIV than in any population sub-group in Indonesia. IDU get infected primarily through needle sharing. While FSW serve as the primary vector for the dissemination of HIV to the Indonesian general population, IDU are at present the core reservoir of infections in the country. A substantial proportion of IDU had been jailed at one time or another, which both contributes to the spread of HIV among prison inmates and poses a risk to the general population when HIV-positive inmates are released back into the community. Taken in the context of earlier HIV sentinel surveillance data from the Ministry of Health, data from the IBBS 2007 provide little in the way of evidence that the HIV epidemic among IDU is abating. However, because many IDU remain uninfected after two years of injecting drugs, prevention programs can potentially prevent a substantial number of infections if IDU are reached early enough.

Comprehensive efforts that reach critical coverage levels (70%-80% of IDU) are urgently needed to slow down the progression of HIV/AIDS in the ranks of IDU. Key components should include access to accurate information, comprehensive distribution and recovery of needles, coordinated methadone maintenance programs, behavior change communications/interventions, condom promotion, access to primary health care, and access to voluntary counseling and testing. Priority attention should be given to needle exchange programs and methadone maintenance therapy (MMT).

★ Needle exchange and methadone maintenance programs need to be both expanded and strengthened in order to have their intended impact.

Needle exchange programs have greatly expanded their coverage in recent years, which is likely the primary cause of the reduction in needle sharing observed in the 2007 IBBS data. However, coverage remains low in some cities, and programs appear not to provide a sufficient number of needles-syringes, resulting in sustained injecting risk. The factors underlying provision of insufficient quantities of needles need to be determined and corrective actions taken immediately.

Insufficient frequency of safe disposal of used needles and syringes is also a concern, likely due at least in part to concern among IDU over being caught by police with traces of heroin in needles being returned. Stronger coordination between public health and law enforcement authorities is needed in order to provide sufficient "space" for effective HIV/AIDS prevention measures such as needle exchange programs. Steps toward achieving this might include education of local police on public health issues related to drug use and continued/stronger advocacy to law enforcement authorities.

Coverage of methadone maintenance therapy (drug substitution) has also increased significantly in recent years, but many IDU on MMT continue to inject, thus reducing program impact. Substitutive therapies should be included in a coordinated comprehensive system of primary health care and psycho-social counseling, with an adequate monitoring system, to ensure that the clients receive a sufficient dose of drug substitute.

★ In view of high HIV prevalence among IDU, coverage of HIV counseling and testing needs to be rapidly expanded. There are a sizeable number of IDU in Indonesia who are infected with HIV but are not aware of their infection. This both precludes them from receiving adequate care, support and treatment in the



event that they are HIV positive and reduces incentive to take action to prevent infecting others, including spouses. Coverage of HIV counseling and testing among IDU has increased somewhat in recent years, but progress must be accelerated further. Operations research to identify barriers to acceptance of HIV counseling and testing among IDU should be undertaken to guide program efforts to increase coverage.

★ Consistent condom use among IDU remains low, and strong condom promotion efforts targeting IDU are needed. IDU are sexually active and tend to have multiple partners. Onehalf of IDU regularly have sex with FSW. With all types of partners, IDU usually have unprotected sex. Because of high HIV prevalence among IDU, their frequency of unprotected sex is likely to play an important role in fueling the epidemic among FSW, who in turn are positioned to disseminate the virus to the general population.

IDU need behavior change communications interventions that focus on safe sex and partner reduction, as well as interventions maximizing their access to condoms. Despite the moderate prevalence of STI among IDU, STI screening should be intensified among IDU combined with HIV pre-test counseling with opt-out for HIV testing.

- ★ Increased attention needs to be directed to the needs of spouses and regular partners of IDUs.

 Spouses and female sexual partners of IDUs in Indonesia are at elevated risk of HIV infection because of high HIV prevalence among IDUs and low levels of condom use. Although establishing contact with spouses/partners of IDUs is challenging, it is essential that greater efforts be made to increase program coverage to provide spouses/partners with accurate information on HIV/AIDS, prevention measures, and care, support and treatment for IDU LWHA, as well as to provide psycho-social and other types of support for spouses/partners themselves.
- ★ Priority attention should be directed to IDUs in prisons. Because access to clean needles and condoms is restricted in prisons, such facilities provide an ideal setting for the rapid spread of HIV among prison inmates, particularly among IDUs. Program efforts should emphasize HIV prevention educational and behavior change efforts, introduction of methadone maintenance therapy (MMT), access to a reliable supply of condoms, and access to STI management, VCT, HIV care, support and treatment, and management of opportunistic infection (Ois, especially tuberculosis) services.















This IBBS Highlight summarizes key findings from the 2007 Integrated Biological-Behavioral Surveillance (IBBS) among Most-at-Risk-Groups (MARG) in Indonesia. Further data and analyses will be posted to the websites of The Department of Health (DepKes), the National AIDS Commission (KPA), and Family Health International (FHI).

The Department of Health (DepKes) The National AIDS Commission (KPA) : www.depkes.go.id : www.aidsindonesia.or.id

Family Health International – Aksi Stop AIDS (ASA) Program: <u>www.aidsinc</u>