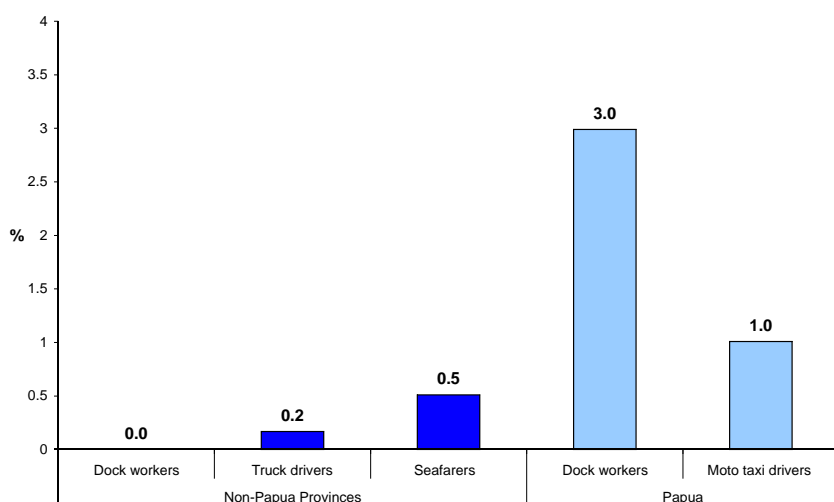


For HIV surveillance purposes, males in occupational groups known or suspected to be frequent clients of female sex workers (FSW) are considered to be "high risk men" (HRM). Such men represent an important "bridge" population between FSW, one of the population sub-groups in Indonesia in which the HIV/AIDS epidemic is currently concentrated, and the general population. Surveillance of such bridge groups serves to provide early warning of the potential spread of HIV/AIDS into the general population. In the 2007 IBBS, men were selected from four occupational categories: truck drivers (in Deli Serdang and Batam), seafarers (in Batam, Medan, Semarang, and Surabaya), dock workers (in Jakarta, Merauke, and Sorong) and moto-taxi drivers (in Medan, Banyuwangi, and Jayapura). This summary presents key findings of the IBBS 2007 for these groups of men. Data are presented by occupational group separately for Papua and non-Papua provinces to account for the difference between those areas in level of HIV epidemic in the general population.

Key Finding 1: HIV has become detectable among high risk men outside of Papua.

HIV has been undetectable among HRM in prior surveillance efforts in Indonesia. The 2007 IBBS did not detect any cases of HIV infection among moto-taxi drivers outside of Papua. However, 0.2% of truck drivers and 0.5% of seafarers were infected with HIV. In Papua, the prevalence of HIV was much higher, with 1% of the moto-taxi drivers and 3% of the dock workers being infected with HIV.

Figure 1: HIV Prevalence among High Risk Men, by Occupational Group and Geographic Area



Key Finding 2: The prevalence of Chlamydia has reached modest levels among HRM, especially in Papua, while the prevalence of syphilis is relatively high in all occupational groups in all geographic locations. This justifies intensification of STI control efforts among HRM. However, few HRM are at present using public sector health services for treatment of STI.

Chlamydia is more frequent than gonorrhea among high risk men. The prevalence of both Chlamydia and gonorrhea is extremely high in Papua, which would justify general population screening and treatment interventions in Papua. The prevalence of syphilis is alarmingly high in all groups and geographic areas. Although the testing algorithm used in the 2007 IBBS does not allow differentiation between current syphilis infection and past infections, such high prevalence in a non-sex worker sub populations justifies the intensification of screening for and treatment of syphilis on a wider basis than is currently being undertaken.

Except for dock workers in Papua, among whom 63% had their last STI treated at a public health facility, public health services were rarely used by HRM when they had symptoms of STI in the last year – less than 25% in all occupational groups (see data table). The majority (52% to 71%, depending upon occupational group and province) preferred to either self-treat or abstain from treatment.

Key Findings:

- ★ HIV has become detectable among high risk men outside of Papua.
- ★ The prevalence of Chlamydia has reached modest levels among HRM, especially in Papua, while the prevalence of syphilis is relatively high in all occupational groups in all geographic locations.
- ★ Truck drivers and seafarers were the most exposed to risk of HIV and STI transmission from sexual contact with FSW. Within similar occupational groups, those from Papua had greater exposure to FSW than those from other provinces. Sex with casual partners is also more common in Papua.
- ★ Consistent condom use by HRM is low with both FSW and casual partners, but is higher in Papua than in other provinces. Most HRM did not know that condoms can protect them against HIV transmission.
- ★ Few HRM have been tested for HIV.
- ★ Few HRM inject drugs. However some truck drivers and seafarers use methamphetamines, which may increase their risky sexual behaviors.

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

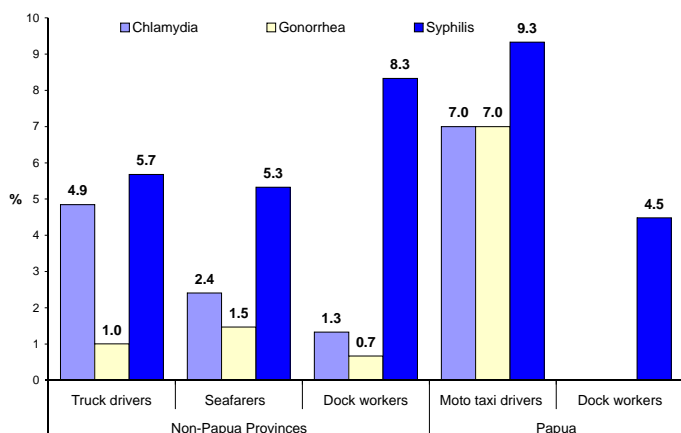
The 2007 IBBS was a collaborative initiative of the following organizations:

- 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).

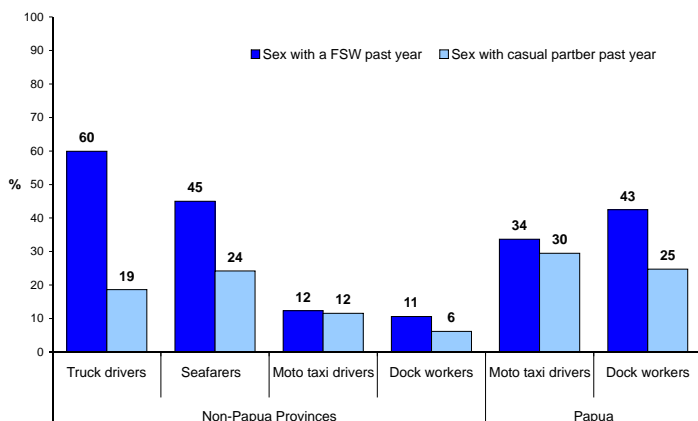
Figure 2: Prevalence of Chlamydia Trachomatis, *Neisseria* Gonorrhoea and Syphilis among High Risk Men, by Occupational Group and Geographic Area



Key Finding 3: Truck drivers and seafarers were the most exposed to risk of HIV and STI transmission from sexual contact with FSW. Within similar occupational groups, those from Papua had greater exposure to FSW than those from other provinces. Sex with casual partners is also more common in Papua.

The highest proportions of HRM reporting having had sex with FSW in the past year are found among truck drivers (60%) and seafarers (46%) outside of Papua. Sex with FSW was also quite common among both moto taxi drivers (34%) and dock workers (43%) in Papua. Sex with casual partners in the past year was more prevalent in Papua than in other provinces: 30% of moto-taxi drivers and 25% of dock workers from Papua reported having had sex with a casual partner in the past year. In Papua, the proportion of HRM who had either sex with a FSW or with a casual partner in the past year was more than double of that reported in provinces outside of Papua.

Figure 3: Proportion of HRM Having Sex with FSW and with Casual Partners in The Past Year, Occupational Group and Geographic Area



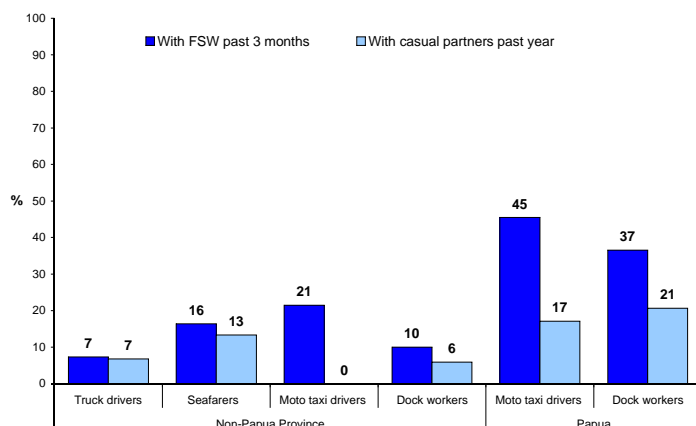
Key Finding 4: Consistent condom use by HRM is low with both FSW and casual partners, but is higher in Papua than in other provinces. Most HRM did not know that condoms can protect them against HIV transmission.

Most HRM do not use condoms consistently with either FSW or casual partners. Consistent use of condom with FSW in the past 3 months ranged from 7% to 21% among the different occupational groups outside of Papua and from 37% to 46% in Papua. Truck drivers, the occupational group with the highest frequency of sex with FSW, are also the least likely to use condoms. When taking into account men reporting not having had sex during the last year, the various type of partners they had and their condom use behaviors, 37% of the truck drivers and 31% of the seafarers had unprotected sex with a casual partner or a FSW in the past year, which makes them a high priority target for future interventions (see data table). By comparison, only 8%



of the dock workers and 9% of the moto-taxi drivers outside Papua had unprotected sex with a casual partner or a FSW in the past year, but those from Papua were more likely to engage in unprotected sex (29% among dock workers and 25% among moto-taxi drivers). Knowledge that condoms can protect against sexual transmission of HIV was low, ranging from 36% to 55% (see data table), which partially accounts for their relatively infrequent use.

Figure 4: Consistent Use of Condom Type of Partner, by Occupational Group and Geographic Area



Key Finding 5: Few HRM have been tested for HIV.

In Papua, 5% of moto-taxi drivers and 7% of dock workers had received the results of an HIV test in the past year (see data table). Outside Papua, only 1% of truck drivers and 0% of moto-taxi drivers had acknowledged their HIV sero-status in the past year. While 4% of the seafarers outside Papua had received their HIV test results in the past year, most did it to obtain a certificate for employment (data not presented).

Key Finding 6: Few HRM inject drugs. However some truck drivers and seafarers use methamphetamines, which may increase their risky sexual behaviors.

Very few HRM reported having had injected drug in the past year (see data table). However, 7% of both truck drivers and seafarers reported having used methamphetamines in the past three months, while in Papua, 8% of moto-taxi drivers had used methamphetamines in the past three months. The available scientific evidence indicates that persons using methamphetamines tend to engage in risky sexual behaviors more frequently than non users.

IBBS Key Indicators

	Medan	Batam	Jakarta	Central Java	East Java	Papua
HIV prevalence (%)	0.2	0.4	0.0	0.4	0.8	1.8
Chlamydia prevalence (%)	2.6		1.3	5.2	2.0	7.0
Gonorrhoea prevalence (%)	0.7		0.7	1.5	2.0	7.0
Syphilis prevalence (%)	1.6	12.0	8.3	7.4	3.2	7.4
	Truck drivers	Seafarers	Dock workers		Moto taxi drivers	
			Papua	Other provinces	Papua	Other provinces
HIV prevalence (%)	0.2	0.5	3.0	0.0	1.0	
Chlamydia prevalence (%)	4.9	2.4		1.3	7.0	
Gonorrhoea prevalence (%)	1.0	1.5		0.7	7.0	
Syphilis prevalence (%)	5.7	5.3	4.5	8.3	9.3	
	Truck drivers	Seafarers	Dock workers		Moto taxi drivers	
			Papua	Other provinces	Papua	Other provinces
Currently married (%)	77	56	69	84	55	87
Did not have sex past year (%)	6	13	8	7	16	3
Had sex with a FSW past year (%)	60	45	43	11	34	12
Had sex with casual partner past year (%)	19	24	25	6	30	12
Ever bought condom past year (%)	57	53	79	78	67	66
Always used condom with FSW past 3 months (%)	7	16	37	10	45	21
Always used condom with casual partners past year (%)	7	13	21	6	17	0
Had unprotected sex with non-regular partner past year (%)	37	31	29	8	25	9
Health seeking behavior at last episode of STI (%)						
No treatment / self treatment	52	53	32	62	71	55
Puskesmas / hospital	10	14	63	25	13	17
Private clinic	33	13	5	28	17	39
Received results of HIV test past year (%)	1	4	7	0	5	0
Know that HIV can be protected by using condom in anal or vaginal sex (%)	55	58	36	39	40	38
Used methamphetamine before sex in the past 3 months (%)	7	7	1	0	8	3
Injected drugs in the past year (%)	0.0	0.2	0.0	0.0	0.7	0.0

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 high risk men (HRM), 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 HRM include the following:

- ★ Outside Papua, although the prevalence of HIV remains low, HIV is now detectable among certain occupational groups of HRM. These men get infected via contact with FSW and require focused prevention interventions.

“High-risk men” (HRM) serve as a potential bridge between FSW and the general population. They get infected with HIV through sexual contact with FSW and may transmit the infection to their wife or girlfriends. The frequency of exposure to unprotected sex with a non-regular partner remains low in groups like moto-taxi drivers and dock workers. However, most truck drivers and seafarers report frequent sex with FSW and casual partners, and the vast majority of such encounters continue to be unprotected. Knowledge of the protective effects of condoms is low, and the sexual risk behavior may be increased by the use of methamphetamines among some HRM.

Programs specifically designed for HRM truck drivers and seafarers in particular are needed. These should aim at establishing peer networks and intervening in workplaces in order to maximize coverage. Key components should include access to accurate information on HIV and STI, behavior change communications/interventions, condom promotion, secure access to condoms, access to effective treatment of STIs, information on risk associated with drug abuse, and promotion of voluntary counseling and testing services. Priority attention should be given to providing information to and intensively supporting consistent condom use with FSW and casual partners. Programs should involve the companies that employ these men. The use of various media, including mass media, is needed to achieve sufficient program coverage of HRM.

- ★ In Papua, HIV and STI prevalence is already high. Sex with non-regular partners is more frequent than among men in comparable occupations in other parts of Indonesia, particularly with casual partners. This contributes to the spread of HIV to the general population. Although condom use is higher than in other parts of Indonesia, it remains insufficient to significantly disrupt disease transmission at the population level and is far too low with casual partners.

The data collected from the occupational groups surveyed in Papua suggest that many urban men with salaries may be at risk in Papua. The HRM covered in the 2007 IBBS report a relatively high frequency of sex with both FSW and casual partners. Sex with casual partners is likely to contribute to the expansion of the epidemic in the general population. In the majority of the cases, sex with casual partners remains unprotected. The prevalence of STI is relatively high, which accelerates dissemination of the HIV epidemic. Papuan men have weak knowledge of the protective effects of condoms on sexual transmission of HIV, inconsistently use medical services for treatment of STI, and only a small proportion of HRM have sought to learn their HIV sero-status.

In Papua, although HIV prevention programs need to be directed to the general population, the 2007 IBBS data suggest that men in the types of occupational groups covered in the survey should be specially targeted in view of their risk behaviors. These programs should aim at raising awareness on risks associated with sex with FSW and casual partners, destigmatizing condoms and increasing their use with both FSW and casual partners, and increasing uptake of medical services for STI treatment and HIV testing. Key components should include access to accurate information on HIV and STI, behavior change communications, condom promotion, partner reduction promotion, secure access to condoms, and access



to effective treatment of STIs and voluntary counseling and testing services. Access to these men should be maximized by using multiple channels to deliver information, including mass media, peer education, and workplace programs. Control of STI among HRM is a high priority in Papua.

- ★ The prevalence of syphilis is extremely high among all groups of HRM, both in Papua and outside Papua.

Syphilis is a potentially lethal, ulcerative STI that increases the probability of HIV transmission. However, it is easy to diagnose and can be treated by a single shot of an inexpensive antibiotic. The test used among HRM in the IBBS did not permit differentiation of current from past syphilis. However, because of the low uptake of medical services reported by HRM in case of STI and the apparent resolution of symptoms in the absence of treatment, it is likely that some if not many of the syphilis cases did not use medical services and were actually active syphilis cases at the time of the survey, thus elevating the risk of HIV transmission.

In light of this, high priority needs to be given to more aggressive syphilis screening and treatment by public health authorities. In addition, campaigns educating the population to syphilis risk and symptoms, as well as promoting utilization of screening and treatment services, should be undertaken to generate demand. The high prevalence of syphilis among HRM across Indonesia, but especially in Papua, makes this a priority area for intervention.



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) : www.depkes.go.id
The National AIDS Commission (KPA) : www.aidsindonesia.or.id
Family Health International – Aksi Stop AIDS (ASA) Program : www.fhi.org