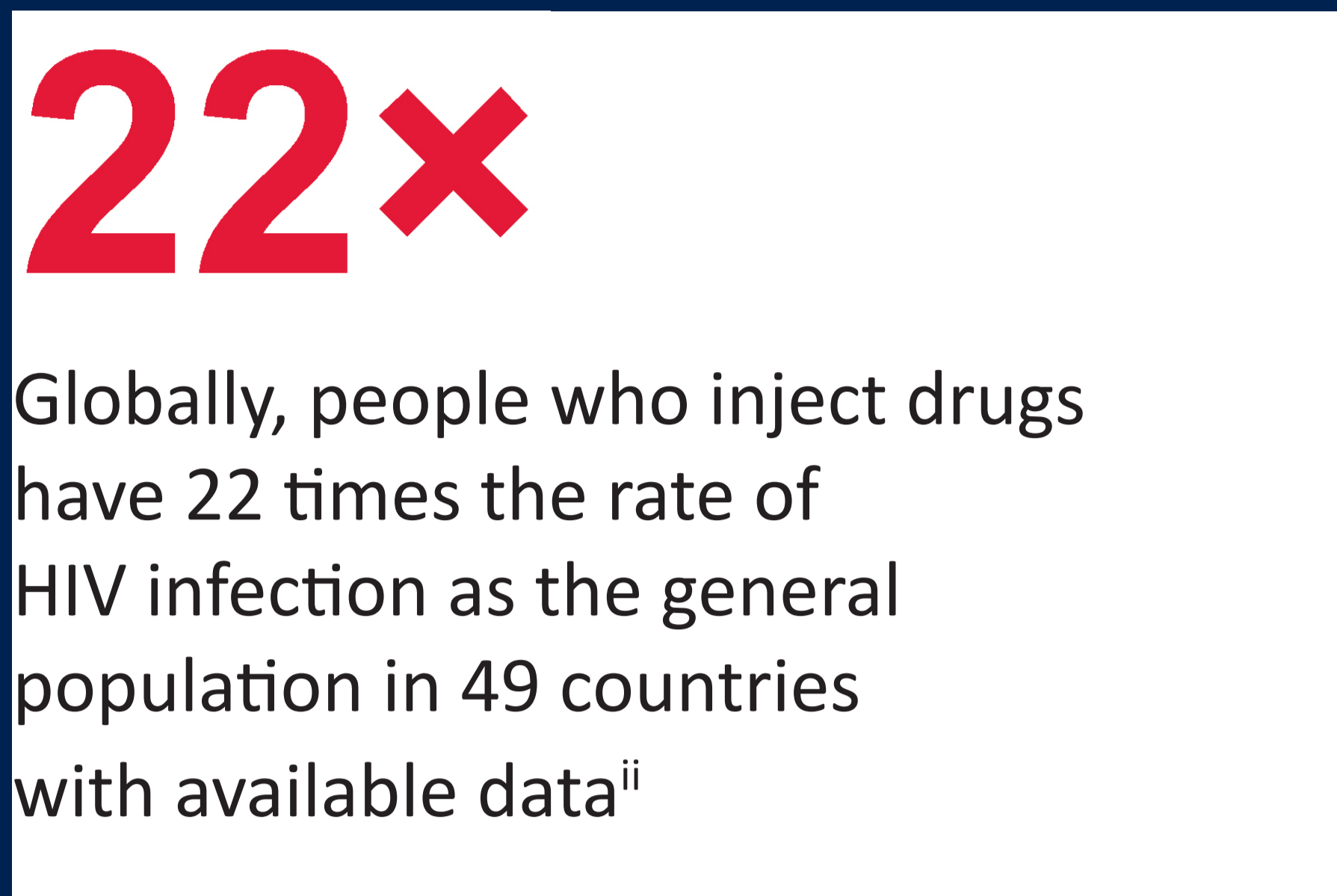


Overview of epidemiology of injection drug use and HIV in Asia

Anne Bergenstrom¹, Vladanka Andreeva², Amala Reddy³

Background/context

People who inject drugs are among the population groups most severely affected by the HIV epidemic. In 2011 an estimated 370,000 people became newly infected with HIV in Asiaⁱ, a region where an estimated 3-4 million people inject drugs (PWID) and where drug use-related transmission has and continues to be a significant driving factor of the HIV epidemic since 30 years.



The HIV epidemics in countries in Asia Pacific fall into five broad categories. In the first category are countries such as Cambodia, Myanmar and Thailand that have declining epidemics, including a decline in the number of new infections among adults and children and where the number of deaths due to AIDS is stable. The second group of countries has a maturing epidemic, with a decline in the number of new infections among adults and children, but an increasing or stable number of people living with HIV. China, Papua New Guinea and Viet Nam have maturing epidemics. In the third category are countries that have expanding epidemics, where new infections, number of people living with HIV and the AIDS deaths are increasing. This is the case in Indonesia, Pakistan and Philippines. Countries, such as Lao PDR among others, have a latent epidemic, with the number of new infections stable at less than 1,000 per year. Countries such as Bhutan, Fiji, Maldives, Mongolia and Timor Leste all have low level epidemics.

In all the three countries with an expanding epidemic (Indonesia, Pakistan and the Philippines) injection drug use has been a significant factor in the spread of HIV. Even countries with declining and maturing epidemics such as Myanmar, Thailand and Viet Nam, continue to report high HIV prevalence among people who inject drugs.

Epidemic Pattern	Adults and children newly Infected	Adults and children living with HIV	Adults and children AIDS Deaths	Countries
Declining Epidemic: New infections and PLHIV declining, deaths stable.	▼	▼	◊	India, Thailand, Myanmar, Nepal, Cambodia
Maturing Epidemic: New infections declining, PLHIV still increasing or stabilizing, death trends vary.	▼	▲ or ◊	varies	China, Viet Nam, Malaysia, PNG
Expanding Epidemic: New infections, PLHIV and deaths increasing.	▲	▲	▲	Indonesia, Pakistan, Philippines
Latent Epidemic: New infections increasing or stable at around 1,000 per year, PLHIV increasing but <10,000, and deaths <500.	▲ or ◊	▲	<500	Bangladesh, Lao PDR, Afghanistan, Sri Lanka
Low Prevalence: Low levels of HIV infections detected but risk factors exist.	<500	<1,000	low	Bhutan, Fiji, Maldives, Mongolia, Timor Leste, PICT

Key: ▲ Expanding Trend ▼ Declining Trend ◊ Stabilizing Trend

Source: UNAIDS Regional Support Team Asia and the Pacific. HIV and AIDS Data Hub, Country epidemic patterns from DRAFT HIV estimates and projections data for the UNAIDS Report on the Global Epidemic 2012

Concerned about the ongoing HIV epidemic among people who inject drugs, Heads of State adopted the Political Declaration on HIV at the United Nations General Assembly High Level Meeting on HIV/AIDS in New York in 2011. Among other targets, the Political Declaration includes the following target:

Reduce transmission of HIV among people who inject drugs by 50% by 2015.

To achieve a 50 percent reduction of HIV transmission among people who inject drugs in Asia by 2015, a total of 32,000 new HIV infections among this group must be prevented.



In order to intensify country support and action towards reaching the 2015 target, during 2013 UNODC, in consultation with international civil society organizations, undertook a prioritization process to identify countries with major HIV epidemics among people who use drugs. A total of 24 countries were identified as High Priority Countries, including eight countries in Asia: China, India, Indonesia, Myanmar, Pakistan, Philippines, Thailand and Viet Nam.

Extent of injection drug use in Asia

Of the estimated 16 million people who inject drugs globallyⁱⁱⁱ it is estimated that between 3 to 4 million people live in in Asia. Estimating the size of the population of people who inject drugs is important for planning national prevention, treatment, and care programmes, as well as for monitoring intervention coverage and advocacy. However, while national size estimates of people who inject drugs in many countries in Asia date back several years, a few countries in the region have undertaken recent population size estimations.

In the meanwhile, countries are reporting a change in the pattern of drug use, from use of opiates to use of, including injection of, amphetamine type stimulants (ATS). The current size estimates mostly reflect the estimated number of people who inject opiates, rather than size of the population who inject ATS.

Table 1. Prevalence of injecting drug use among 15-64 year olds (%)

Country	Estimated number of people who inject drugs	Range	Prevalence of injecting drug use, 15-64 year olds (%)	Year of estimate
China	2,260,000 ¹	1,500,000-3,000,000 ¹	0.23	2009
India	177,000 ²	--	0.02	2009
Indonesia	105,784 ³	73,663-201,131 ³	0.06	2009
Myanmar	75,000 ⁴	60,000-90,000 ⁴	0.22	2007
Pakistan	91,000 ⁵	--	0.08	2007*
Philippines	14,456 ⁶	12,304-16,607 ⁶	0.02	2011
Thailand	40,300 ⁷	--	0.08	2010
Viet Nam	335,990 ⁸	335,990 ⁸ (upper range)	0.53	2011
Total	3,099,530	--	0.14	--

Sources of data:

- UNAIDS China Country Office (2009). China AIDS Fact Sheet 2009.
- National AIDS Control Organisation India, Department of AIDS Control, & Ministry of Health & Family Welfare. (2012). Annual Report 2011-12.
- Ministry of Health, Indonesia (2009). Estimasi Polulasi Dewasa Rawan Terinfeksi HIV 2009.
- National AIDS Programme Myanmar (2009). HIV Estimates and Projections, Myanmar 2008-2015
- National AIDS Control Program, Ministry of Inter-Provincial Coordination (2012). Pakistan Global AIDS Response Progress Report 2012
- Estimated number is calculated as the midpoint of the range. Source of range of size estimate: Philippine National AIDS Council (2011). Estimates of the Most At-Risk Population and People Living with HIV.
- Aramattana A, et al. Using the Multiplier Method to Estimate the Population Size of Injecting Drug Users (IDUs) in Thailand, 2009. The 10th International Congress on AIDS in Asia and the Pacific 26-30 August 2011, Busan, Republic of Korea.
- Only upper range size estimate is available: Ministry of Health and National Technical Working Group on HIV Estimates and Projections. (2011). Preliminary Viet Nam HIV/AIDS Estimates and Projections 2011 cited in Viet Nam Global AIDS Response Progress Report 2012.
- A new national estimate of people who use drugs has recently been completed in Pakistan. According to this survey the estimated number of people who inject drugs is 423,000 (range:190,000 to 657,000).
- UNODC & Ministry of Narcotics Control. Pakistan Bureau of Statistics. Government of Pakistan. Drug Use in Pakistan 2013 Technical Summary Report.

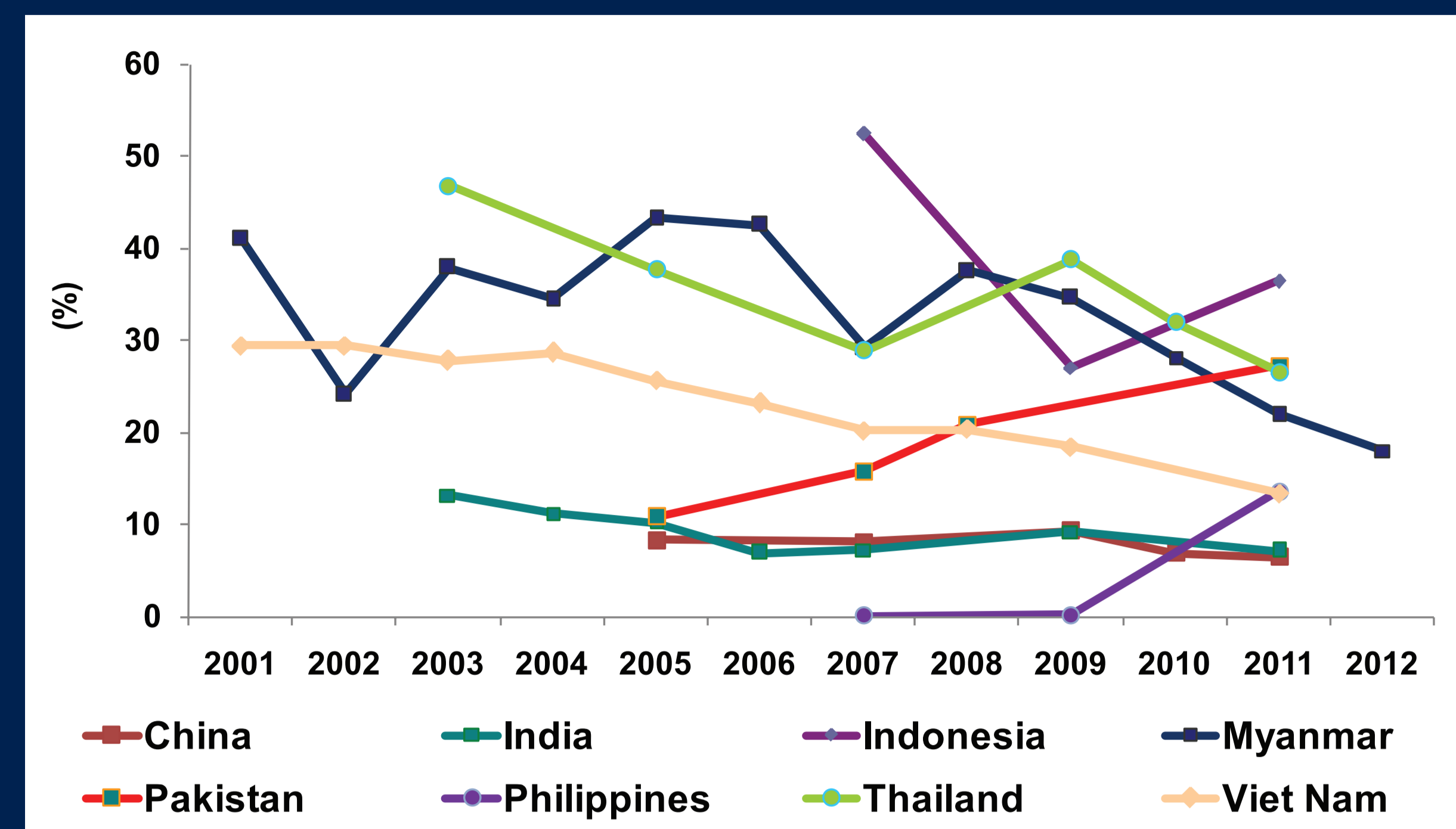
References:

- UNAIDS Global AIDS Report 2012.
- Source: 2012 country progress reports (www.unaids.org/cpr) and UNAIDS estimates.
- Mathers B, et al (2008). Global epidemiology of injecting drug use and HIV among people who inject drugs: a systematic review. *Lancet*, 372:1733-45.

HIV prevalence among people who inject drugs

Prevalence of HIV remains high among people who inject drugs in a number of countries in Asia. Furthermore, HIV prevalence in this population is often higher at sub-national level than the national prevalence.

Figure 1. HIV prevalence among people who inject drugs



Sources: China: UNGASS 2008, 2010 and GARP 2012 citing comprehensive surveillance reports. India: National AIDS Control Organisation, India (2012). HIV Sentinel Surveillance 2010-11 - A Technical Brief. Indonesia: IBBS 2007 and 2011 cited in UNGASS 2010 and GARP 2012, and data from UA 2011 questionnaire (Indonesia) citing IBBS 2009 from 4 districts in 4 provinces. Myanmar: National AIDS Programme, DoH, Ministry of Health (2013). Results of HIV Sentinel Sero-surveillance 2012 Myanmar. Pakistan: National AIDS Control Program, Pakistan. HIV Second Generation Surveillance in Pakistan - National Report Round 1 to IV. Philippines: Philippines National AIDS Council, IHBS 2005, 2007, 2009 and 2011. Thailand: Bureau of Epidemiology, Department of Disease Control, Ministry of Health (2011). Prevalence and Incidence of HIV Infections in Thailand. Viet Nam: HIV prevalence among IDUs in Viet Nam, 1996-2009 from Sentinel Surveillance Survey (VAAC, 2009) cited in UNGASS Country Progress Report 2010: Vietnam and Viet Nam Global AIDS Response Progress Report 2012.

HIV prevalence among people who inject drugs remains high in Indonesia (36.4%), Pakistan (27.2%) and Thailand (21.9%). New epidemic outbreaks have been recently reported at sub-national level in India (Punjab province – 21%) and the Philippines (Cebu province – 54%). A few countries have reported a decline in HIV prevalence among people who inject drugs. This trend is not necessarily attributable to impact of HIV prevention interventions alone. Mortality, whether due to AIDS, tuberculosis, hepatitis, overdose or other harms related to injection drug use, is likely to account for some of the decline in HIV prevalence.

Programmatic coverage

The 2012 revision of the WHO, UNODC and UNAIDS Technical Guide for countries to set targets for universal access to HIV prevention, treatment and care for people who inject drugs, recommends that countries make available a comprehensive package of services for this population:

- Needle and syringe programmes (NSPs)
- Opioid substitution therapy (OST) and other evidence-based drug dependence treatment
- HIV testing and counselling (HTC)
- Antiretroviral therapy (ART)
- Prevention and treatment of sexually transmitted infections (STIs)
- Condom programmes for PWID and their sexual partners
- Targeted information, education and communication (IEC) for PWID and their sexual partners
- Prevention, vaccination, diagnosis and treatment for viral hepatitis
- Prevention, diagnosis and treatment of tuberculosis (TB).



Based on global evidence, the first four interventions are particularly effective in preventing new HIV infections among people who inject drugs. However, while coverage of life saving HIV prevention services, such as needle and syringe programmes (NSP) and opioid substitution therapy (OST) has been increasing, the pace of scale-up in most countries currently remains too slow to reach the optimal levels of coverage and impact of these interventions.

For example, the coverage of opioid substitution treatment ranges from less than one per cent of the estimated number of people who inject drugs in Pakistan, to nine percent of people who inject drugs in China. None of the countries have reached the recommended level of 40 percent of coverage.

Table 2. Coverage of opioid substitution treatment

Country	Estimated number of people who inject drugs	Reported number of people on OST programme	% reached with OST	Estimated number of people yet to be reached to achieve 40% coverage
China	2,260,000	200,000	8.8	704,000
India	177,000	10,000	5.6	60,800
Indonesia	105,784	2,525	2.4	39,789
Myanmar	75,000	2,909	3.9	27,091
Pakistan	91,000	50	< 0.1	36,350
Philippines	14,456	N/A	N/A	N/A
Thailand	40,300	2,777	6.9	13,343
Viet Nam	335,990	12,259	3.6	122,137
Total	3,099,530	230,520	7.4	1,003,510

Source: * Programme monitoring data reported by governments.

The routine reporting systems in most countries in Asia are not designed to collect information on access to antiretroviral treatment by people who inject drugs. However, the available data from some countries indicate that despite the general progress in scaling up access to treatment for all in need, the proportion of people who inject drugs among people living with HIV currently on treatment is low.

Table 3. Access to antiretroviral treatment

Country	Estimated number of people living with HIV ¹	% of eligible people on ART in the country ¹	Total number of people on ART in the country ²	2010 estimate of ratio of PWID receiving ART: 100 PWID living with HIV (range) ³	2010 estimate of PWID as share of total number of people on ART ⁴
China	780,000	--	126,400	3 (2-6)	10.7%
India	2,088,642 ⁵	40-59	543,000	--	N/A
Indonesia	380,000	20-39	24,400	6 (4-9)	N/A
Myanmar	220,000	20-39	40,100	--	N/A
Pakistan	130,000	<20	2,491	<1 (<1-<1)	N/A
Thailand	490,000	60-79	225,300	2 (1-4)	N/A
Viet Nam	250,000	40-59	60,900	4 (1-86)	6.3%
Total	4,338,642	--	1,022,591	--	--

Sources of data:

- Unless otherwise indicated, the estimated number is from: UNAIDS (2012). Global Report: UNAIDS report on the global AIDS epidemic. UNAIDS, Geneva.
- UNAIDS (2013). UNAIDS Country Profile. Retrieved from: <http://www.unaids.org/en/regionscountries/countries/>.
- Mathers, BM., et al (2010). HIV prevention, treatment, and care services for people who inject drugs: a systematic review of global, regional and national coverage. *Lancet*, 375:1014-28.
- Wolfe, D., et al (2010). Treatment and care for injecting drug users with HIV infection: a review of barriers and ways forward. *Lancet*, 376:355-66.
- National Institute of Medical Statistics and National AIDS Control Organization. (2013). Technical Report: India HIV Estimates-2012

Conclusion/recommendations

While many countries are expanding access to the recommended HIV prevention, treatment and care interventions and report declining HIV prevalence among people who inject drugs, there is no room for complacency. Ongoing transmission of HIV and new reported epidemic outbreaks among people who inject drugs will hamper efforts by Member States towards achieving goals and targets reflected in the Political Declaration on HIV/AIDS.

Reduction of new HIV infections by 50% among people who inject in Asia by 2015 will require an intensified geographical prioritization at country level to reach larger numbers of people who inject drugs, and their sexual partners, with evidence-informed programmes. Specifically, there is an urgent need to expand access to and uptake of antiretroviral treatment for people who inject drugs, along with a range of other recommended harm reduction services.

Authors:

¹ Anne Bergenstrom, Regional Adviser, HIV/AIDS, UNODC Regional Office for Southeast Asia and the Pacific (anne.bergenstrom@unodc.org)

² Vladanka Andreeva, Regional Strategic Intervention Adviser (Prevention and Treatment), UNAIDS Regional Support Team for Asia and the Pacific

³ Amala Reddy, Regional Strategic Information Adviser, UNAIDS Regional Support Team for Asia and the Pacific

Acknowledgments:

Khin Cho Win Htin, Lead Data Specialist, HIV and AIDS Data Hub for Asia-Pacific
Ye Yu Shwe, Data Specialist, HIV and AIDS Data Hub for Asia-Pacific
Motoi Matsukura, Intern, UNODC Regional Office for Southeast Asia and the Pacific.
Akara Umapornsakula, Web Consultant, UNODC Regional Office for Southeast Asia and the Pacific.