

Global HIV Prevention
Progress Report Card 2010

Executive Summary

Global HIV Prevention Working Group

Executive Summary

“Unless the rate of new HIV infections is sharply lowered, the long-term viability of treatment initiatives will be jeopardized.”

Since 2002, the Global HIV Prevention Working Group has issued reports on various aspects of HIV prevention. Each of these reports has included urgent recommendations directed to key stakeholders, including national governments, international donors, multilateral agencies, researchers, the private sector, and civil society.

In an effort to assess the degree to which the Working Group's recommendations have been implemented, the Working Group in 2009 undertook a comprehensive analysis of available data, including HIV surveillance and epidemiological studies, service coverage information, policy monitoring databases, spending trends, independent evaluations, and other authoritative data sources. In its analysis of available data, the Working Group prioritized validated quantitative measures, with preference given for population-based data (rather than information on limited cohorts). For qualitative sources, the Working Group primarily used independent assessments that derived from standardized evaluation methods. Where neither quantitative nor qualitative data were readily available, the Working Group undertook interviews with key informants, as well a survey of the Working Group itself.

Based on the results of data analyses and key informant interviews, the Working Group has assigned a grade for each key recommendation, using the following system for grading the degree of adherence to the recommendation: A = excellent; B = acceptable; C = average, needs improvement; D = poor, unacceptable; F = extremely poor, failure.

Bringing existing HIV prevention strategies to scale – focusing the right interventions at the right scale on the right populations – would avert half or more of all HIV infections projected to occur by 2015 (Futures Institute, 2007). Unfortunately, the Working Group's analysis of available data indicates that the world is currently doing a poor job of implementing sound, evidence-based, well-planned HIV prevention programs. None of the sectors studied – national governments, international donors, multilateral agencies, prevention researchers, the private sector, and civil society – receives strong grades on its respective HIV prevention efforts. On average, grades assigned by the Global HIV Prevention Working Group range between C and D, with failing grades reported on a number of priority indicators. While the analysis undertaken by the Global HIV Prevention Working Group represents the most comprehensive canvassing of available information on the quality of HIV prevention efforts undertaken to date, the often-poor quality of available data is striking.

These findings, while disappointing, should be cause for renewed determination rather than despair. The systematic, milestone-driven, well-monitored scaling-up of antiretroviral treatment in recent years demonstrates what can be accomplished with sufficient resources, global resolve, and broad cooperation among key stakeholders. As this report card emerges, leading global actors – including the US government’s PEPFAR initiative; the Global Fund to Fight AIDS, Tuberculosis, and Malaria, UNAIDS, and the Bill & Melinda Gates Foundation – are engaged in extensive strategic planning efforts to strengthen the effectiveness, impact, and sustainability of their respective prevention efforts. At country level, many national governments are taking steps to realign and sharpen their prevention programs, often in response to recent modes-of-transmission studies and HIV prevention syntheses that have highlighted key areas where improvement is needed. Moving forward, the world should build on this momentum to address the weaknesses identified in this report.

Overall Findings:

Although some progress has been achieved, prevention efforts remain inadequate in light of the continuing challenges posed by the epidemic. Globally, the annual number of new HIV infections fell by nearly 30% between 1996 and 2008 (UNAIDS, 2009a), although there is considerable variability between and within countries and regions. Statistically significant declines in HIV incidence have occurred in such countries as the Dominican Republic, Tanzania, and Zambia (Hallett et al., in press), although no drop in new infections is apparent in such heavily affected countries as South Africa and Swaziland (UNAIDS, 2009a). HIV is spreading the fastest in Eastern Europe and Central Asia, where infection rates continue to rise (UNAIDS, 2009a).

The rate of new HIV infections is substantially outpacing the scale-up of HIV treatment programs. For every two people who start on antiretroviral therapy each year, another five become newly infected (UNAIDS, 2009a). In December 2009, the World Health Organization revised its clinical guidelines to recommend initiation of therapy much sooner after initial exposure, increasing by an estimated 5 million the number of people who need antiretroviral therapy (WHO, 2009b). Unless the rate of new HIV infections is sharply lowered, the long-term viability of treatment initiatives will be jeopardized.

Spending on HIV prevention is grossly inadequate. To achieve universal access to HIV prevention services in 132 low- and middle-income countries, total funding for prevention programs must reach \$9 billion in 2009 and \$11.6 billion in 2010 (UNAIDS, 2009b). Current amounts for HIV prevention represent only a fraction of these sums. In 2009, an estimated \$13.7 billion will be available worldwide for HIV programs of any kind in developing countries. According to country reports submitted to UNAIDS in 2008, the median percentage of HIV spending directed toward preventing new infections is 21% (UNAIDS, 2008a). The US government – the world’s largest donor for HIV/AIDS – allocates only 22% of American HIV assistance toward HIV prevention efforts (Office of Global AIDS Coordinator, 2009). *Extrapolating from these figures, the Working Group estimates that no more than \$2.9 billion will be available this year for HIV prevention programs – less than one-third of amounts needed.* Moreover, evidence indicates that prevention programs are disproportionately experiencing negative effects as a result of the ongoing global financial and economic downturn; according to surveys of UNAIDS Country Coordinators, negative consequences for HIV prevention funding are anticipated over the next 12 months in 59% of countries (compared to 21% of countries with respect to HIV treatment programs) (UNAIDS, 2009c).

Inadequate political commitment has focused on the urgent necessity of slowing the rate of new HIV infections. Although roughly 90% of developing countries have national targets in place for treatment scale-up, only about half have targets for components of HIV prevention other than prevention of mother-to-child transmission (Piot, 2009). According to key informants surveyed by the Working Group, civil society HIV advocates have focused relatively little attention on holding governments accountable for preventing new HIV infections.

Too few people at risk of HIV infection receive the prevention services they need. Fewer than half of people at high risk of HIV infection receive the prevention support they need. Less than 40% of people living with HIV know they are infected (WHO UNICEF, 2009), resulting in considerable unknowing transmission of the virus to sexual and drug-using partners. In 2008, only 45% of HIV-infected pregnant women received antiretrovirals to prevent mother-to-child HIV transmission (WHO, UNAIDS 2009), an increase over global coverage of 35% in 2007. Coverage figures are either lacking or of questionable reliability regarding other key components of comprehensive HIV prevention.

The populations most at risk of HIV infection are especially neglected in HIV prevention efforts. Although surveys in all regions have consistently found extremely elevated HIV prevalence among sex workers, people who inject drugs, and men who have sex with men, prevention efforts routinely neglect these populations. As of early 2009, only 22 countries had national targets in place for prevention coverage for sex workers, only 15 for people who use injection drugs, and only 13 for men who have sex with men (UNAIDS, 2009d). In concentrated epidemics – where infections are, by definition, heavily centered in one or more of these populations – only 4.7%, 3.3% and 1.8% of all prevention spending was allocated to programs for injection drug users, men who have sex with men, and sex workers, respectively (UNAIDS, 2008). Even though sex workers and their clients, men who have sex with men, and injection drug users together account for roughly 1 in 3 new HIV infections in Kenya, spending on prevention programs focused on these populations is virtually nil (Gelmon et al., 2009). In Ghana – where these populations account for 38% of new HIV infections – programs focused on these populations represent only 9% of national prevention spending (Bosu et al., 2009).

In planning HIV prevention strategies, many countries are aiming in the dark, lacking basic information about the dynamics of their national epidemics. UNAIDS advises countries to “know your epidemic and your response.” However, most countries lack survey-based information about their HIV epidemic. Since 2001, 36 countries have benefited from a population-based survey that includes HIV testing (UNAIDS, 2009a). With no validated method for measuring new HIV infections, few countries have a meaningful understanding of the rate and distribution of new infections, making it difficult to target limited prevention resources to those who need them most. In 2008-2009, the UNAIDS Secretariat and Cosponsors undertook modes-of-transmission studies and HIV prevention syntheses in more than 10 countries, providing modeling estimates of the number and source of new HIV infections; this approach offers useful strategic information to national prevention planners and program implementers and should be widely expanded.

Based on the limited data currently available regarding national epidemics, prevention efforts appear poorly matched with documented needs. According to UNAIDS Country Coordinators, national prevention efforts are well-matched with epidemiological needs in only 10% of countries. The mismatch between prevention programs and actual needs has been vividly documented by recent modes-of-transmission studies and HIV prevention syntheses. While people over 25 account for two-thirds of new HIV infections in Swaziland, few prevention programs in the country focus on older adults (Mngadi et al., 2009). Although people in stable relationships make up as much as 62% of new HIV infections in Lesotho, few prevention programs in Lesotho focus on couples (Khobotlo et al., 2009). Uganda’s HIV prevention efforts are heavily weighted toward youth-focused HIV prevention that promote abstinence, even though 43% of new HIV infections are occurring among older heterosexual adults in monogamous relationships (UNAIDS, 2006).

Current prevention efforts exhibit severe gaps, with key strategies often receiving little, if any, support. Effective HIV prevention involves the simultaneous combination of biomedical, behavioral, and structural strategies that promote risk reduction among both HIV-positive and HIV-negative individuals and that work at individual, group, and societal levels. Currently, combination prevention is an aspiration rather than a reality. According to recent HIV prevention syntheses, few countries studied have made meaningful efforts to focus HIV prevention

services on people living with HIV. Few structural or community-level interventions – such as universal girls’ education, women’s microfinance programs, or programs to change social norms regarding gender – have been implemented for HIV prevention.

Laws and policies often impede effective HIV prevention by exacerbating stigma, increasing social marginalization, and deterring individuals from seeking prevention services. One-third of countries lack a national law prohibiting HIV-related discrimination, and laws are often not enforced even when they are in place (UNAIDS, 2008a). More than 30 countries have enacted HIV-specific laws that criminalize HIV transmission or exposure, 27 other countries have used non-HIV-specific laws to prosecute alleged HIV transmission or exposure, and as of December 2008, 35 other countries were considering enactment of laws criminalizing HIV transmission or exposure (IPPF, 2008). Sex work is illegal in at least 110 countries (IPPF, 2008), consensual sex between adults of the same sex is criminalized in more than 80 countries (Ottosson, 2009), and substitution therapy with methadone and buprenorphine is allowed in only 52 and 32 countries, respectively (Travel Resource Center, 2008). The US government, the world’s leading HIV donor, refuses to allow US funding to support comprehensive harm reduction programs and maintains policies that deter organizations that serve sex workers from seeking or receiving US financial support.

In evaluating HIV prevention efforts, stakeholders of all kinds lack basic information. In addition to the absence of coverage data for key prevention strategies and the lack of national targets in most countries for comprehensive HIV prevention efforts, it is difficult, if not impossible, to determine what kinds of prevention services (if any) donor agencies support. At country level, mechanisms to assess the impact of prevention strategies are seldom in place, nor is there a consensus in the field on the optimal approach to measure prevention effectiveness.

Robust support for HIV prevention research remains critical to strengthen long-term prospects for slowing the rate of new HIV infections. Although existing strategies could prevent nearly two-thirds of new infections if they were brought to scale (Futures Institute, 2007), it is clear that additional HIV prevention tools are needed to expand the prevention continuum and buttress the capacity to prevent new infections. Researchers are currently pursuing a number of promising potential prevention strategies, including antiretrovirals for pre-exposure prophylaxis and vaginal and rectal microbicides. In 2009, researchers for the first time reported that an experimental HIV vaccine modestly reduced the risk of HIV infection, bolstering long-term prospects for vaccine research. Sustaining strong support for these and other prevention research efforts will be essential; in 2008, funding for HIV vaccine research and development fell by 10% (HIV Vaccines & Microbicide Resource Tracking Group, 2009). Additional support is urgently needed for operational research to guide and accelerate the implementation of evidence-based prevention programs, as well as for efforts to build the evidence base on structural and community-level interventions for HIV prevention.

Summary Report Card

National governments

- Grade D** **Have comprehensive national HIV prevention coverage/outcome targets been established?**
While 90% of countries have national targets for treatment scale-up, only about half have targets in place for comprehensive HIV prevention.
- Grade F** **Are prevalence/incidence data/estimates available for key vulnerable populations?**
Among 169 countries reporting epidemiological data to UNAIDS in 2008, 44 (26%) have survey-based estimate of HIV prevalence among injection drug users, 53 (31%) for men who have sex with men, and 65 (38%) for female sex workers.
- Grade D** **Is there a reasonable fit between new HIV infections and HIV prevention spending patterns?**
Prevention strategies are well-matched with epidemiology in only 10% of countries. Recent HIV prevention syntheses sponsored by UNAIDS have found that national prevention programs routinely fail to focus services on groups at highest risk.
- Grade D** **Are prevention services reaching those who need them?**
Most people at risk of HIV infection do not receive prevention services. Less than 40% of HIV-infected people have been tested for HIV, and only 45% of HIV-infected pregnant women received antiretrovirals to prevent mother-to-child transmission. Support for prevention services focused on sex workers, injection drug users, and men who have sex with men is minimal in most countries.
- Grade D** **Are well-enforced legal frameworks to prohibit HIV-related discrimination, empower women and promote gender equality, and protect the rights and well-being of marginalized populations in place?**
One in three countries in 2008 had no law in place prohibiting HIV-related discrimination. Sex work is criminalized in at least 100 countries, more than 80 countries criminalize consensual sex among adults of the same sex, and drug substitution therapy with methadone or buprenorphine is allowed in only 52 and 32 countries, respectively.

International donors

- Grade D** **Is the overall level of donor funding adequate for HIV prevention?**
Prevention programs accounted for a median of 21% of all HIV-related spending in 2007. Extrapolating from available data, the Working Group estimates that no more than \$2.9 billion was available for HIV prevention programs in developing countries in 2009 – less than one-third of amounts needed to bring HIV prevention programs to scale.

Grade D **Is there a satisfactory rate of disbursement for donor financial commitments?**
An independent evaluation of leading HIV funders found that spending typically experiences major bottlenecks that delay program implementation.

Grade D **Do donors support evidence-based prevention programs?**
Applicable law prevents the world's leading HIV funder – the US government – from supporting highly effective needle and syringe programs. The US government imposes onerous requirements on programs serving sex workers and to date has provided little in the way of financial support for prevention services for men who have sex with men. The US government's programmatic emphasis on abstinence-based prevention for young people ignores extensive evidence demonstrating that this approach is not effective in preventing new HIV infections

Multilateral and technical agencies

Grade C **Have international agencies undertaken technical reviews of national prevention strategies?**
More than 50 countries benefited from technical reviews of national prevention strategies between 2006-2008. Recent modes of transmission analyses and HIV prevention syntheses – sponsored in more than 10 countries by the UNAIDS Secretariat and Cosponsors – have provided important feedback on national strategies and recommendations for improving prevention efforts..

Grade C **Have technical agencies supported national population-based HIV surveys to inform prevention planning?**
Population-based surveys with HIV testing components have taken place in at least 36 countries since 2001. Modes of transmission studies in more than 10 African countries have provided strategic information on the number and distribution of new HIV infections.

Grade C **Does the UN system effectively coordinate its technical support for prevention planning and program implementation at country level?**
While UN partners provide technical support that has proven valuable to many country partners, an independent evaluation concluded that such support is often poorly coordinated and insufficiently strategic. With the UNAIDS AIDS Strategy & Action Plan Service and the creation of regional technical support facilities, there are signs that the availability of coordinated, high-quality technical support may be improving.

Grade C **Are international agencies providing visible leadership at the global and national levels for strategic, evidence-based prevention programming?**
Although numerous informants cite UNAIDS as a leader in prevention advocacy, the Second Independent Evaluation of UNAIDS concluded that "UNAIDS leadership and support for effective HIV prevention policies and programmes has been inadequate."

Prevention researchers

Grade C **Are adequate resources dedicated to new HIV prevention technologies?**
Public sector and philanthropic funding for research and development of vaccines and microbicides roughly tripled between 2000 and 2007. However, funding for vaccine R&D declined by 10% between 2007 and 2008. As the microbicide field has increasingly focused on antiretroviral-based products, future research costs are likely to increase.

Grade C **Are adequate resources dedicated toward strategies to improve behavior change, harm reduction, community-level or structural interventions, and other non-technological prevention strategies?**
Although considerable resources are currently focusing on non-biomedical HIV prevention research, current research efforts are overwhelmingly oriented towards theory-based behavioral strategies, to the neglect of social research or investigation of new community-level and structural interventions.

Grade D **Are prevention trials for behavioral or structural interventions focusing on effectiveness as well as efficacy? Incorporating biological endpoints? Following participants for sufficient length of time?**
Few prevention trials have examined the effectiveness of prevention strategies in the real world, few have included biological endpoints (such as HIV or STI incidence), and most trials follow participants for an unreasonably short period of time.

Private sector

Grade C **Are workplace prevention programs broadly available among the largest employers in high-prevalence settings?**
In countries with more than 5% HIV prevalence, workplace prevention programs are broadly available about one-third of the time. While most large employers in hyper-endemic settings have adopted HIV policies, these are often not effectively implemented.

Civil society

Grade C **Does civil society participate in national AIDS coordinating bodies? Do non-governmental representatives comprise 40% of membership in Country Coordinating Mechanisms?**
Civil society participants were meaningfully involved in multi-partner reviews of national HIV strategies in at least 50 countries in 2008. However, in half the countries studied, civil society membership in the CCM did not reach the recommended 40% threshold.

Grade F **Do civil society organizations have meaningful access to financial support for capacity building?**
Civil society organizations have meaningful access to financial support for operations and capacity building in only 20% of countries.

Grade D **Are civil society advocates adequately prioritizing HIV prevention advocacy?**
Although civil society organizations provide a considerable share of HIV prevention services in many settings, they have not been adequately engaged in holding governments accountable for HIV prevention.

The Way Forward

The Working Group urges that respective stakeholders take steps to implement the full array of recommendations issued in Working Group reports over the last several years. Based on the most recent findings summarized above, the Working Group recommends the following priority actions to address the weaknesses and gaps identified in its latest analysis:

Know Your Epidemic. National governments should take immediate steps to strengthen national HIV surveillance and information systems, and international donors and technical agencies should intensify financial and technical support for such efforts. All stakeholders must pay particular attention to rigorous documentation of HIV-related epidemiological and social trends pertinent to the populations most likely to become infected in particular settings. In hyper-endemic settings, particular focus is needed for older adults in stable, long-term relationship. In all settings, epidemiological and social science data should be analyzed for key populations

Match Prevention Strategies to National Needs. All countries should have in place clear national HIV prevention plans with specific, time-bound targets. Leveraging increased access to modes-of-transmission estimates, countries and technical agencies should ensure that national prevention programs (not merely strategic plans) receive a thorough, independent review at least once every three years. National governments should commit to “follow the epidemic” by supporting programs that respond to documented needs, with particular attention to focusing national strategies on the primary drivers of the epidemic and on populations most likely to become infected. International donors must formally commit – and follow through – to ensure that no sound national prevention strategy goes unfunded. Donors should be accountable for ensuring that their prevention initiatives are in line with documented national needs and support sound national prevention strategies.

Scale-up Proven Strategies Now. National governments, donors, technical agencies, civil society and other stakeholders should prioritize achievable, cost-effective approaches that can be immediately implemented even while working to develop new tools and close the information gap on structural and behavioral approaches. Ensuring that individuals know their HIV serostatus is critical, especially in hyper-endemic settings. It is entirely feasible to virtually eliminate mother-to-child transmission by 2015. Similarly, no one should become infected through injecting drug use since harm reduction services have shown to result in radical declines in drug-related HIV incidence.


Reform National Laws. The one-third of countries that have no HIV discrimination law must immediately adopt one. Countries should immediately take steps to decriminalize same-sex sexual relations and the purchase or sale of sex (with complementary national and donor support for initiatives that provide women with economic alternatives to sex work). Legal impediments to gender equality – such as restrictions on property ownership or inheritance – should be removed. Donors and international agencies should intensify efforts to oppose the criminalization of HIV transmission or HIV risk behaviors, including repeal of statutes that are already in place. International donors should explore the implementation of meaningful financial incentives to discourage enactment of punitive or counterproductive legal frameworks.

Fund HIV Prevention. All funders – including national governments and international donors – should commit to a dramatic increase in HIV prevention resources. To ensure universal access to HIV prevention services, prevention funding must increase nearly four-fold in 2010, reaching \$11.6 billion. Leading donors – including the Global Fund and PEPFAR – should take steps to increase the magnitude and impact of financial support for HIV prevention. While redoubling efforts to mobilize resources for HIV prevention, increased efforts should focus on maximizing efficiencies in the planning and delivery of HIV prevention programs. In particular, intensified operational and implementation research is needed to identify unit cost benchmarks for standardized prevention services, and national programs and international donors should implement protocols to incentivize efficiency in the delivery of prevention programs. Attention should be paid to rigorous programmatic management for results.

Monitoring Impact. Donors and national governments should commit to allocating at least 10% of all HIV prevention spending for operational research and rigorous monitoring and evaluation. Both national governments and international donors should report annually on results achieved with HIV prevention spending. Reporting should include clear evidence of public health impact, as well as reporting on the unit costs for specific services and strategies. Findings from monitoring and evaluation should be taken into account in the review, revision and adaptation of country and donor strategies. Development of more reliable, affordable assays to measure HIV incidence is an urgent global health priority.

REFERENCES

- Bosu WK et al. (2009). *Modes of HIV transmission in West Africa: analysis of the distribution of new HIV infections in Ghana and recommendations for prevention*.
- Futures Institute (2007), data-based modelling undertaken at the request of the Global HIV Prevention Working Group.
- Gelmon L et al. (2009). *Kenya: HIV prevention response and modes of transmission analysis*. Nairobi, Kenya National AIDS Control Council.
- HIV Vaccines & Microbicides Working Group (2009). *Adapting to Realities: Trends in HIV Prevention Research Funding, 2000 to 2008*.
- International Planned Parenthood Federation et al. (2008). *Verdict on a Virus: Public Health, Human Rights, and Criminal Law*.
- Khobotlo M et al. (2009). *Lesotho: HIV prevention response and modes of transmission analysis*. Maseru, Lesotho National AIDS Commission.
- Marston M et al. (2005). Estimating the net effect of HIV on child mortality in Africa affected by generalized HIV epidemics. *J Acquired Immune Deficiency Syndromes* 38:219-227.
- Mngadi S et al. (2009) *Swaziland: HIV prevention response and modes of transmission analysis*. Mbabane, National Emergency Response Council on HIV/AIDS.
- Newell MI et al. (2004). Mortality of infected and uninfected infants born to HIVinfected mothers in Africa: a pooled analysis. *Lancet* 364:1236-1243.
- Ottosson D (2009). *State-sponsored homophobia: A world survey of laws prohibiting same sex activity between consenting adults*. International Lesbian, Gay, Bisexual, Trans and Intersex Association, Brussels.
- Travel Resource Center (2008). *International Travel Regulations for Patients Participating in Drug Substitution Treatment*. Accessed 17 November 2009 at <http://www.indro-online.de/travreg.htm#Introduction>.
- UNAIDS (2009a). *AIDS Epidemic Update*. Geneva, Joint United Nations Programme on AIDS.
- UNAIDS (2009b). *What countries need: investments needed for 2010 targets*. Geneva, Joint United Nations Programme on AIDS.
- UNAIDS (2009c). *Impact of the global financial and economic crisis on the AIDS response*. 25th Meeting of the UNAIDS Programme Coordinating Board. UNAIDS/PCB/(25)/09.26.
- UNAIDS (2009d). *UNAIDS Performance Monitoring Report 2008*. 24th Meeting of the UNAIDS Programme Coordinating Board. UNAIDS/PCB(24)/09.5.
- UNAIDS (2008a). *Report on the globalAIDS epidemic*. Geneva, Joint United Nations Programme on AIDS.
- UNAIDS (2008b). *AIDS Outlook 2009*. Geneva, Joint United Nations Programme on AIDS.
- WHO (2009a). *Women and Health: Today's Evidence, Tomorrow's Agenda*. Geneva, World Health Organization.
- WHO (2009b). *Rapid Advice: Antiretroviral therapy for H/V infection in adults and adolescents*. Geneva, World Health Organization.



The Global HIV Prevention Working Group (PWG) is an international panel of more than 50 leading public health experts, clinicians, biomedical and behavioral researchers, advocates and people affected by HIV/AIDS, convened by the Bill & Melinda Gates Foundation and the Henry J. Kaiser Family Foundation.

The Working Group was launched in 2002 to inform global policy-making, program planning, and donor decisions on HIV prevention.

The Working Group:

- Issues periodic reports and fact sheets on key issues in HIV prevention science and policy
 - Works to build consensus on evidence-based HIV prevention programming
 - Advocates for a comprehensive international response to HIV/AIDS that integrates prevention, treatment, and care
 - Provides information and guidance to donors, media, and policy makers
- 