

UNICEF Children and AIDS Newsletter Special Edition

Highlights from the 2019 International AIDS Society Conference on HIV Science



More than 5,000 people gathered in Mexico City on 21–24 July 2019 for the **10th International AIDS Society Conference on HIV Science (IAS 2019)**. Papers and presentations in four tracks – basic science, clinical science, prevention science and implementation science – highlighted new developments and the progress made thus far, the challenges of ending AIDS and the road ahead for HIV programmes, policy and practice. The presentations on novel approaches in prevention, the development of new treatment options and promising results from implementation research are reasons for hope.

But progress for children is critically lagging. While the 160,000 children (aged 0–14 years) who became newly infected in 2018 is a decrease from the 240,000 children newly infected in 2010, the pace of progress has slowed. In 2018, only 54 per cent of children living with HIV received antiretroviral therapy (ART), compared with 82 per cent of pregnant women living with HIV; and treatment data for adolescents aged 15–19 years are unreported in many countries. The global targets for children and adolescents were missed in 2018, and some regions remain further behind than others. These and other key points from the new [Start Free, Stay Free, AIDS Free 2019 Report](#), which was launched at IAS 2019, paint a picture of the challenges that lie ahead in the future of the HIV response for children.

The evidence presented at IAS 2019 overwhelmingly signals that no one solution will suffice to achieve epidemic control and the end of AIDS; and where children and adolescents are concerned, efforts to reach global targets need to be redoubled. The HIV response must take on challenges at the individual, community and population levels. The innovations we invest in should thus be multi-pronged and person-centred, addressing structural, behavioural and biomedical components of HIV prevention, treatment and retention in care, and adaptable to the unique dynamics of the epidemic in each context.

Programmes and policies need not only innovation in concept and design, but also constant adjustments that reflect the contexts of beneficiaries and appropriate scale-up in partnership with communities. For UNICEF's work towards ending HIV and AIDS for children, the conference highlighted both clinical advances, such as for paediatric treatment and biomedical prevention, and lessons from implementation, including issues of access, equity and programme quality based in the experience of what works in country and on the ground.



Pictured: Global partners at the launch of the Start Free, Stay Free, AIDS Free 2019 Report at IAS 2019. This new progress report reviews progress and challenges as countries approach the 2020 targets for children and adolescents. Download the report [here](#).

From the Conference

Key Takeaways



UNICEF's Chewe Luo (Associate Director of Programmes, Chief of HIV/AIDS), Damilola Walker (Senior Advisor on Adolescents and HIV) and Catherine Langevin-Falcon (Senior Advisor on Knowledge, Advocacy and Partnerships) share their main takeaways from IAS 2019.

The progress on achieving HIV epidemic control offers reason for hope.

1. New developments such as long-acting injectables, implants and vaginal rings hold promise for preventing HIV in adolescent girls and young women, who often face challenges with adherence to pre-exposure prophylaxis (PrEP). [more>>](#)
2. We are learning more about dolutegravir use in pregnancy. New evidence on the safety of the drug was presented, and WHO updated its guidelines to recommend dolutegravir as the preferred HIV treatment option in all populations. [more>>](#)
3. Strategic HIV testing approaches, including index-linked case finding, partner notification and the use of self-testing approaches, are being used in diverse

- settings with important implications for children and adolescents who are missed by traditional approaches. [more>>](#)
4. Rapid limiting antigen avidity assays (rapid recency assays) not only are helpful for expanding testing strategies but also can be a game changer for public health surveillance and clinical management, as a tool to help track new infections when they are most highly transmissible and where they occur. [more>>](#)
 5. Structural prevention and layering of HIV prevention interventions, including keeping girls in school, addressing gender-based violence and offering cash transfers, are critical for adolescent girls and young women, for whom the HIV epidemic is driven by a range of socioeconomic factors. [more>>](#)
 6. Vaccine development remains complex due to the nature of the HIV virus. But the possibility of a safe and effective vaccine is inspiring to all those working to end AIDS – and when one finally becomes available it will be a turning point for epidemic control. [more>>](#)

But there is also more work to be done, if epidemic control is to become a reality.

7. The ambitious 90-90-90 targets by 2020 are a rallying cry for progress, but these treatment targets alone are not enough for epidemic control. [more>>](#)
8. While progress has been made in the HIV epidemic at large, less progress has been made among adolescent girls and young women in sub-Saharan Africa. Further study based on implementation experiences is needed to determine the best interventions to reduce the high risks of HIV incidence in this population. [more>>](#)
9. Where health systems are weak, epidemic control is more challenging to achieve. Ending HIV outbreaks and sustaining progress require alignment with broader strategies to strengthen health systems. [more>>](#)
10. In settings where the HIV epidemic is concentrated in key populations, adolescent and young people within these populations have disproportionately high rates of HIV incidence. [more>>](#)
11. As we look ahead to 2030, the ethical and social implications of new policies and programmes cannot be an afterthought. With each new frontier of prevention and treatment, new ethical questions will arise; addressing them requires ongoing investment in implementation research looking across disciplines. [more>>](#)

Abstracts, slides and rapporteur summaries are available on ias2019.org. For additional discussion, [join the conversation on Yammer](#).

A Young Voice at the Conference



Mercy Mutonyi is a champion for HIV prevention programming for female sex workers and vulnerable young women at the Bar Hostess Empowerment and Support Programme, a women-led organization in Kenya. At IAS 2019, she took over [@UNICEF_aids](#) (Twitter) during the launch of the *Start Free Stay Free AIDS Free 2019 Report* and spoke at a [panel on gender transformative approaches](#) for the HIV response. Mercy shared with UNICEF her biggest takeaways from this year's conference:

1. What do you see as the most important lessons for programmes and policies?

There were two key points that I hope policymakers and others take from IAS:

- (a) *Community engagement cannot be an afterthought.* Often, communities are left out when it comes to HIV prevention research and designing prevention tools. IAS 2019 strongly reinforced the role of the community in HIV science. Voices of young people, women living with HIV, female sex workers and other vulnerable populations count when it comes to designing HIV prevention and treatment approaches.
- (b) *Integrated approaches are what works and what communities need.* Following the release of the ECHO study results, the discussion clearly highlighted the need for integrated approaches in the HIV response, and specifically, not to leave out the sexual and reproductive health needs of those vulnerable to HIV. As emphasized in the *Start Free, Stay Free, AIDS Free 2019 Report*, HIV prevention is beyond just biomedical interventions. Young people and vulnerable populations need a mix of structural, behavioural and biomedical interventions – not just one component. Young people need to feel safe to access and utilize available interventions.

2. Does the research meet the needs of young people at risk of living with HIV? What is missing?

Over the decades, researchers and scientists have made many efforts to design HIV prevention solutions for vulnerable populations. But for any intervention to be acceptable among our communities, it needs to speak to our needs – and this can only be done through meaningful involvement of intended audiences in designing these interventions, beyond just being research participants. We know what will work for us and what won't work for us. This lesson was often discussed at the conference and must continue to be raised.

Also, we need to look at interventions as options because not everyone has the same needs. What one person in one specific situation prefers is perhaps not what another prefers or needs, and prescriptive programmes that lack flexibility and fail to present an array of options makes us less likely to be able to adhere [to treatment]. We also need to be presented with adequate information from the beginning for interventions in the pipeline and those that are being implemented. A lot of times, we receive conflicting messages or scares, as was the case early in the dialogue on dolutegravir in pregnancy. Clarity in language and communication is still missing.

Lastly, policies are a barrier to accessing HIV prevention interventions. This includes policies around age of consent for services for young people as well as around stigma and discrimination against key populations. The newest developments in HIV research will mean nothing on the ground if policies are still a barrier to access them.

3. What makes you most hopeful about the current HIV response and conversations about the future for research, policy and programming?

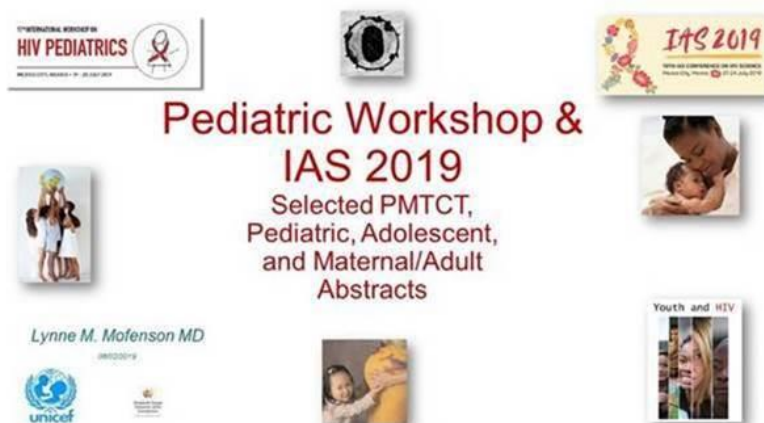
As a young person, there is much to be hopeful about in current and future HIV research and programming. I see vulnerable populations in the centre of shaping HIV prevention and treatment because their opinions, voices and ideas matter – today and tomorrow. I see a future where HIV prevention and treatment are not perceived as cumbersome, expensive and with limited options.

I am also hopeful for friendly policies that do not prevent vulnerable populations including young women and female sex workers from accessing HIV prevention services or young people living with HIV from accessing treatment and care.

<p>Prevention New HIV prevention tools address realities of people's lives IAS (Press Release) 23 July 2019</p>	<p>Treatment New drugs and more effective treatment regimens featured at IAS 2019 IAS (Press Release) 24 July 2019</p>	<p>Vulnerable Populations ECHO study finds high rates of HIV and STIs among women in trial countries IAS (Press Release) 22 July 2019</p>
<p>Prevention Modest Increase in HIV Prevention Research & Development Funding Encouraging AVAC (Press Release) 23 July 2019</p>	<p>Treatment Arm Implant to Prevent HIV in Reach Medscape (Conference Coverage) 24 July 2019</p>	<p>Vulnerable Populations Meet Young People on Their Own Terms and Don't Judge Their Sex Lives, Experts Agree TheBodyPro (Conference Coverage) 26 August 2019</p>
<p>Prevention Three forms of PrEP stigma in Kenya Aidsmap (Conference Coverage) 24 July 2019</p>	<p>Treatment Islatravir plus doravirine may offer new dual therapy option Aidsmap (Conference Coverage) 25 July 2019</p>	<p>Vulnerable Populations HIV outcomes for transgender women improved by addressing social and structural issues Aidsmap (Conference Coverage) 29 July 2019</p>
<p>Prevention PrEP implant could last well over a year Aidsmap (Conference Coverage) 24 July 2019</p>	<p>Treatment Without frequent viral load monitoring dolutegravir-based regimens not the best choice for African youth on failing ART Aidsmap (Conference Coverage) 30 July 2019</p>	<p>Vulnerable Populations Cash payments to stay in school reduce HIV incidence in girls and young women, eSwatini study finds Aidsmap (Conference Coverage) 12 August 2019</p>
<p>Prevention Could integrating HIV prevention into contraceptive services reduce infections among African women? Aidsmap (Conference Coverage) 26 July 2019</p>	<p>Epidemic Status Is the global HIV response in crisis? IAS (Press Release) 21 July 2019</p>	<p>Participatory research The New Face of HIV and Treating the 'Hardly Reached' Medscape (Conference Coverage) 17 July 2019</p>
<p>Prevention Dapivirine vaginal ring effective and acceptable with longer use Aidsmap (Conference Coverage) 27 July 2019</p>	<p>Epidemic Status The Future of the HIV Response amfAR, AVAC, Global Fight, IAS (Press Release) 22 July 2019</p>	<p>Participatory research Communities Should Be Involved in Research. Here Are Some Key Insights on Good Participatory Practice. TheBodyPro (Conference Coverage) 28 August 2019</p>
<p>Treatment New studies and WHO guidance clarify the way forward for use of dolutegravir in women of childbearing age IAS (Press Release) 22 July 2019</p>	<p>Epidemic Status UNAIDS calls on countries to accelerate efforts and close service gaps to end the AIDS epidemic among children and adolescents UNAIDS (Press Release) 22 July 2019</p>	<p>Cure Research Beyond antibodies: conference hears of new molecular tools to kill HIV-infected reservoir cells Aidsmap (Conference Coverage) 22 July 2019</p>
<p>Treatment Dolutegravir recommended for all in new World Health Organization guidelines Aidsmap (Conference Coverage) 23 July 2019</p>	<p>Epidemic Status UNAIDS outlines progress on HIV, but decries funding cuts Aidsmap (Conference Coverage) 22 July 2019</p>	<p>Cure Research Could a better understanding of inflammation help research towards an HIV cure? Aidsmap (Conference Coverage) 31 July 2019</p>
<p>Treatment Dolutegravir safety in pregnancy: risk is lower than first reported Aidsmap (Conference Coverage) 23 July 2019</p>	<p>Epidemic Status Men accounted for two-thirds of HIV transmission in PopART prevention trial Aidsmap (Conference Coverage) 24 July 2019</p>	<p>Vaccine Research Promising HIV vaccine to be tested with gay men and trans people Aidsmap (Conference Coverage) 22 July 2019</p>
<p>Treatment People with HIV express high satisfaction with monthly injectable regimen Aidsmap (Conference Coverage) 23 July 2019</p>	<p>Epidemic Status Select Countries and Cities Report 90-90-90 Progress in Mexico City IAPAC (Conference Coverage) 14 August 2019</p>	<p>Vaccine Research Trial vaccine could protect against HIV for more than five years Aidsmap (Conference Coverage) 25 July 2019</p>

UNICEF Resources

Webinar on Research Presented at IAS 2019 and the International Workshop on HIV Pediatrics



Dr. Lynne Mofenson, senior HIV technical advisor at the Elizabeth Glaser Pediatric AIDS Foundation, joined a UNICEF webinar in which she summarized the HIV/AIDS research related to women, children and adolescents presented at IAS 2019 and the International Workshop on HIV Pediatrics that preceded the conference. The topics presented by Dr. Mofenson include: updates from global UNAIDS and WHO estimates, dolutegravir use and pregnancy outcomes, HIV treatment and prevention in the context of contraception use and pregnancy, antiretroviral drugs for children, HIV prevention and treatment among adolescents and new PrEP options. Watch and share the presentation: childrenandaids.org/ias2019-webinar.

Updates to Global HIV Dashboards



The [HIV Estimates for Children dashboard](#) has been updated with UNICEF calculations based on UNAIDS 2019 estimates. The dashboard presents global, regional and national

trends in the HIV response for children, allows for comparisons between geographical regions by indicator and provides statistical profiles by country, age and sex and over time.

Explore the [interactive dashboard](#) and the updated [global snapshot](#).

Summary of Evidence on Key Takeaways

1. New developments such as long-acting injectables, implants and vaginal rings hold promise for preventing HIV in adolescent girls and young women, who often face challenges with adherence to pre-exposure prophylaxis (PrEP).

- Results from a study evaluating daily oral PrEP as a primary prevention strategy in the HIV Prevention Trials Network highlighted the challenges of adherence in adolescent girls and young women participants aged 16–25 years. Adherence declined from 84 per cent at 3 months to 57 per cent at 6 months and 31 per cent at 12 months after PrEP initiation. ([Celum, C., et al.](#))
- A new PrEP implant with islatravir, a type of reverse transcriptase inhibitor, held promise for at least one year of prevention. The implants were generally well-tolerated and drug levels remained above targets at both doses through the study period. ([Matthews, R. P., et al.](#))
- The final results from the previously reported [HOPE study](#) demonstrated effectiveness and tolerability of a vaginal ring containing dapivirine among women in Africa over a year-long period. The ring reduced the risk for HIV infection by an estimated 39 per cent, although this result is limited by the lack of a contemporaneous placebo group. However, it is notable that when offered a choice, the vast majority of women accepted the dapivirine vaginal ring (92 per cent) and continued in the study throughout 12 months. ([Baeten J., et al.](#))

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2. We are learning more about dolutegravir use in pregnancy. New evidence on the safety of the drug was presented, and WHO updated its guidelines to recommend dolutegravir as the preferred HIV treatment option in all populations.

- New analyses from Botswana and Brazil suggest that the risk of neural tube defects among infants of women taking dolutegravir is lower than previously reported by the Tsepamo study (Botswana) last year. The new analysis from Botswana included 22 health facilities that were not included in the Tsepamo study and found one case of neural tube defects in infants among 152 mothers with dolutegravir use, compared to two cases among 2,328 HIV-negative mothers. ([Raesima, M. M., et al.](#)) Thus, there remains a smaller increase in prevalence of neural tube defects observed among children of pregnant women living with HIV on dolutegravir compared to those of pregnant women without HIV in this study. A surveillance-based study from Brazil showed no incidence of neural tube defects in a cohort of 382 women using dolutegravir during pregnancy. Around half of this cohort received folic acid supplementation. ([Pereira, G., et al.](#))
- WHO updated its [guidelines](#) to recommend dolutegravir as the preferred first-line and second-line treatment for all populations including pregnant women, based on a review of new evidence. Still, it is important to weigh risks against benefits for each sub-population and understand the limitations of evidence with small cohort sizes and narrow geographical focus. System strengthening measures will be required to reduce the risk of neural tube defects in infants among pregnant women living with HIV, including scaled-up surveillance and folate supplementation during pregnancy. ([See slides](#))

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3. Strategic HIV testing approaches, including index-linked case finding, partner notification and the use of self-testing approaches, are being used in diverse settings with important implications for children and adolescents who are missed by traditional approaches.

- Results from the PEPFAR-supported Community Impact to Reach Key and Underserved Individuals for Treatment and Support (CIRKUIITS) project, on index and social network testing for adolescents and young people in Zambia, were presented. Trained community health workers identified 1,809 individuals who were HIV-positive and followed up with 87 per cent of them for contacts and social networks. The HIV yield, or proportion of tests performed that are positive, in the population was 32 per cent. ([Mwango, L. K., et al.](#))
- Results of self-testing interventions were presented from several countries. In Malawi and Burundi, peer distributors improved uptake of HIV self-testing kits by female sex workers. Community engagement was a key component of an HIV self-testing intervention in Viet Nam. In addition to community-based distribution of kits, the programme included outreach through social media. ([See slides](#))

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4. Rapid limiting antigen avidity assays (rapid recency assays) not only are helpful for expanding testing strategies but also can be a game changer for public health surveillance and clinical management, as a tool to help track new infections when they are most highly transmissible and where they occur.

- Rapid recency assays for HIV can distinguish recent infections occurring within the last 12 months from long-term infections. Ambassador Deborah Bix of PEPFAR emphasized the importance of expanding recency testing as a component of routine programme service delivery in all PEPFAR countries. ([See video](#))
- Early evidence of recency testing using limiting antigen avidity assays was shared from Ethiopia, Malawi, Rwanda and Viet Nam under the Tracking with Recency Assays to Control the Epidemic (TRACE) project. A validation study embedded in scale-up efforts showed concurrence between ELISA tests (considered the 'gold standard' for clinical diagnosis) and the limiting antigen avidity assays. ([See summary of presentations](#))
- Recency testing can be an important surveillance tool to understand new infections in young people; pilot projects from across the field found alarming rates of HIV incidence among adolescent girls and young women. A recency pilot among pregnant adolescent girls and young women in Malawi identified 10 per cent of participants to be recently infected with the bulk of new infections in a younger cohort aged 13–19 years. ([See slides](#))

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5. Structural prevention and layering of HIV prevention interventions, including keeping girls in school, addressing gender-based violence and offering cash transfers, are critical for adolescent girls and young women, for whom the HIV epidemic is driven by a range of socioeconomic factors.

- The Population Council presented a novel analysis to determine the relative contributions of layered interventions for adolescent girls aged 15–19 years from Zambia. The adolescent girls, all enrolled in the DREAMS programme, were more likely to have comprehensive knowledge about HIV and report consistent condom use when they received educational and economic interventions in addition to social asset-building and safe spaces interventions. ([Mathur, S., et al.](#))
- In Eswatini, the Sitakhela Liskusasa Impact Evaluation found the lowest incidence of HIV in a cohort of adolescent girls and young women aged 15–22 years who received a combination of financial and educational interventions compared to those who received only financial incentives or only education interventions. ([Gorgens, M., et al.](#))

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6. Vaccine development remains complex due to the nature of the HIV virus. But the possibility of a safe and effective vaccine is inspiring to all those working to end AIDS – and when one finally becomes available it will be a turning point for epidemic control.

- The landmark study in HIV vaccine development to date has been the RV144 efficacy trial in Thailand, which showed that adults who received the experimental vaccine were 31 per cent less likely to acquire HIV at the end of the 3.5-year study period. The latest results from the Phase 2a ASCENT trial, a randomized controlled trial designed to assess safety, tolerability and antibody response of two vaccine regimens, showed promising results for prime-boost combination among low-risk HIV-negative adults in Kenya, Rwanda and the United States. ([Stieh, D. J., et al.](#))

- A new Phase 3 trial called Mosaico, which aims to demonstrate 70 per cent vaccine efficacy, will soon begin in study sites across North America, South America and Europe. ([See press conference video](#))

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7. The ambitious 90-90-90 targets by 2020 are a rallying cry for progress but these treatment targets alone are not enough for epidemic control.

- The HPTN 071 (PopART) trial randomized communities in Zambia and South Africa to a standard of care, an intervention of universal HIV testing and voluntary medical male circumcision with universal ART, or an intervention of ART by national guidelines with a primary outcome of HIV incidence. While the universal ART intervention achieved 90-90-90 targets in the study population, it was not associated with a significant reduction in HIV incidence. PopART was presented at CROI 2019 earlier this year. At IAS 2019, a discussion addressed efficacy and cost-effectiveness of the intervention, additional modelling and community engagement during the trial. ([See video](#)) While the intervention might have had better outcomes over a longer period of time, the population it reached is important to consider. The disconnect between individuals accessing treatment to achieve viral suppression and population-level changes in the epidemic could be because interventions do not adequately address which populations have access to treatment and are supported to be retained in care. ([See the discussion in The Lancet HIV](#))

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8. While progress has been made in the HIV epidemic at large, less progress has been made among adolescent girls and young women in sub-Saharan Africa. Further study based on implementation experiences is needed to determine the best interventions to reduce the high risks of HIV incidence in this population.

- Additional analyses from the Evidence for Contraceptive Options and HIV Outcomes (ECHO), a randomized clinical trial comparing HIV risk among women on three common hormonal contraception methods, showed an alarming rate of HIV incidence in the study population of girls and women aged 16–35 years. The trial, conducted in Eswatini, Kenya, South Africa and Zambia, found no difference in HIV risk by contraceptive method ([press release](#)). During the study period, 397 new HIV infections occurred across all study arms, which was an incidence rate of 3.81 per 100 woman-years. ([See slides](#))

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9. Where health systems are weak, epidemic control is more challenging to achieve. Ending HIV outbreaks and sustaining progress require alignment with broader strategies to strengthen health systems.

- Weak health systems can exacerbate the crisis of the HIV epidemic. In 2019, Pakistan saw an HIV outbreak in the Larkana district, Sindh province; among 876 new cases found between April and June, 82 per cent (719) were children under the age of 15 years. A WHO-led response suggested that most infections occurred through unsafe injection practices and poor infection control practices in clinics and hospitals. The importance of investing in robust health systems that meet established quality of care standards and can respond quickly to outbreaks cannot be ignored. Further studies are needed to better understand the source and nature of new outbreaks. ([See slides](#))

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10. In settings where the HIV epidemic is concentrated in key populations, adolescent and young people within these populations have disproportionately high rates of HIV incidence.

- In Viet Nam, the HIV epidemic is concentrated in key populations, particularly men who have sex with men. An analysis of HIV incidence in this population using a novel recency test found that nearly all (92.8 per cent) of recent infections in the cohort were among young men 24 years of age and below. ([Vu, D., et al.](#)) Routine recency testing in Viet Nam has found HIV transmission to be greatest among young people with the median age of new infections at 23 years. ([See slides](#))
- Similarly in Thailand, data from the Linkages across the Continuum of HIV Services for Key Populations Affected by HIV (LINKAGES) project showed that young men who have sex with men under the age of 20 have high HIV prevalence and incidence compared to older men, and these younger men have some of the lowest rates of testing uptake. Only 11.2 per cent of men under 20 were tested compared to 59 per cent of men aged 25–49 years, according to LINKAGES data between 2016 and 2018. ([Slides upcoming](#))

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11. As we look ahead to 2030, the ethical and social implications of new policies and programmes cannot be an afterthought. With each new frontier of prevention and treatment, new ethical questions will arise; addressing them requires ongoing investment in implementation research looking across disciplines.

- While there is considerable evidence on safe breastfeeding for mothers living with HIV and on treatment, global recommendations on breastfeeding must be implemented according to national and subnational contexts. Local variations in the socio-economic and cultural context, the health of the mother-baby pair and the risks of HIV transmission weighed against the benefits of breastfeeding should influence a mother's decision to breastfeed her baby, or not. ([Session](#))
- Large-scale investments are being made in areas of data collection and analysis as part of HIV research and programme planning. Countries and institutions investing in large-scale, population-based surveys must address the obligation to return results from HIV tests and data analysis to individuals and communities and to inform them of implications for health beyond HIV. Such surveys that are siloed in HIV and fail to include other conditions and issue areas are missed opportunities to address public health from an integrated lens. ([Session](#))
- In clinical trials and prevention research, there is a need to communicate and engage with communities to truly reach the goals of informed consent. This includes engaging individuals living with HIV in the design and implementation stages of studies, communicating the progress of studies using language that is accessible and culturally sensitive, conveying the possibilities of further analysis of the data collected and conducting relevant follow-up. (Multiple sessions, including a [PrEP demonstration project in Brazil](#) and discussions by the [HIV Vaccine Trial Network and HIV Prevention Trials Network](#))

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For more, see [rapporteur summaries](#) and other resources on [ias2019.org](#)

