Health for the World’s Adolescents
A second chance in the second decade

www.who.int/adolescent/second-decade
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Summary
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What must we do to improve and maintain the health of the world’s one billion adolescents? Health for the world’s adolescents is a World Health Organization (WHO) report fully addressing that question across the broad range of health needs of people ages 10–19 years. It was presented to Member States at the 2014 World Health Assembly in follow-up to its 2011 Resolution 64.28, Youth and health risks.

Health for the world’s adolescents is a dynamic, multimedia, online report (who.int/adolescent/second-decade). It describes why adolescents need specific attention, distinct from children and adults. It presents a global overview of adolescents’ health and health-related behaviours, including the latest data and trends, and discusses the determinants that influence their health and behaviours. It features adolescents’ own perspectives on their health needs.

The report brings together all WHO guidance concerning adolescents across the full spectrum of health issues. It offers a state-of-the-art overview of four core areas for health sector action:

- providing health services
- collecting and using the data needed to advocate, plan and monitor health sector interventions
- developing and implementing health-promoting and health-protecting policies and
- mobilizing and supporting other sectors.

The report concludes with key actions for strengthening national health sector responses to adolescent health.

The website will be the springboard for consultation with a wide range of stakeholders leading to a concerted action plan for adolescents.

The report seeks to focus high-level attention on health in the crucial adolescent years and to provide the evidence for action across the range of adolescent health issues. Thus, it addresses primarily senior and mid-level staff of ministries of health and health sector partners, such as nongovernmental organizations, United Nations organizations and funders. It will likely interest many others, too – for example, advocates, service providers, educators and young people themselves.

The report has benefited from the contribution and inputs of WHO experts at country, regional and global levels and across health issues including use of alcohol and other psychoactive substances, HIV, injuries, mental health, nutrition, sexual and reproductive health, tobacco use and violence.

This document highlights key aspects of the report Health for the world’s adolescents.
Deaths among adolescents due to complications of pregnancy and childbirth have declined significantly.

Extending the improvements in maternal and child health to adolescents

Overall, there were an estimated 1.3 million adolescent deaths in 2012, most of them from causes that could have been prevented or treated. Mortality is higher in boys than in girls and in older adolescents (15–19 years) than in the younger group (10–14 years). While there are many causes of mortality common to boys and girls, violence is a particular problem in boys and maternal causes in girls.

Maternal mortality ratios drop. In recent years ministries of health have intensified efforts to reduce the unacceptable toll of deaths among children and women by applying well-known, well-proven interventions.

Efforts towards achieving Millennium Development Goals (MDG) 5 (reduce the maternal mortality ratio by three-quarters) have had a positive impact in adolescents’ health. This report highlights a new analysis of the main causes of death, illness and disability among adolescents showing that deaths due to complications of pregnancy and childbirth among adolescents have declined significantly since 2000. This decline is particularly noticeable in the regions where maternal mortality rates are highest. The South-East Asia, Eastern Mediterranean and African Regions have seen declines of 57%, 50% and 37%, respectively. Despite these improvements, maternal mortality ranks second among causes of death of 15–19-year-old girls globally, exceeded only by suicide.

Some infectious diseases still major causes of death. Similarly for MDG4 (reduce the under-5 mortality rate by two-thirds), thanks to childhood vaccination, adolescent deaths and disability from measles have fallen markedly – by 90% in the African Region between 2000 and 2012, for example. However, as the new analysis also highlights, substantial numbers of adolescents still die from diseases that have been addressed successfully in efforts to decrease infant and child mortality. For example, diarrhoeal diseases and lower respiratory
tract infections rank second and fourth among causes of death among 10–14-year-olds. Combined with meningitis, these conditions account for 18% of all deaths in this age group, little changed from 19% in 2000.

**Rising rate of deaths due to HIV.** In contrast to reductions in maternal deaths and measles mortality, estimates suggest that numbers of HIV deaths are rising in the adolescent age group. This increase occurred predominantly in the African Region, at a time when HIV-related deaths were decreasing in all other population groups. It may reflect improvements in the response to paediatric HIV, with infected children surviving into the second decade of life, or it may reflect limitations in current knowledge of and estimation of survival times for HIV-positive children in adolescence. There is good evidence on the poor quality of, and retention in, services for adolescents indicating the need for improved service delivery. In addition, improved data are needed on HIV mortality and survival times in the age groups 5–14 years.

While much remains to be done in pursuit of the unfinished agendas of MDGs 4, 5 and 6 (combat HIV/AIDS, malaria and other diseases), many countries have made significant progress. Precisely because of the remarkable achievements in decreasing deaths during the first decade of life in many high- and middle-income countries, mortality in the second decade is now greater than mortality in the first decade (with the exception of the first year of life). Countries need to sustain these achievements in child health by investing in the health of adolescents.

### Health during adolescence has an impact across the life-course

The life-course provides an important perspective for public health action. Events in one phase of life both affect and are affected by events in other phases of life. Thus, what happens during the early years of life affects adolescents’ health and development, and health and development during adolescence in turn affect health during the adult years and, ultimately, the health and development of the next generation.

Effective interventions during adolescence protect public health investments in child survival and early child development. At the same time, adolescence offers an opportunity to rectify problems that have arisen during the first decade. For example, interventions during adolescence may decrease the adverse long-term impacts of violence and abuse in childhood or of under-nutrition and prevent them from undermining future health.

Achieving MDGs 4, 5 and 6 requires greater focus on the adolescent phase of the life-course. Further lowering rates of adolescent pregnancy will be central to reducing maternal mortality and to improving child survival, since the younger the mother, the higher the mortality rate among newborns. This has been one of the important achievements in adolescent health of the past two decades – significant reductions in adolescent pregnancy rates in a number of countries, for example, Canada, England and the United States of America. HIV prevention and decreasing HIV-related deaths also depend on reaching adolescents.
Adolescents feature in new health agendas. Focus on the adolescent phase of the life-course is crucial not only for the unfinished MDG agenda, but also for new public health agendas. The health-related behaviours and conditions that underlie the major noncommunicable diseases usually start or are reinforced during the second decade: tobacco and alcohol use, diet and exercise patterns, overweight and obesity. These behaviours and conditions have a serious impact on the health and development of adolescents today but devastating effects on their health as adults tomorrow.

New data presented in Health for the world’s adolescents show, for example, in countries with survey data that fewer than one in every four adolescents meets recommended guidelines for physical activity; as many as one in every three is obese in some countries; and, in a majority of countries in every region, at least half of younger adolescent boys report serious injuries in the preceding year.

Fortunately, there is also some more positive news concerning adolescent behaviour. In most countries, half or more of 15-year-olds who are sexually active report using condoms the last time that they had sex (although this still means that large numbers of adolescents do not use condoms), and cigarette smoking is decreasing among younger adolescents in many high-income countries.

Mental health is another emerging public health priority. Mental health problems take a particularly big toll in the second decade. Globally, suicide ranks number 3 among causes of death during adolescence, and depression is the top cause of illness and disability (see Figures 1 and 2). As many as half of all mental health disorders start by age 14, but most cases go unrecognized and untreated, with serious consequences for mental health throughout life.
Figure. 1. Top 10 causes of death among adolescents by sex

Figure. 2. Top 10 causes of DALYs lost among adolescents by sex
The new adolescent health strategy in India takes these new public health concerns into consideration, going beyond sexual and reproductive health to focus additionally on mental health, nutrition, substance use, violence, including gender-based violence, and noncommunicable diseases.

For most of the major causes of death and disability in adolescence, there are few quick fixes or simple solutions. Nonetheless, we have learnt a great deal about what needs to be done, both through the health sector and in other sectors. We have a stronger evidence base now, too, for interventions to avert behaviours that undermine health – interventions directed both to adolescents themselves and to the environments in which they live, grow and learn.

Adolescents differ from other groups in the population

Adolescence is a key phase of human development. The rapid biological and psychosocial changes that take place during the second decade affect every aspect of adolescents’ lives. These changes make adolescence a unique period in the life-course in its own right, as well as an important time for laying the foundations of good health in adulthood.

Changes in adolescence affect the spectrum of diseases and health-related behaviours; they are responsible for the epidemiological transition that takes place during the second decade from infectious diseases to noncommunicable conditions. At the same time, health problems and behaviours that arise during adolescence – chronic illnesses and alcohol use, for example – affect physical and cognitive development. Adolescents’ evolving capacities affect how they think about their health, how they think about the future, and what influences their decisions and actions. All of this has implications for the types of interventions needed and how programmes should be implemented.

Recent advances in understanding the development of the adolescent brain show that the reward-seeking regions of the brain develop before the regions responsible for planning and emotional control. We also now know that the adolescent brain has a remarkable capacity to change and adapt. This implies that the experimentation, exploration and risk-taking that take place during adolescence is more normative than pathological and that there is real potential to ameliorate negative developments that took place during the early years of life. These observations, too, have implications for interventions.

Some adolescents are particularly vulnerable to poor health and developmental outcomes as a result of individual and environmental factors, including marginalization, exploitation and living without parental support. National health information systems can miss these adolescents, and priority interventions including services may not reach them. They can be neglected, despite being the most in need.
Combining forces for adolescent health

Over the past two decades, WHO has supported the development and synthesis of evidence for action on adolescent health. It has used this evidence base to produce policy and programme support tools addressing many of the problems and behaviours that undermine adolescents’ health.

Numerous factors protect or undermine adolescents’ health, having their impact at many different levels (Figure. 3):

- at an individual level – for example, age, gender, knowledge, skills and empowerment;
- at the level of families and peers, where adolescents have most of their close relationships;
- in their communities and through the organizations that provide adolescents with services and opportunities, such as schools and health facilities; and
- more distally, through cultural practices and norms, through the mass media and digital interactive media, and through social determinants, including policies and political decisions about the distribution of resources and power and the exercise of human rights.

![Figure. 3. The determinants of adolescent health and development: an ecological model](image)
Many sectors must participate. Therefore, to have a significant impact on mortality, disability and illness during the adolescent years, the health sector must strengthen collaboration with other sectors and actors. Preventing deaths from maternal causes or from interpersonal violence, for example, is not just a matter of improving adolescents’ knowledge and skills. Many other factors also contribute to these deaths: the negative attitudes and harmful actions of parents and peers; lack of good-quality schools and health services; an absence of positive community values; and social conditions and services such as prescriptive gender attitudes and expectations; poverty; coercive sex; easy access to psychoactive substances and the presence of peers with anti-social values. Addressing these environmental and social factors requires coordinated response from many sectors. Similarly, reducing road injuries, the top cause of mortality in 10–19-year-olds, will require actions from range of sectors, from education to transportation.

The media, including interactive media such as the Internet and mobile phones, is a sector with the important potential to provide information and influence values and norms that strengthen the health of adolescents.

Commonality among risk and protective factors. Adolescents’ various health problems and behaviours often have similar risk factors and similar protective factors. For example, parents and schools can play particularly important roles in protecting adolescents from a range of health-compromising behaviours and conditions, including unsafe sex, substance use, violence and mental health problems.

Among all the sectors that play critical roles in adolescent health, education is key. Not only is education important in itself, but schools are also a setting where adolescents can receive skills-based health education and, sometimes, services. Furthermore, the social environment or ethos of the school can contribute positively to physical and mental health. It is in the interest of the education sector for adolescents to be healthy, because they are better able to learn and benefit from their years in school.

Universal health coverage for adolescents

Adolescents are one of the groups that existing health services serve least well. As countries work towards universal health coverage, in the context of the post-2015 agenda, it will be important to ensure that the adolescent segment of the population receives adequate attention.

Although the provision of health services per se is unlikely to prevent many of the major causes of death and disease in adolescence, health services do have a key role to play in responding to and treating health problems and health-related behaviours and conditions that arise during the second decade. They should also be able to provide information and respond to adolescents’ and parents’ concerns about adolescent development.

Prevention of adolescent pregnancy, HIV prevention, treatment and care and the provision of HPV vaccines are important entry points for improving the provision of
Health services to adolescents. Now health services need to move beyond these issues to address the full range of adolescents’ health and development needs.

All of the health services elements and interventions currently addressed in WHO guidelines have been brought together in *Health for the world’s adolescents* (see Figure 4). Some are specific to adolescents, while others are also important for other population groups. The interventions included reflect a life-course perspective: Some deal with adolescents’ current problems (e.g. the management of existing health conditions), while others seek to prevent disease both during and beyond adolescence (e.g. addressing risk factors for noncommunicable diseases).

Countries will need to prioritize these services and interventions based on a range of factors, including the main health problems facing their adolescents and the capacity of the health system.

**More coverage with more services.** In addition to the need for services that respond to a wider set of health problems, there is also a need to expand coverage. This can be done both through existing mainstream services and in other settings that are close to adolescents, such as schools, and by using new technologies – for example, mobile phones.

All of these considerations will be important to the health sector’s focus on the adolescent years as it moves towards the goal of universal health coverage. Progress will require renewed attention to the training of health workers to ensure, for example, that all health professionals graduate with knowledge of adolescent health and development and the implications for clinical practice. Cost barriers must be overcome: Pooled, prepaid sources

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**Figure 4. Health services and interventions addressed in WHO guidelines**

<table>
<thead>
<tr>
<th>HIV</th>
<th>SRH/Maternal care</th>
<th>Mental health</th>
<th>Substance use</th>
</tr>
</thead>
<tbody>
<tr>
<td>• HIV testing and counselling</td>
<td>• Cessation support and treatment</td>
<td>• Management of common complaints and conditions</td>
<td>• Assessment and management of alcohol use and alcohol use disorders</td>
</tr>
<tr>
<td>• Voluntary medical male circumcision in countries with HIV generalized epidemic</td>
<td>• Assessment of adolescents specifically related to stress</td>
<td>• Assessment and management of other significant emotional or medically unexplained complaints</td>
<td>• Assessment and management of alcohol use and alcohol use disorders</td>
</tr>
<tr>
<td>• PMTCT</td>
<td>• Management of self-harm/suicide</td>
<td>• Management of self-harm/suicide</td>
<td>• Screening and brief interventions for hazardous and harmful substance use during pregnancy</td>
</tr>
<tr>
<td>• ART treatment</td>
<td>• Management of adolescents with developmental disorders</td>
<td>• Management of other significant emotional or medically unexplained complaints</td>
<td>• Management of substance use disorders</td>
</tr>
<tr>
<td>• Contraceptive information and services</td>
<td>• Management of adolescents with developmental disorders</td>
<td>• Management of other significant emotional or medically unexplained complaints</td>
<td>• Management of adolescent girls’ reporting of violence</td>
</tr>
</tbody>
</table>

**Violence and injury prevention**

| • Care in pregnancy, childbirth and postpartum period for adolescent mother and newborn infant | • Management of conditions specifically related to stress | • Management of conditions specifically related to stress | • Management of self-harm/suicide |
| • First-line support when an adolescent girl discloses violence | • Management of behavioural disorders | • Management of conditions specifically related to stress | • Management of adolescent girls’ reporting of violence |
| • Health education on intimate partner violence | • Management of emotional disorders | • Management of adolescent girls’ reporting of violence | • Screening and brief interventions for hazardous and harmful substance use during pregnancy |
| • Identification of intimate partner violence | • Management of behavioural disorders | • Management of adolescent girls’ reporting of violence | • Management of adolescent girls’ reporting of violence |
| • Care for survivors of intimate partner violence | • Prevention and management of sexually transmitted infections | • Management of adolescent girls’ reporting of violence | • Management of adolescent girls’ reporting of violence |
| • Clinical care for survivors of sexual assault | • Safe abortion care | • Management of adolescent girls’ reporting of violence | • Management of adolescent girls’ reporting of violence |

**Nutrition**

| • Intermittent iron and folate acid supplementation | • Management of common complaints and conditions | • Assessment of adolescent girls’ reporting of violence | • Management of adolescent girls’ reporting of violence |
| • Health education of adolescents, parents and caregivers regarding physical activity | • HEADS* assessment | • Management of adolescent girls’ reporting of violence | • Management of adolescent girls’ reporting of violence |
| • BMI-for-age assessment | • Management of common complaints and conditions | • HEADS* assessment | • Management of adolescent girls’ reporting of violence |

**Physical activity**

| • Health education of adolescents, parents and caregivers regarding physical activity | • Cessation support and treatment | • Management of adolescent complaints and conditions | • HEADS* assessment |
| • Assessment and management of adolescent girls’ reporting of violence | • Management of adolescent complaints and conditions | • HEADS* assessment | • Management of adolescent complaints and conditions |
| • Assessment and management of adolescent girls’ reporting of violence | • Management of adolescent complaints and conditions | • HEADS* assessment | • Management of adolescent complaints and conditions |

**Tobacco control**

| • Health education of adolescents, parents and caregivers regarding physical activity | • Cessation support and treatment | • Management of adolescent complaints and conditions | • HEADS* assessment |
| • Assessment and management of adolescent girls’ reporting of violence | • Management of adolescent complaints and conditions | • HEADS* assessment | • Management of adolescent complaints and conditions |
| • Assessment and management of adolescent girls’ reporting of violence | • Management of adolescent complaints and conditions | • HEADS* assessment | • Management of adolescent complaints and conditions |

**Integrated management of common conditions**

| • Health education of adolescents, parents and caregivers regarding physical activity | • Cessation support and treatment | • Management of adolescent complaints and conditions | • HEADS* assessment |
| • Assessment and management of adolescent girls’ reporting of violence | • Management of adolescent complaints and conditions | • HEADS* assessment | • Management of adolescent complaints and conditions |
| • Assessment and management of adolescent girls’ reporting of violence | • Management of adolescent complaints and conditions | • HEADS* assessment | • Management of adolescent complaints and conditions |

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*HEADS is an acronym for Home, Education/Employment, Eating, Activity, Drugs, Sexuality, Safety, Suicide/Depression*
of funds must cover priority services for all adolescents. Ultimately, health-care provision must evolve from adolescent-friendly projects to adolescent-responsive programmes and systems.

Some success is in evidence. For example, through the national adolescent health programme in El Salvador, the quality and coverage of primary care services have improved, and the adolescent fertility rate has dropped.

WHO has developed new global standards for improving the quality of health services for adolescents that will support this shift in emphasis. At the same time, there has been some progress with the disaggregation of health information management systems by age and sex, which will greatly increase the precision of planning and monitoring. There have also been improvements in measurement of the coverage, quality and costs of priority health sector interventions for adolescents, which is essential for developing and monitoring health sector programmes. However, much more needs to be done.
Policies play a key role in protecting adolescents’ health

Health sector efforts must go beyond interventions directed to individual adolescents. While it remains important to ensure that adolescents have knowledge, skills, and access to health services, interventions that support parents, make schools health-promoting and focus on changing negative social values and norms are also key. Policies and laws that facilitate and mandate interventions to prevent exposure to harm – for example, policies to decrease road traffic injuries and use of harmful substances such as tobacco – also are essential.

Most countries have committed to international conventions that recognize adolescents’ right to the highest attainable standard of health, and the Committee on the Rights of the Child now has General Comments that focus on adolescents and on health. These provide guidance and support for governments and health sector partners to develop national policies and laws benefiting adolescents that are based on human rights and public health principles.

Issue-specific health policies – for example, policies directed to tobacco or HIV – need to consider adolescents explicitly. In addition, some policies need to be specifically designed with adolescents in mind – for example, those ensuring that adolescents have access to information and services and that deal effectively with issues of confidentiality and informed consent.

Analysis in *Health for the world’s adolescents* finds that policies and their implementation vary widely among regions. For example, in terms of restricting or prohibiting the marketing of food and non-alcoholic beverages to children and adolescents, most countries in the European Region implement such policies, while in other regions only a few countries have implemented WHO’s recommendations. Policies are only as effective as their implementation, however, so it is necessary to have adequate systems to monitor relevant actions. The decline in consumption of sugar-sweetened beverages among adolescents in many European Region countries, also reflected in the report, may be a sign of success of these policies.

Broader policies are needed. Like the content of health services, national health policies need to go beyond sexual and reproductive health, where they have tended to focus, and to respond to the spectrum of adolescents’ health problems and health-related behaviours. Among national health policy documents from 109 countries reviewed for this report, 84% give some attention to adolescents. In three-quarters of them the focus is on sexual and reproductive health (including HIV/AIDS); approximately one-third address tobacco and alcohol use among adolescents; and one-quarter address mental health.

*Health for the world’s adolescents* is the first time that policies promoted by WHO that have implications for adolescent health have been brought together in one report from throughout the Organization.
Adolescents need to be involved in decisions and actions

In general, it is not a matter of setting up separate interventions for adolescents but rather of ensuring that adolescents receive adequate attention in all policies, strategies and programmes that are relevant to them. To ensure that programmes and policies meet their needs, adolescents must be heard and must contribute to the planning, implementation, monitoring and evaluation of services.

Adolescents are a force for their own health and for the health of their families and communities. They are actors for social change, not simply beneficiaries of social programmes. Their participation needs to be advocated and facilitated, all the more so since many of them are legally minors, “children” in terms of the Convention on the Rights of the Child.

A human rights-based approach to adolescent health is important for many reasons: to be clear about the obligations of governments and other duty-bearers; to maintain a focus on equity; to support interventions and policies that are needed but are culturally sensitive and controversial, such as sexuality education and informed consent; and to ensure that adolescents are listened to and engaged.

Adolescents are actors for social change, not simply beneficiaries of social programmes.
Moving beyond the status quo

Currently, adolescents are receiving much attention, and a real sense of urgency is growing that more action is needed now. We understand the physical, emotional and cognitive changes taking place during adolescence and their implications for policies and programmes. We know a great deal about adolescents’ health and health-related behaviours through improvements in data collection and analysis. We understand the determinants underlying poor health and health-compromising behaviours. We have an increasingly strong evidence base for action and clarity about the ways in which public health and human rights are complimentary. We have experience using entry points that bring political commitment and resources, such as the HPV vaccine, voluntary medical male circumcision, tobacco and alcohol pricing policies, and crash helmets for motorcyclists.
But there are still facets of the status quo that we must move beyond:

**Beyond the myths.** There are still many myths about adolescents that obstruct accelerated action: that they are healthy and therefore do not need much attention; that the only real problems that they face are related to sexual and reproductive health; that the evidence base is weak and we do not really know what to do. None of this is true.

**Beyond mortality.** Deaths in adolescence are important, and no adolescent should die from a cause that is preventable or treatable. But for public health more generally, more attention needs to go to preventing the health-compromising behaviours (e.g. use of tobacco, alcohol and drugs, unsafe sex) and conditions (e.g. depression, obesity) that arise during adolescence and have a long-term impact on health across the life-course.

**Beyond the individual.** We know individual-level interventions directed to a few health issues will not be enough to decrease adolescents’ all-cause mortality. Health services and adolescents’ own knowledge and skills are important, but these alone will not be enough. Structural, environmental, and social changes are essential. Substantially reducing adolescent mortality will require, among other changes, more support for parents and schools and policies and programmes that protect adolescents’ health.

**Beyond single-problem thinking.** Many of the behaviours and conditions that undermine the health of adolescents, and will continue to undermine their health as adults and the health of their children, have common determinants and are linked. We need to find more effective ways to move out of single health problem silos and focus more on interventions that address the determinants of multiple risk behaviours.

**Beyond business as usual.** As countries move towards universal health coverage, ensuring that adolescents receive adequate consideration is essential. There are many untapped resources to improve and maintain the health of adolescents, including interactive media and technologies – and adolescents are at the centre of such developments.

**Beyond aspirations.** A human rights-based approach stresses the obligations of governments. Setting clear goals and targets and monitoring progress gives focus to these obligations. Consensus is needed on a set of measurable and achievable goals and targets, which countries can select and adapt, that include both girls and boys and that go beyond sexual and reproductive health.

Now is the time to build on the successes and lessons of past decades and to pick up the pace of action to improve the health of adolescents. Certainly, we need more data and a stronger evidence base for interventions, but there is much that we can do now.
In the second decade of the millennium we have many opportunities to improve health in the second decade of life.

*Health for the world’s adolescents* is the basis for a call to action to countries and partners to accelerate action and increase accountability.

There is a place for comments on the WHO/MCA website (see below) as well as information about how stakeholders can contribute to action.