About 16 million adolescent girls between 15 and 19 give birth each year. Babies born to adolescent mothers account for roughly 11% of all births worldwide; 95% occur in developing countries. For some of these young women, pregnancy and childbirth are planned and wanted, but for many others they are not. There are several factors that contribute to this. Girls may be under pressure to marry and bear children early, or they may have limited educational and employment prospects. Some do not know how to avoid a pregnancy, or are unable to obtain contraceptives. Others may be unable to refuse unwanted sex or to resist coerced sex. Those that do become pregnant are less likely than adults to be able to obtain legal and safe abortions. They are also less likely than adults to access skilled prenatal, childbirth and postnatal care.

In low- and middle-income countries, complications from pregnancy and childbirth are the leading cause of death among girls aged 15 to 19. And in 2008, there were an estimated three million unsafe abortions among girls in this age group.

The adverse effects of adolescent childbearing also extend to the health of their infants. Perinatal deaths are 50% higher among babies born to mothers under 20 years of age than among those born to mothers aged 20 to 29. The newborns of adolescent mothers are also more likely to have low birth weight, with the risk of long-term effects.

This brief emanates from World Health Organization Guidelines on preventing early pregnancy and poor reproductive outcomes in adolescents in developing countries. It contains evidence-based recommendations on action and research for preventing early pregnancy and poor reproductive outcomes.
Over 30% of girls in developing countries marry before 18 years of age; around 14% do so before the age of 15. Early marriage is a risk factor for early pregnancy and poor reproductive health outcomes. Furthermore, marriage at a young age perpetuates the cycle of under-education and poverty.¹

WHO’s recommendations for reducing early marriage are informed by 21 studies and project reports as well as the conclusions of an expert panel. The studies were conducted in Afghanistan, Bangladesh, Egypt, Ethiopia, India, Kenya, Nepal, Senegal and Yemen, among others. In some of these studies and projects, the primary outcome was delaying the age of marriage. In others, this outcome was secondary to school retention, influencing knowledge and attitudes, or changing sexual behaviour. The results of these studies and projects support action at multiple levels – policies, individuals, families and communities – to prevent early marriage.

**What can policy-makers do?**

**PROHIBIT EARLY MARRIAGE.**

In many places, laws do not prohibit marriage before the age of 18. Even in places where they do, these laws are not enforced. Policy-makers must put in place and enforce laws that ban marriage before 18 years of age.

**What can individuals, families and communities do?**

**KEEP GIRLS IN SCHOOL.**

Around the world, more girls are enrolled in school than ever before. Educating girls has a positive effect on their health, the health of their children, and that of their communities. Also, girls in school are much less likely to be married at an early age. Sadly, school enrolment drops sharply after five or six years of schooling.² Policy-makers must increase formal and non-formal educational opportunities for girls at both primary and secondary levels.

**INFLUENCE CULTURAL NORMS THAT SUPPORT EARLY MARRIAGE.**

In some parts of the world, girls are expected to marry and have children in their early or middle adolescent years, well before they are physically or mentally ready to do so. Parents feel pressured by prevailing norms, traditions and economic constraints to marry their daughters at an early age. Community leaders must work with all stakeholders to challenge and change norms around early marriage.

**What can researchers do?**

- Build evidence on the types of interventions that can result in the formulation of laws and policies to protect adolescents from early marriage (e.g., public advocacy).
- Gain a better understanding of how economic incentives and livelihood programmes can delay the age of marriage.
- Develop better methods to assess the impact of education and school enrolment on the age of marriage.
- Assess the feasibility of existing interventions to inform and empower adolescent girls, their families and their communities to delay the age of marriage, and assess the potential of taking interventions to scale.

Worldwide, one in five women has a child by the age of 18. In the poorest regions of the world, this rises to over one in three women. Adolescent pregnancies are more likely to occur among poor, less educated and rural populations.

WHO’s recommendations for reducing early pregnancy are informed by two graded systematic reviews, three ungraded studies, as well as the conclusions of an expert panel. The studies in the systematic reviews included those conducted in developing countries (Mexico and Nigeria) as well as those conducted among poorer socio-economic populations in developed countries. Collectively, the studies demonstrate reductions in early pregnancy among adolescent girls exposed to interventions that included sexuality education, cash transfer schemes, early childhood education and youth development, as well as life skills development. One study showed a reduction in repeat pregnancies as a result of an intervention that included home visits for social support.

What can policy-makers do?

SUPPORT PREGNANCY PREVENTION PROGRAMMES AMONG ADOLESCENTS.

Early pregnancies occur because of a combination of social norms, traditions and economic constraints. At the same time, there continues to be resistance to sexuality education. Policy-makers must give strong and visible support for efforts to prevent early pregnancy. Specifically, they must ensure that comprehensive sexuality education programmes are in place as well as access to counseling services and contraceptive methods.

What can individuals, families and communities do?

EDUCATE GIRLS AND BOYS ABOUT SEXUALITY.

Many adolescents become sexually active before they know how to avoid unwanted pregnancies and sexually transmitted infections. Peer pressure and pressure to conform to stereotypes increase the likelihood of early and unprotected sexual activity. In order to prevent early pregnancy, curriculum-based sexuality education must be widely implemented. These programmes must develop life skills, provide support to deal with thoughts, feelings and experiences that accompany sexual maturity and be linked to contraceptive counseling and services.

BUILD COMMUNITY SUPPORT FOR PREVENTING EARLY PREGNANCY.

In some places premarital sexual activity is not acknowledged and there is resistance to discussing meaningful ways of addressing it. Families and communities must be engaged and involved in efforts to prevent early pregnancies and sexually transmitted infections, including HIV.

What can researchers do?

• Build evidence on the effect of interventions to prevent early pregnancy, including those that increase employment, school retention, education availability, and social supports.
• Conduct research across socio-cultural contexts to identify feasible and scalable interventions to reduce early pregnancy among adolescents.

Sexually active adolescents are less likely to use them than adults, even in places where contraceptives are widely available.

WHO’s recommendations for increasing the use of contraception are informed by 7 graded and 26 ungraded studies conducted in 17 countries, as well as the conclusions of a panel of experts. The studies were conducted in Bahamas, Belize, Brazil, Cameroon, Chile, China, India, Kenya, Madagascar, Mali, Mexico, Nepal, Nicaragua, Sierra Leone, South Africa, Tanzania and Thailand. Some focused exclusively on increasing condom use, while others examined increasing the use of hormonal and emergency contraceptives. In some, increasing contraception was a primary outcome whereas in others it was secondary. Some studies focused exclusively on health system actions (such as over-the-counter or clinic provision of contraceptives) while others focused on community and stakeholder engagement to increase contraceptive use. Collectively, these studies demonstrate that contraceptive use can be increased as a result of actions directed at multiple levels – policies, individuals, families, communities and health systems.

What can policy-makers do?

LEGISLATE ACCESS TO CONTRACEPTIVE INFORMATION AND SERVICES.

In many places, laws and policies prevent the provision of contraceptives to unmarried or younger adolescents. Policy-makers must intervene to reform policies to enable all adolescents to obtain contraception.

REDUCE THE COST OF CONTRACEPTIVES TO ADOLESCENTS.*

Financial constraints can adversely impact contraceptive use among poorer adolescents. To increase use, policy-makers should consider reducing the financial cost of contraceptives to adolescents.

What can individuals, families and communities do?

EDUCATE ADOLESCENTS ABOUT CONTRACEPTIVE USE.

Adolescents may not be aware of where to obtain contraceptives and how to use them appropriately. Efforts to provide accurate information about contraceptives must be combined with sexuality education.

BUILD COMMUNITY SUPPORT FOR CONTRACEPTIVE PROVISION TO ADOLESCENTS.

There is resistance to the provision of contraceptives to adolescents, especially those who are unmarried. Community members must be engaged and their support obtained for the provision of contraceptives.

What can health systems do?

ENABLE ADOLESCENTS TO OBTAIN CONTRACEPTIVE SERVICES.

Often, adolescents do not seek contraceptive services because they are afraid of social stigma or being judged by clinic staff. Health service delivery must be made more responsive and friendly to adolescents.

What can researchers do?

• Build evidence on the effectiveness of different interventions to increase contraceptive use through favorable laws and policies, commodity cost reduction, community support of adolescent access to contraception, and access to over-the-counter hormonal contraception.

• Understand how gender norms affect contraceptive use and how to transform gender norms about the acceptability of contraceptive use.


* Conditional recommendation
Girls in many countries are pressured into having sex, often by family members. In some countries, over a third of girls report that their first sexual encounter was coerced.\(^6\)

WHO's recommendations for reducing coerced sex are informed by two graded studies, six ungraded studies or reviews of laws, and the collective experience and judgment of an expert panel. The studies and reviews were conducted in Botswana, India, Kenya, South Africa, Tanzania and Zimbabwe. Collectively, these studies suggest that actions to influence community and gender norms can have positive effects on the ability of girls to resist coerced sex and on the attitudes of men and boys towards coerced sex.

**What can policy-makers do?**

**PROHIBIT COERCED SEX.**
In many places, law enforcement officials do not actively pursue perpetrators of coerced sex and it is often difficult for victims to seek justice. Policy-makers must formulate and enforce laws that prohibit coerced sex and punish perpetrators. Victims and their families must feel safe and supported when approaching the authorities and seeking justice.

**What can individuals, families and communities do?**

**EMPOWER GIRLS TO RESIST COERCED SEX.**
Girls may feel powerless to refuse unwanted sex. Girls must be empowered to protect themselves, and to ask for and obtain effective assistance. Programmes that build self-esteem, develop life skills, and improve links to social networks and supports can help girls refuse unwanted sex.

**INFLUENCE SOCIAL NORMS THAT CONDONE COERCED SEX.**
Prevailing social norms condone violence and sexual coercion in many parts of the world. Efforts to empower adolescents must be accompanied by efforts to challenge and change norms that condone coerced sex, especially gender norms.

**ENGAGE MEN AND BOYS TO CRITICALLY ASSESS NORMS AND PRACTICES.**
Men and boys may view gender-based violence and coercion as normal. They should be supported to critically look at the negative effects of this on girls, women, families and communities. This could persuade them to change their attitudes and refrain from violent and coercive behaviours.

**What can researchers do?**

- Build evidence on the effectiveness of laws and policies aimed at preventing sexual coercion.
- Assess how laws and policies are formulated, enforced and monitored in order to understand how best to prevent the coercion of adolescent girls.

5 REDUCE UNSAFE ABORTION

An estimated 3 million unsafe abortions occur globally every year among adolescent girls 15 to 19 years of age. Unsafe abortions contribute substantially to maternal deaths and to lasting health problems.

WHO’s recommendations for reducing unsafe abortions are informed by the collective experience and judgment of an expert panel. There were no studies that could be used to provide evidence to inform the panel’s decisions.

What can policy-makers do?

ENABLE ACCESS TO SAFE ABORTION AND POST-ABORTION SERVICES.

Policy-makers must support efforts to inform adolescents of the dangers of unsafe abortion and to improve their access to safe abortion services, where legal. They must also improve adolescent access to appropriate post-abortion care, regardless of whether the abortion itself was legal. Adolescents who have had abortions must be offered post-abortion contraceptive information and services.

What can individuals, families and communities do?

INFORM ADOLESCENTS ABOUT SAFE ABORTION SERVICES.

When faced with an unwanted pregnancy, adolescent girls may turn to illegal or unsafe abortions. All adolescent girls must be informed about the dangers of unsafe abortion. In countries where abortion services are legally available, they must be informed about where and how they can obtain these services.

INCREASE COMMUNITY AWARENESS OF THE DANGERS OF UNSAFE ABORTION.

There is very little public awareness of the scale and tragic consequences of withholding legal and safe abortion services. Families and community leaders must be made aware of these consequences and build support for policies to enable adolescent girls to access abortion and post-abortion services.

What can health systems do?

IDENTIFY AND REMOVE BARRIERS TO SAFE ABORTION SERVICES.

Even where abortions are legal, adolescents are often unable or unwilling to obtain safe abortions because of unfriendly health workers and burdensome clinic policies and procedures. Managers and health service providers must identify and overcome these barriers so that adolescent girls can obtain safe abortion services, post-abortion care, and post-abortion contraceptive information and services.

What can researchers do?

• Identify and assess interventions that reduce barriers to the provision of safe and legal abortion services in multiple socio-cultural contexts.
• Build evidence on the impact of laws and policies that enable adolescents to obtain safe abortion and post-abortion services.

In some countries, adolescents are less likely than adults to obtain skilled care before, during and after childbirth.\textsuperscript{8,9}

WHO’s recommendations for increasing the use of skilled antenatal, childbirth and postpartum care are informed by one graded study, one ungraded study, existing WHO guidelines and the collective experience and judgment of a panel of experts. The studies were conducted in Chile and India. One intervention was a home visit programme for adolescent mothers. Another was a cash transfer scheme contingent upon health facility births. Collectively, these studies suggest that interventions to increase the use of skilled antenatal, childbirth and postpartum care can result in improved health outcomes for adolescent mothers and newborns.

**What can policy-makers do?**

**EXPAND ACCESS TO SKILLED ANTENATAL, CHILDBIRTH AND POSTNATAL CARE.**
Policy-makers must develop and implement legislation to expand access to skilled antenatal care, childbirth care and postnatal care, especially for adolescent girls.

**EXPAND ACCESS TO EMERGENCY OBSTETRIC CARE.**
Emergency obstetric care can be a life-saving intervention. Policy-makers must intervene to expand access to emergency obstetric services, especially for pregnant adolescent girls.

**What can individuals, families and communities do?**

**INFORM ADOLESCENTS AND COMMUNITY MEMBERS ABOUT THE IMPORTANCE OF SKILLED ANTENATAL, CHILDBIRTH AND POSTPARTUM CARE.**
Lack of information is a significant barrier to seeking services. It is important to disseminate accurate information on the risks of not utilizing skilled care for both mother and baby, and where to obtain care.

**What can health systems do?**

**ENSURE THAT ADOLESCENTS, THEIR FAMILIES AND COMMUNITIES ARE WELL PREPARED FOR BIRTH AND BIRTH-RELATED EMERGENCIES.**
Pregnant adolescents must get the support they need to be well prepared for birth and birth-related emergencies, including creating a birthing plan. Birth and emergency preparedness must be an integral part of antenatal care.

**BE SENSITIVE AND RESPONSIVE TO THE NEEDS OF YOUNG MOTHERS AND MOTHERS-TO-BE.**
Adolescent girls must receive skilled - and sensitive - antenatal and childbirth care and, if complications arise, they must have access to emergency obstetric care.

**What can researchers do?**

- Build evidence to identify and eliminate barriers that prevent the access to and use of skilled antenatal, childbirth and postnatal care among adolescent girls.
- Develop and evaluate interventions that inform adolescents and stakeholders about the importance of skilled antenatal and childbirth care.
- Identify interventions to tailor the way in which antenatal, childbirth and postnatal services are provided to adolescents; expand the availability of emergency obstetric care; and improve birth and emergency preparedness for adolescents.

\textsuperscript{8} Reynolds, D, Wong, E, and Tucker, H. Adolescents’ use of maternal and child health services in developing countries. International Family Planning Perspectives, 2006, 32(1): 6-16.

\textsuperscript{9} Magadi, M A, Agwanda, A O, and Obware, F A. A comparative analysis of the use of maternal health services between teenagers and older mothers in sub-Saharan Africa: evidence from Demographic and Health Surveys (DHS). Social Science and Medicine, 2007 Mar, 64(6):1311-25.
These guidelines are primarily intended for programme managers, technical advisors and researchers from governments, nongovernmental organizations, development agencies and academia. They are also likely to be of interest to public health practitioners, professional associations and civil society groups.

They have been developed through a systematic review of existing research and input from experts from countries around the world, in partnership with many key international organizations working to improve adolescents’ health. Similar partnerships have been forged to distribute them widely and support their use.

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Contact details

World Health Organization
Department of Maternal, Newborn, Child and Adolescent Health
20 Avenue Appia, 1211 Geneva 27, Switzerland
Tel +41 22 791 3281 • Fax +41 22 791 4853 • Email: mncah@who.int