

# Packages of Interventions

for Family Planning, Safe Abortion care, Maternal,  
Newborn and Child Health



World Health  
Organization

## Acknowledgement

This document has been developed by the World Health Organization. It includes inputs from UNICEF, UNFPA, The World Bank and different members of The Partnership for Maternal, Newborn and Child Health (PMNCH). Bilateral partners also made valuable contributions.

© World Health Organization 2010

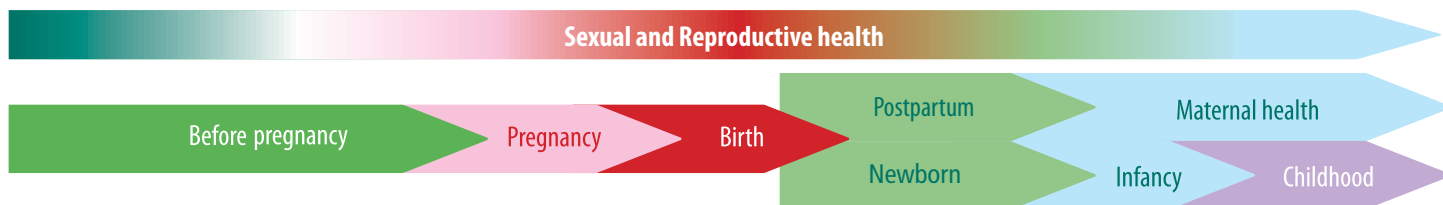
All rights reserved. Publications of the World Health Organization can be obtained from WHO Press, World Health Organization, 20 Avenue Appia, 1211 Geneva 27, Switzerland (tel.: +41 22 791 3264; fax: +41 22 791 4857; e-mail: [bookorder@who.int](mailto:bookorder@who.int)). Requests for permission to reproduce or translate WHO publications – whether for sale or for noncommercial distribution – should be addressed to WHO Press, at the above address (fax: +41 22 791 4806; e-mail: [permissions@who.int](mailto:permissions@who.int)).

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use.

Printed by the WHO Document Production Services, Geneva, Switzerland



# Packages of Interventions for Family Planning, Safe Abortion care, Maternal, Newborn and Child Health

## INTRODUCTION

Maternal and neonatal morbidity and mortality are major public health concerns in most developing countries and in under resourced settings. WHO estimates that every year approximately 8 million women endure pregnancy-related complications and around half a million die as a result. Almost 9 million children die every year, of which 4 million newborn babies die within the first month of life. In addition, 3.3 million babies are born dead.

The evidence shows that high maternal, perinatal, neonatal and child mortality rates are associated with inadequate and poor quality health services. Evidence also suggests that explicit, evidence-based, cost effective packages of interventions can improve the processes and outcomes of health care when appropriately implemented.

### 1. The Packages of Interventions for Family Planning, Safe Abortion Care, Maternal, Newborn and Child Health

This document describes the key effective interventions organized in packages across the continuum of care through pre-pregnancy, pregnancy, childbirth, postpartum, newborn care and care of the child. The packages are defined for community and/or facility levels in developing countries and provide guidance on the essential components needed to assure adequacy and quality of care.

### 2. Guiding principles in delivery of the interventions

Seven principles guide the delivery of the packages outlined in this document, namely:

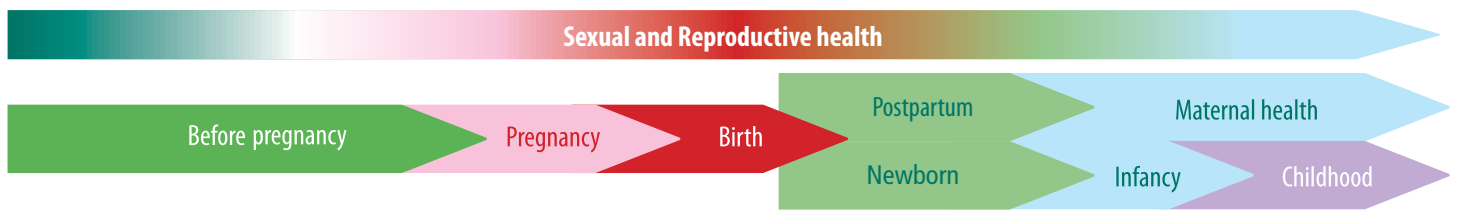
- Ensuring universal access to family planning, safe abortion, maternal, newborn and child health care, with special attention to the needs of under-served and vulnerable groups.
- Women and community participation in programmes.
- Integration of sexual, reproductive, maternal, newborn and child health services, including with HIV prevention and treatment.
- Pursuing social justice and poverty reduction to address health inequities.
- Facilitating the respect, protection and fulfillment of the human rights of women, men, adolescents, newborn and children.
- Respecting the basic values of choice, dignity, diversity and equality.
- Addressing gender and cultural sensitivity.

### 3. How the Packages of Interventions for Family Planning, Safe Abortion Care, Maternal, Newborn and Child Health care are structured?

Overall the document includes the most relevant topics that need to be addressed for ensuring quality reproductive health, maternal, neonatal and child health services. The document includes 7 packages focusing on clinical standards and health system's requirements, according to the life cycle and the continuum of care.

They are:

- 1) Family Planning
- 2) Safe Abortion Care
- 3) Pregnancy Care
- 4) Childbirth Care
- 5) Postpartum Care of the Mother
- 6) Care of the Newborn
- 7) Care during Infancy and Childhood



#### 4. How the Packages of interventions for Family Planning, Safe Abortion Maternal, Neonatal and Child Care can be used and for whom are they intended

These packages of interventions are built on WHO standards, which can be adapted and implemented according to the needs and resource capacities of different contexts. They can be used at national and sub-national level to establish norms, develop guidelines, as well as support the design of competency-based training curricula for skilled attendants and other health care providers in charge of reproductive, maternal, newborn and child health care.

It is expected that the packages of interventions will assist the global partners to implement the principles of the Global Consensus, in particular to accelerate the implementation of the recognized priority interventions and to strengthen the health systems that will deliver them.

#### 5. Resource needs

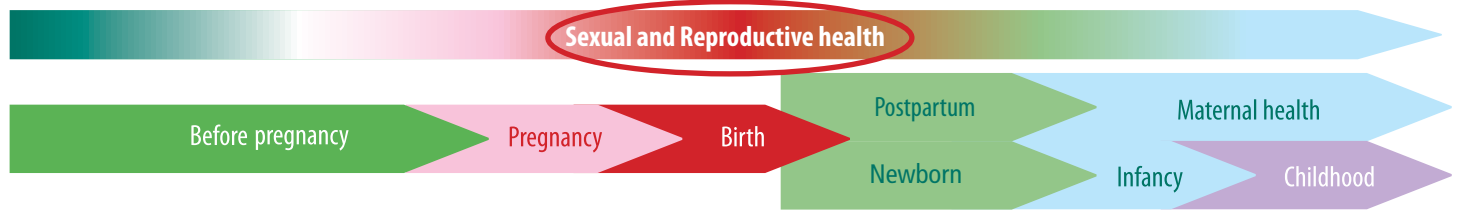
Scaling up the delivery of interventions to address child and maternal mortality will require additional investments to strengthen the performance of health system in particular regarding commodities, equipment and human resources and management.

Resource needs for implementing these packages are likely to differ by country, depending on the current situation as well as the targets set and the strategies employed for reaching those targets. Useful information to enable countries to move towards efficient and needs-based resource allocation include evidence on cost-effectiveness to inform priority setting; estimates of future resource needs; estimates of current expenditures; analysis of financing alternatives; and estimates of financial and fiscal gaps.

Numerous tools and methods exist to support countries undertaking economic and financial analysis for MNCH, including:

- For cost-effectiveness: WHO CHOICE tools ([www.who.int/choice](http://www.who.int/choice))
- For an overview of existing costing tools see [http://www.who.int/pmnch/topics/economics/costing\\_tools/en/index.html](http://www.who.int/pmnch/topics/economics/costing_tools/en/index.html)
- For monitoring current health expenditures, including guidelines specific to the assessment of child and reproductive health spending: [www.who.int/nha](http://www.who.int/nha))”

## Sexual and Reproductive health



# Family Planning

## Components

- Family Planning services integrated within preventive and curative sexual and reproductive health care.
- Education and counselling for informed contraception decision making.
- Availability of and access to contraceptive supplies.
- Family planning within integrated primary health care, including the prevention and care for STIs (including HIV), cancer of cervix and cancer of breast.

## Benefits and potential impact

- Promotes gender equity and empower women and families.
- Family planning has the potential to reduce 32% of maternal deaths, 10% of newborn, infant and child deaths.
- Family planning has the potential to decrease 71% of unwanted pregnancies: eliminating 53 million unintended pregnancy, 22 million fewer unplanned births, 25 million fewer induced abortion and 7 million fewer miscarriages.
- Can avert 80% of HIV sexual transmission with consistent and correct use of condoms.
- If all the women at risk of unintended pregnancy used modern contraceptive methods the decline in unintended pregnancy and unsafe abortion would reduce the cost of post abortion care to about \$ 230 million a year.
- Slows population growth contributing towards significantly reducing poverty and hunger and helps achieve national and international development goals.

## Health system requirements needed to support the delivery of the intervention

### Policy

- Enabling policy to increase access to contraceptive methods including expanding method choice.
- Defining and implementing strategies to eliminate unmet need for family planning, affecting up to 215 million couples globally.
- Health systems strengthening including increase in direct funding for family planning.

### Service delivery

- Integration of family planning in maternal and child health care throughout the continuum of care, including HIV and STI services, cervical and breast cancer screening.
- Regular access to and availability of contraceptives supplies.
- Integration in primary health care.
- Strengthen links between different levels of health system.
- Skilled health professionals: midwives, nurses and doctors trained in FP and counseling techniques that respect individual human rights.
- Community health workers with proper FP training and supervision.

### Indicators

- Contraceptive prevalence rate.
- Unmet need for family planning.
- Service delivery points prepared (with stocks and trained providers) to provide at least three family planning methods
- Government funding for Family Planning as a proportion of total funding for FP
- Percentage of Family Planning delivery points providing STI/HIV counselling/testing

### Further reading

- 1 Singh S et al. *Adding it up: The Costs and Benefits of Investing in Family Planning and Maternal and Newborn Health*, New York: Guttmacher Institute and United Nations Population Fund, 2009
- 2 Weller SC, Davis-Beatty K. *Condom effectiveness in reducing HIV transmission*. Cochrane Database of systemic Reviews 2007, Issue 4, Art. No.: CD003255. DOI: 10.1002/14651858.CD003255.

## Sexual and Reproductive health



# Family Planning

Interventions at Home/COMMUNITY level	Key supplies and commodities needed
<ul style="list-style-type: none"> <li>■ Health education to women, men, families and community:                             <ul style="list-style-type: none"> <li>□ To increase awareness on benefits of safe sex, family planning and birth spacing starting from the pre-pregnancy period, during pregnancy and after childbirth.</li> <li>□ Enable adolescents, women, men to access to various reproductive health services through integrated and linked services</li> <li>□ Counselling and distribution of contraceptive methods including emergency contraception</li> <li>□ Awareness of signs of domestic and sexual violence and referral</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>■ Counselling, health education and promotion materials</li> <li>■ Job aids</li> <li>■ Contraceptive methods                             <ul style="list-style-type: none"> <li>□ Condoms for STI/HIV and pregnancy prevention</li> <li>□ Oral contraceptives including emergency contraception</li> <li>□ Injectables</li> </ul> </li> </ul>
Interventions at FIRST LEVEL HEALTH FACILITIES	Key supplies and commodities needed
<p><u>All of the above plus:</u></p> <ul style="list-style-type: none"> <li>■ Counselling and provision of the full range of family planning methods</li> <li>■ HIV testing and counselling in generalized epidemics</li> <li>■ Dual protection (female and male condoms)</li> <li>■ Screening for and recognition and possible management of STI</li> <li>■ HIV testing and counselling</li> <li>■ Screening for and management of signs/symptoms of domestic violence and sexual assault</li> <li>■ Screening for cancer of the cervix and of the breast</li> <li>■ Identification of initial needs of the infertile couple, and referral</li> <li>■ Management or referral of problems</li> </ul>	<p><u>All of the above plus:</u></p> <ul style="list-style-type: none"> <li>■ Decision making aids for clients</li> <li>■ Full range of contraceptive methods (including vasectomy)</li> <li>■ Oral and parenteral antibiotics</li> <li>■ Laboratory tests kits for STI/ HIV</li> <li>■ Surgical equipment to insert/remove implants</li> <li>■ Sphygmomanometer</li> </ul>
Interventions at REFERRAL FACILITIES	Key supplies and commodities needed
<p><u>All of the above plus:</u></p> <ul style="list-style-type: none"> <li>■ Treatment of medical conditions, side effects and/or complications.</li> <li>■ Management of methods of choices if not provided at first level of care (tubal ligation/vasectomy/insertion and removal of implants, difficult removal of devices etc).</li> <li>■ Appropriate management of the infertile couples including HIV discordant couples.</li> </ul>	<p><u>All of the above plus:</u></p> <ul style="list-style-type: none"> <li>■ Appropriate operating theatre for surgical methods</li> <li>■ Surgical equipment</li> </ul>

## Sexual and Reproductive health



## Safe Abortion care

### Components

- Access to safe abortion to the full extent of the law.
- Access to treatment for complications of spontaneous and unsafe abortion.
- WHO-recommended surgical and medical methods for uterine evacuation.
- Contraceptive information, counselling, and methods.
- Screening, treatment, and referral for other sexual and reproductive health needs.

### Benefits and potential impact

- Has the potential to prevent nearly all deaths (70,000) and disabilities (5 million) from unsafe abortion annually.
- Saves an estimated.
  - US\$680 million in health-system costs for treating serious complications due to unsafe abortion.
  - US\$6 billion to treat post abortion infertility from unsafe abortion.
  - US\$930 million to society and individuals in lost income due to death or disability resulting from unsafe abortion.
- Allows women and families to address consequences of contraceptive method failure.

### Health system requirements needed to support the delivery of the intervention

#### Policy

- Broadening legal grounds for safe abortion.
- Universal access to safe services.
- Universal knowledge about the law and services and importance of safe abortion care.

#### Service delivery

- Evidence-based national standards and guidelines for safe abortion care.
- Skilled health professionals (e.g. doctors, midwives and nurses) and equipped facilities.
- Social safety net for poor women (e.g. through health insurance or voucher schemes).

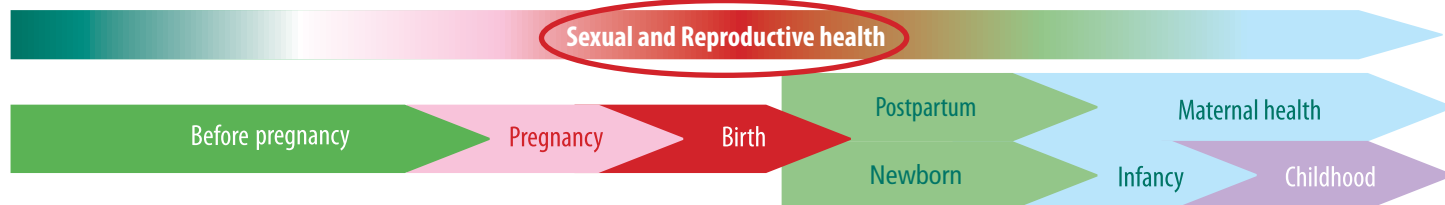
#### Indicators

- Percentage of health providers trained to provide safe abortion.
- Percentage of services delivery points that use WHO recommended methods for induced abortion to the full extent of the law.
- Percentage of services delivery points that use WHO recommended methods for management of abortion complications.
- Hospitalization rate for unsafe abortion per 1000 women, age disaggregated.
- Maternal death ratio attributed to abortion, age disaggregated.

#### Further reading

1. World Health Organization. *Safe abortion: technical and policy guidance for health system*. WHO 2003.
2. World Health Organization. *Unsafe abortion: global and regional estimates of the incidence of unsafe abortion and associated mortality in 2003*. Geneva: World Health Organization, 2007.
3. Vlassoff M et al. *Economic impact of unsafe abortion-related morbidity and mortality: evidence and estimation challenges*. IDS Research Report. Brighton, UK: Institute for Development Studies, 2008, No. 59.
4. World Health Organization., *The global burden of disease: 2004 update*, 2008. <[http://www.who.int/healthinfo/global\\_burden\\_disease/2004\\_report\\_update/en/index.html](http://www.who.int/healthinfo/global_burden_disease/2004_report_update/en/index.html)>

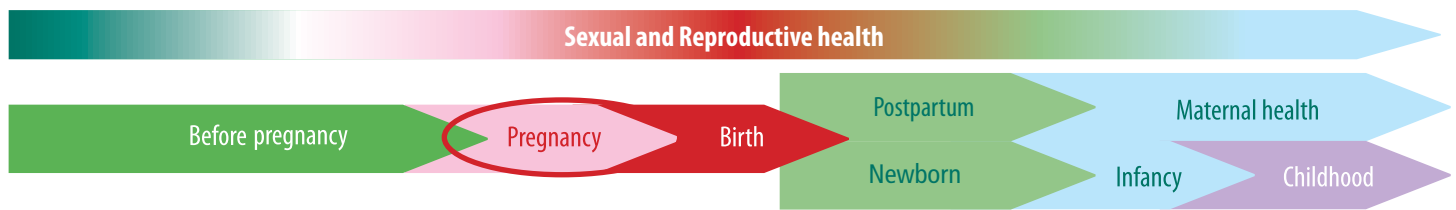
## Sexual and Reproductive health



# Safe Abortion care

Interventions at Home/COMMUNITY level	Key supplies and commodities needed
<ul style="list-style-type: none"> <li>■ Health education to women, men, families and community:                             <ul style="list-style-type: none"> <li>□ Sexual and reproductive health, including safe sex, family planning, unwanted pregnancy, coerced sex, consequences of unprotected sex, legal grounds for safe abortion</li> <li>□ Consequences of unsafe abortion</li> <li>□ Availability of family planning services</li> <li>□ Availability of pregnancy detection and safe abortion services</li> </ul> </li> <li>■ Distribution of methods of contraception, including emergency contraception</li> <li>■ Identification of signs of domestic and sexual violence and referral</li> <li>■ Identification, first aid and prompt referral of women with signs of complications of unsafe abortion</li> </ul>	<ul style="list-style-type: none"> <li>■ Counselling, health education and health promotion materials</li> <li>■ Job aids</li> <li>■ Contraceptive methods                             <ul style="list-style-type: none"> <li>□ Condoms for STI/HIV and pregnancy prevention</li> <li>□ Oral contraceptives including emergency contraceptives</li> <li>□ Injectables</li> <li>□ Pregnancy test kits</li> </ul> </li> </ul>
Interventions at FIRST LEVEL HEALTH FACILITIES	Key commodities needed
<p><u>All of the above plus:</u></p> <ul style="list-style-type: none"> <li>■ Counselling for contraceptive methods</li> <li>■ Uterine evacuation for first-trimester and, incomplete abortions</li> <li>■ Diagnosis and treatment of common complications of abortion including infection, bleeding or injury</li> <li>■ Referral mechanisms for timely treatment of abortion-related complications</li> <li>■ Diagnosis and treatment of STIs/HIV</li> </ul>	<p><u>All of the above plus:</u></p> <ul style="list-style-type: none"> <li>■ Vacuum aspiration equipment</li> <li>■ Medications for induced abortion (mifepristone + misoprostol)</li> <li>■ Analgesics and local anaesthetics</li> <li>■ Antibiotics</li> <li>■ Uterotonics</li> <li>■ Full range of contraceptive methods (including vasectomy)</li> </ul>
Interventions at REFERRAL FACILITIES	Key commodities needed
<p><u>All of the above plus:</u></p> <ul style="list-style-type: none"> <li>■ Uterine evacuation for pregnancies beyond the first trimester</li> <li>■ Management of women with any complication of abortion</li> <li>■ Management of ectopic pregnancy</li> <li>■ Provision of all contraceptive methods including tubal ligation</li> </ul>	<p><u>All of the above plus:</u></p> <ul style="list-style-type: none"> <li>■ Parenteral and oral antibiotics</li> <li>■ Intravenous fluids</li> <li>■ Oxygen</li> <li>■ Blood and transfusion sets</li> <li>■ Operating theatre drugs, and equipment</li> </ul>





## Pregnancy care

### Components

- Essential preventive and promotive care in pregnancy including PMTCT.
- Management of complications during pregnancy.

### Benefits:

- Improves healthy practices.
- Prevents tetanus, syphilis and anaemia.
- Increases uptake of PMTCT.
- Provides opportunities for preventing malaria.
- Pregnancy care increases uptake of IPT and ITNs.

### Potential impact

- Tetanus immunization reduces the risk of neonatal deaths from tetanus by 90%.
- Screening for pre-eclampsia reduces risk of maternal deaths due to hypertension by 48% and neonatal deaths due to prematurity by 15%.
- IPTs and ITNs can reduce low birth weight by 35% and IPTp can reduce neonatal mortality by up to 61%.

### Health system requirements needed to support the delivery of the intervention

#### Policy

- Policies that address social, cultural and financial factors that affect access to care.
- Nationally agreed standards and local protocols for integrated antenatal care services and timely referral and management of complications.

#### Service delivery

- Services organized to ensure that ANC provided through facilities and outreach programmes is available, accessible and acceptable to all women in the service area.
- Services linked to a health care system providing continuity with childbirth and postnatal care.
- Skilled health professionals.
- Essential medicines and medical devices.
- Functioning referral system (communications, ambulance).
- Adequate recording and reporting systems.
- Use of data for quality improvement.

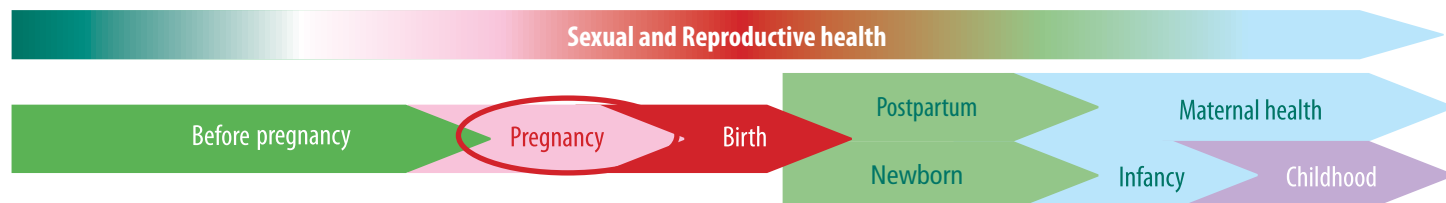
#### Indicators

- Percentage of pregnant women receiving antenatal care by skilled personnel at least once during pregnancy.
- Percentage of pregnant women receiving antenatal care by skilled personnel at least four times during pregnancy.
- Percentage of pregnant women who have been tested for HIV and screened and treated for syphilis.
- Percentage of HIV positive pregnant women who have received ARVs for PMTCT.
- Percentage of pregnant women who are fully immunized against tetanus.

### Further reading

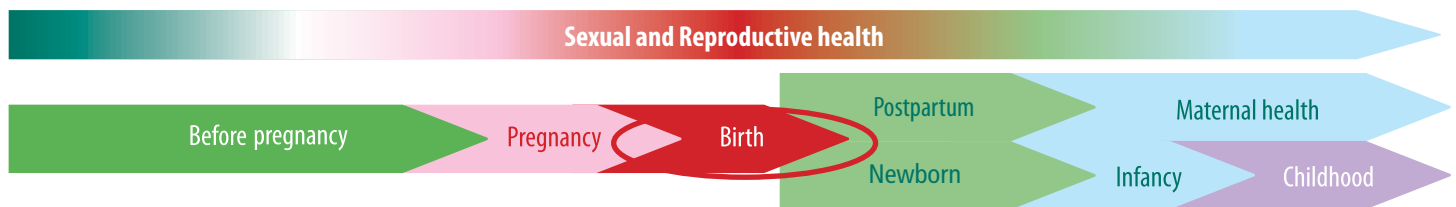
1. World Health Organization, United Nations Population Fund, UNICEF and The World Bank. *Pregnancy, childbirth, postpartum and newborn care: a guide for essential practice*. Geneva, World Health Organization, 2006. <[www.who.int/making\\_pregnancy\\_safer/documents/924159084x/en/index.html](http://www.who.int/making_pregnancy_safer/documents/924159084x/en/index.html)>
2. World Health Organization. *WHO recommended interventions for improving maternal and newborn health*. Geneva, World Health Organization 2007. <[http://www.who.int/making\\_pregnancy\\_safer/documents/who\\_mps\\_0705/en/index.html](http://www.who.int/making_pregnancy_safer/documents/who_mps_0705/en/index.html)>
3. World Health Organization, United Nations Population Fund, UNICEF and The World Bank. *Managing complications in pregnancy and childbirth: A guide for midwives and doctors*. Geneva, World Health Organization 2003. <[www.who.int/making\\_pregnancy\\_safer/documents/9241545879/en/index.html](http://www.who.int/making_pregnancy_safer/documents/9241545879/en/index.html)>

## Sexual and Reproductive health



# Pregnancy care

<b>Interventions at Home/COMMUNITY level</b> <ul style="list-style-type: none"> <li>■ Information and counselling on self care at home, nutrition, safer sex, HIV, breastfeeding, family planning, healthy lifestyle including harmful effects of smoking and alcohol use, and use of insecticide treated bednets</li> <li>■ Birth planning, advice on labour, danger signs and emergency preparedness</li> <li>■ Support for compliance with preventive treatments</li> <li>■ Support for women living with HIV/AIDS</li> <li>■ Assessment of signs of domestic violence and referral</li> </ul>	<b>Key supplies and commodities needed</b> <ul style="list-style-type: none"> <li>■ Counselling, health education and promotion materials</li> <li>■ Job aids</li> <li>■ Home-based maternal records</li> <li>■ Insecticide treated bed nets</li> <li>■ Birth and emergency cards</li> <li>■ Condoms</li> </ul>
<b>Pregnancy care at FIRST LEVEL FACILITY</b>	<b>Key supplies and commodities needed</b>
<p><u>All of the above plus:</u></p> <ul style="list-style-type: none"> <li>■ Confirmation of pregnancy</li> <li>■ Monitoring of progress of pregnancy and assessment of maternal and fetal well-being including nutritional status</li> <li>■ Detection of problems complicating pregnancy (e.g., anaemia, hypertensive disorders, bleeding, mal-presentations, multiple pregnancy)</li> <li>■ Respond to other reported needs.</li> <li>■ Tetanus immunization, anaemia prevention and control (iron and folic acid supplementation)</li> <li>■ Syphilis testing and treatment of syphilis (woman and her partner)</li> <li>■ Treatment of mild to moderate pregnancy complications (mild to moderate anaemia- urinary tract infection, vaginal infection)</li> <li>■ Post abortion care and family planning</li> <li>■ Pre-referral treatment of severe complications (pre-eclampsia, eclampsia, bleeding, infection and complicated abortion)</li> <li>■ Support for women living with violence and HIV</li> </ul>	<p><u>All of the above plus:</u></p> <ul style="list-style-type: none"> <li>■ Sphygmomanometer</li> <li>■ Stethoscope</li> <li>■ On site tests (Hb, pregnancy, proteinuria, HIV and syphilis, thermometer)</li> <li>■ Vaccine (TT)</li> <li>■ Iron and folic acid</li> <li>■ IV fluids</li> <li>■ Parenteral drugs (antibiotics, MgSO<sub>4</sub>)</li> <li>■ Manual Vacuum Aspiration (MVA) kit</li> <li>■ Gloves</li> <li>■ Oxygen</li> <li>■ Magnesium sulphate</li> <li>■ Calcium gluconate</li> </ul>
<b>Situational</b>	<b>Key supplies and commodities needed</b>
<p><u>All of the above plus:</u></p> <ul style="list-style-type: none"> <li>■ HIV testing and counselling, prevention of mother to child transmission of HIV (PMTCT) by antiretroviral including antiretroviral therapy (ART), infant feeding counselling, mode of delivery advice</li> <li>■ Antimalarial Intermittent preventive treatment (IPT) and promotion of insecticide treated nets (ITN)</li> <li>■ Deworming</li> <li>■ Assessment of female genital mutilation</li> <li>■ Treatment of mild to moderate opportunistic infections</li> <li>■ Treatment of simple malaria cases</li> </ul>	<p><u>All of the above plus:</u></p> <ul style="list-style-type: none"> <li>■ Antiretroviral drugs</li> <li>■ Insecticide treated bednets</li> <li>■ Antimalarial drugs</li> <li>■ Anthelmintic drugs</li> <li>■ Cotrimoxazole</li> </ul>
<b>Interventions at REFERRAL FACILITIES</b>	<b>Key supplies and commodities needed</b>
<p><u>All of the above plus:</u></p> <ul style="list-style-type: none"> <li>■ Treatment of severe pregnancy complications (anaemia, severe pre-eclampsia, eclampsia, bleeding, infection, other medical complications)</li> <li>■ Treatment of abortion complications</li> <li>■ Management of mal-presentations, multiple pregnancy</li> </ul>	<p><u>All of the above plus:</u></p> <ul style="list-style-type: none"> <li>■ Surgical kits</li> <li>■ Blood transfusion</li> <li>■ Anaesthesia</li> <li>■ Laboratory equipment for biochemical and microbiological tests</li> <li>■ Antimalarial drugs for complicated cases</li> </ul>
<b>Situational</b>	<b>Key supplies and commodities needed</b>
<p><u>All of the above plus:</u></p> <ul style="list-style-type: none"> <li>■ Treatment of severe HIV infection</li> <li>■ Treatment of complicated malaria</li> </ul>	<p><u>All of the above:</u></p>



## Childbirth Care

### Components

- Essential care during childbirth from the onset of labour up to 24hrs including promotive and preventive care.
- Essential care for the mother and newborn immediately after childbirth.
- Early recognition and appropriate management of complications.
- Prevention of transmission and care of HIV positive pregnant women.

### Benefits

- Increases safety for pregnant women and their babies in the childbirth process.
- Early detection and timely management of complications reduces maternal and perinatal morbidity and mortality.

### Potential Impact

- Has potential to reduce risks of maternal mortality and severe morbidity due to labour related complications by 95% and asphyxia related newborn deaths by 40%.
- Risks of postpartum haemorrhage reduced by 67%.

### Health system requirements to support the delivery of interventions

#### Policies

- Nationally agreed standards and local protocols for childbirth care services and timely referral and management of complications.
- Policies that address social, cultural and financial barriers to access care, with free delivery care at point of service.

#### Service delivery

- Skilled health professionals available to provide all women with quality childbirth services.
- Services are organized so as to ensure that they are available, accessible and acceptable to all women in the service area.
- Facilities provide 24hours / 7 days a week service.
- Essential medicines and medical devices.
- Referral system (communication, ambulance).
- Recording systems.
- Regular maternal and perinatal death reviews at facility level to improve quality of care.

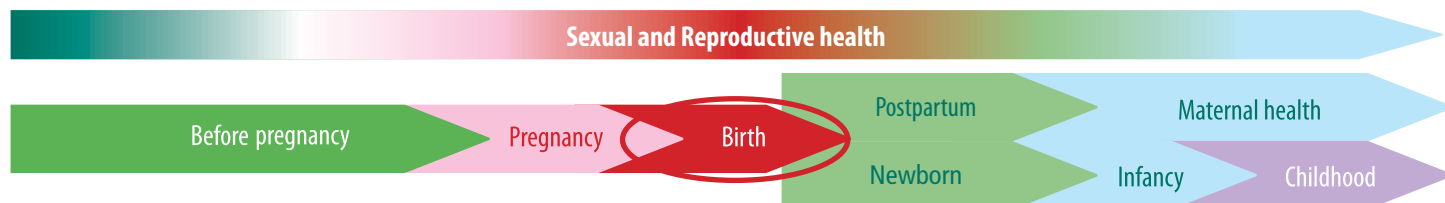
#### Indicators

- Percentage of births attended by skilled health personnel.
- Percentage of births in facilities.
- Percentage of all births by Caesarean section.
- Maternal mortality ratio, age disaggregated.
- Perinatal mortality rate.

#### Further reading

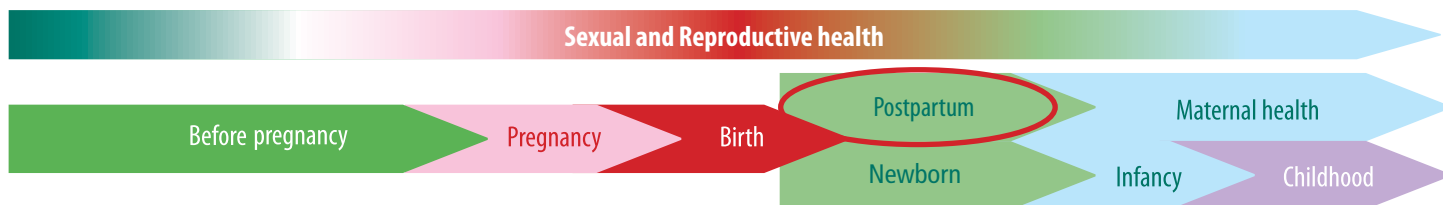
1. World Health Organization, United Nations Population Fund, UNICEF and The World Bank. *Pregnancy, childbirth, postpartum and newborn care: a guide for essential practice*. Geneva, World Health Organization, 2006. <[www.who.int/making\\_pregnancy\\_safer/documents/924159084x/en/index.html](http://www.who.int/making_pregnancy_safer/documents/924159084x/en/index.html)>
2. World Health Organization. *WHO recommended interventions for improving maternal and newborn health*. Geneva, World Health Organization 2007. <[http://www.who.int/making\\_pregnancy\\_safer/documents/who\\_mps\\_0705/en/index.html](http://www.who.int/making_pregnancy_safer/documents/who_mps_0705/en/index.html)>
3. World Health Organization, United Nations Population Fund, UNICEF and The World Bank. *Managing complications in pregnancy and childbirth: A guide for midwives and doctors*. Geneva, World Health Organization 2003. <[www.who.int/making\\_pregnancy\\_safer/documents/9241545879/en/index.html](http://www.who.int/making_pregnancy_safer/documents/9241545879/en/index.html)>

## Sexual and Reproductive health



# Childbirth care

Interventions at Home/COMMUNITY level	Key supplies and commodities needed
<ul style="list-style-type: none"> <li>■ Companion of choice to support the woman to attend a facility</li> <li>■ Support for care for the rest of the family</li> <li>■ Support for transport</li> </ul>	<ul style="list-style-type: none"> <li>■ Job aids</li> <li>■ Birth and emergency cards</li> </ul>
Childbirth care at FIRST LEVEL FACILITY	Key supplies and commodities needed
<p><u>All of the above plus:</u></p> <ul style="list-style-type: none"> <li>■ Care during labour and delivery                             <ul style="list-style-type: none"> <li>□ Diagnosis of labour</li> <li>□ Monitoring progress of labour, maternal and fetal well-being with partograph</li> <li>□ Companion of choice to support the woman</li> <li>□ Infection prevention</li> <li>□ Supportive care and pain relief</li> <li>□ Detection of problems and treatment of complications (e.g. malpresentations, prolonged and/or obstructed labour, hypertension, bleeding, and infection)</li> <li>□ Delivery and immediate care of the newborn baby</li> <li>□ Initiation of breastfeeding</li> <li>□ Newborn resuscitation</li> <li>□ Active management of third stage of labour</li> </ul> </li> <li>■ Immediate postpartum care of mother                             <ul style="list-style-type: none"> <li>□ Monitoring and assessment of maternal well being, prevention and detection of complications (e.g. hypertension, infections, bleeding, anaemia)</li> </ul> </li> <li>■ Treatment of abnormalities and complications (e.g. prolonged labour, vacuum extraction; breech presentation, episiotomy, repair of genital tears, manual removal of placenta)</li> <li>■ Pre-referral management of serious complications (e.g. obstructed labour, fetal distress, preterm labour, severe peri- and postpartum haemorrhage)</li> <li>■ Support for the family if maternal or perinatal death</li> <li>■ Counselling for family planning including insertion of IUDs</li> </ul>	<p><u>All of the above plus:</u></p> <ul style="list-style-type: none"> <li>■ Delivery set</li> <li>■ Oxytocin</li> <li>■ Partograph</li> <li>■ Sphygmomanometer</li> <li>■ Stethoscope</li> <li>■ Thermometer</li> <li>■ Vacuum extractor</li> <li>■ Gloves</li> <li>■ IV fluids</li> <li>■ Parenteral antibiotics and MgSO<sub>4</sub></li> <li>■ Analgesia</li> <li>■ Oxygen</li> <li>■ Newborn suction device</li> <li>■ Newborn resuscitation device</li> <li>■ Home-based maternal record</li> <li>■ IUDs</li> <li>■ Insecticide treated bednets</li> <li>■ Magnesium sulphate</li> <li>■ Calcium gluconate</li> <li>■ Vitamin K</li> </ul>
Situational	Key supplies and commodities needed
<p><u>All of the above plus:</u></p> <ul style="list-style-type: none"> <li>■ Vitamin A administration for mother</li> <li>■ HIV testing and counselling</li> <li>■ Prevention of mother-to-child transmission of HIV by mode of delivery, guidance and support for chosen infant feeding option</li> <li>■ Care for HIV positive women/ART</li> </ul>	<p><u>All of the above plus:</u></p> <ul style="list-style-type: none"> <li>■ Vitamin A</li> <li>■ Antiretroviral drugs</li> <li>■ Cotrimoxazole</li> </ul>
Childbirth care at REFERRAL FACILITIES	Key supplies and commodities needed
<p><u>All of the above plus:</u></p> <ul style="list-style-type: none"> <li>■ Treatment of severe complications in childbirth and in the immediate postpartum period, including caesarean section, blood transfusion and hysterectomy)</li> <li>■ Induction and augmentation of labour</li> <li>■ Management of other obstetric complications</li> </ul>	<p><u>All of the above plus:</u></p> <ul style="list-style-type: none"> <li>■ Surgical kit</li> <li>■ Anaesthetic medicines and medical devices</li> <li>■ Blood and blood transfusion kits</li> <li>■ Laboratory equipment for biochemical and microbiological tests</li> </ul>



## Postpartum care

**This package should be delivered together with package on Newborn care**

### Components

- Essential promotive and preventive care following childbirth (24 hours to 6 weeks).
- Early identification and appropriate management of complications.
- Family planning/birth spacing.
- Care and counselling for HIV positive mother.
- Support for breast feeding.

### Benefits

- Reduces maternal mortality and morbidity.
- Improves maternal and infant health by promoting birth spacing.

### Potential impact

- Timely management of maternal sepsis will reduce risk of maternal mortality due to sepsis by 90%.

### Health system requirements to support the delivery of interventions

#### Policies

- Nationally agreed standards and local protocols for childbirth care services and timely referral and management of complications.
- Policies that address social, cultural and financial barriers to access care.

#### Service delivery

- Services are organized so as to ensure that they are available, accessible and acceptable to all women in the service area.
- Linkages with families and communities to ensure support and care for mother and baby.
- Skilled professionals available to provide all women with quality postpartum care.
- Facilities provide 24 hour service.
- Essential medicines and medical devices.
- Referral system (communication, ambulance).
- Recording systems.
- Regular maternal and perinatal death reviews at facility level to improve quality of care.

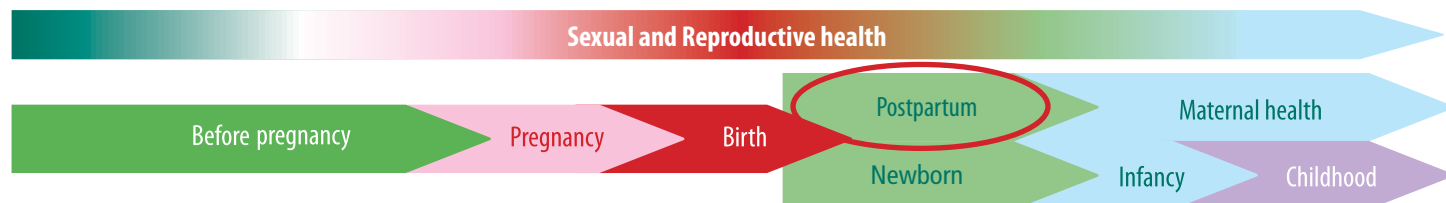
#### Indicators

- Percentage of women discharged from facilities in less than 24 hours after childbirth
- Percentage of women receiving postpartum care within 7 days after childbirth
- Percentage of women using a modern method of contraception at 6 weeks after childbirth

#### Further reading

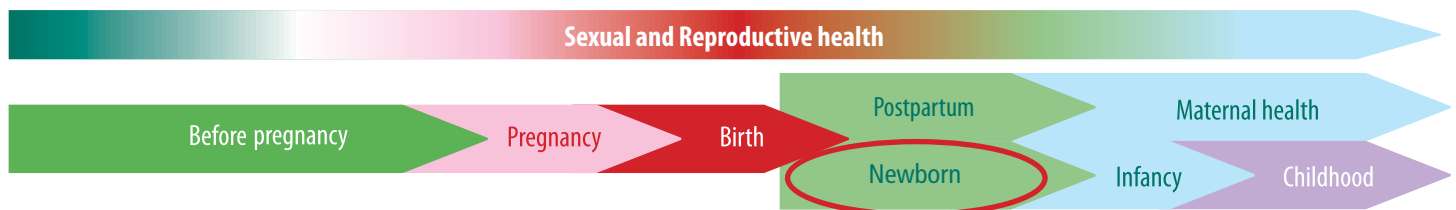
1. World Health Organization, United Nations Population Fund, UNICEF and The World Bank. *Pregnancy, childbirth, postpartum and newborn care: a guide for essential practice*. Geneva, World Health Organization, 2006. <[www.who.int/making\\_pregnancy\\_safer/documents/924159084x/en/index.html](http://www.who.int/making_pregnancy_safer/documents/924159084x/en/index.html)>
2. World Health Organization. *WHO recommended interventions for improving maternal and newborn health*. Geneva, World Health Organization 2007. <[http://www.who.int/making\\_pregnancy\\_safer/documents/who\\_mps\\_0705/en/index.html](http://www.who.int/making_pregnancy_safer/documents/who_mps_0705/en/index.html)>
3. World Health Organization, United Nations Population Fund, UNICEF and The World Bank. *Managing complications in pregnancy and childbirth: A guide for midwives and doctors*. Geneva, World Health Organization 2003. <[www.who.int/making\\_pregnancy\\_safer/documents/9241545879/en/index.html](http://www.who.int/making_pregnancy_safer/documents/9241545879/en/index.html)>

## Sexual and Reproductive health



# Postpartum care

Interventions at Home/COMMUNITY level	Key supplies and commodities needed
<ul style="list-style-type: none"> <li>■ Information and counselling on self care at home, nutrition, safer sex, breastfeeding, family planning, healthy lifestyle including harmful effects of smoking and alcohol use</li> <li>■ Support for exclusive breastfeeding</li> <li>■ Safe disposal / washing of pads</li> <li>■ Support for rest and less work load</li> <li>■ Malaria prevention and management of malaria</li> <li>■ Support for complication with prevention measures and treatments</li> <li>■ Family planning / birth spacing</li> <li>■ Recognition of dangers signs, including blues / depression</li> <li>■ Awareness of signs of domestic and sexual violence and referral</li> <li>■ Support for women living with HIV/AIDS including ART</li> <li>■ Reporting birth and death (vital registration)</li> <li>■ Use of insecticide treated bed nets</li> </ul>	<ul style="list-style-type: none"> <li>■ Counselling, health education and promotion materials</li> <li>■ Home-based maternal records</li> <li>■ Insecticide treated bed nets (ITN)</li> <li>■ Job aids</li> <li>■ Contraceptives including condoms</li> <li>■ Birth and emergency cards</li> </ul>
Postpartum care at FIRST LEVEL FACILITY	Key supplies and commodities needed
<p><u>All of the above plus:</u></p> <ul style="list-style-type: none"> <li>■ Assessment of maternal wellbeing including maternal nutrition</li> <li>■ Prevention and detection of complications (e.g. infections, bleeding, anaemia)</li> <li>■ Anaemia prevention and control (iron and folic acid supplementation)</li> <li>■ Provision of contraceptive methods</li> <li>■ Treatment of some problems (e.g. mild to moderate anaemia, mild puerperal depression, mastitis)</li> <li>■ Pre-referral treatment of some problems (e.g. severe postpartum bleeding, puerperal sepsis)</li> <li>■ Recording and reporting</li> </ul>	<p><u>All of the above plus:</u></p> <ul style="list-style-type: none"> <li>■ Sphygmomanometer</li> <li>■ Stethoscope</li> <li>■ Thermometer</li> <li>■ On site tests (Hb, HIV, syphilis)</li> <li>■ Vaccines (TT)</li> <li>■ Basic oral medicines</li> <li>■ IV fluids</li> <li>■ Antibiotics, MgSO<sub>4</sub>, oxytocin</li> <li>■ Gloves</li> <li>■ Analgesia</li> <li>■ Oxygen</li> <li>■ Magnesium sulphate</li> <li>■ Calcium gluconate</li> </ul>
Situational	Key supplies and commodities needed
<p><u>All of the above plus:</u></p> <ul style="list-style-type: none"> <li>■ Antiretroviral treatment (ART)</li> <li>■ Treatment of uncomplicated malaria</li> </ul>	<p><u>All of the above plus:</u></p> <ul style="list-style-type: none"> <li>■ Antiretroviral drugs</li> <li>■ Antimalarial drugs</li> </ul>
Postpartum care at REFERRAL FACILITY	Key supplies and commodities needed
<p><u>All of the above plus:</u></p> <ul style="list-style-type: none"> <li>■ Treatment of all complications                             <ul style="list-style-type: none"> <li>□ severe anaemia</li> <li>□ severe postpartum bleeding</li> <li>□ severe postpartum infections</li> <li>□ severe postpartum depression</li> </ul> </li> <li>■ Tubal ligation and vasectomy</li> <li>■ Contraceptive implants</li> </ul>	<p><u>All of the above plus:</u></p> <ul style="list-style-type: none"> <li>■ Surgical kits</li> <li>■ Anaesthetic medicines and medical devices</li> <li>■ Laboratory equipment for biochemical and microbiological tests</li> <li>■ Blood and blood transfusion sets</li> </ul>
Situational	Key supplies and commodities needed
<p><u>All of the above plus:</u></p> <ul style="list-style-type: none"> <li>■ Treatment of complicated malaria</li> </ul>	<p><u>All of the above plus:</u></p> <ul style="list-style-type: none"> <li>■ Antimalarial drugs</li> </ul>



## Newborn care

### Components

- Essential preventive interventions for the healthy newborn infant; and
- Early identification and management of newborn problems, namely care for prematurely born or low birth weight infants.

### Benefits and potential impact

Timely, quality postnatal care services for all newborn infants will maintain health of the majority of babies born healthy and ensure prompt detection and management of complications or problems and, hence, reduce mortality, morbidity and disabilities.

- It can reduce more than half of neonatal mortality when universally applied.
- Saving up to 2 million newborn lives each year.
- In addition it ensures a good start to life with practices and protections important for health, growth and development later in life.

### Health system requirements needed to support the delivery of the intervention

#### Policies

- Supportive policies to ensure availability and universal access to newborn care services that address social, cultural, financial and health service barriers, particularly of the poor and other vulnerable groups
- Supportive policies and a regulatory framework that enable mothers, family and communities, particularly those in special need, to care for newborn babies, including the ratification of ILO Maternity Protection Convention 183 and adoption of the International Code of Marketing of Breast-milk Substitutes
- Broadly-based support and partnerships to promote newborn care that foster community engagement, promote public-private partnership

#### Service delivery

- Health care services that are organized so as to ensure that they are always available, accessible and acceptable to all mothers and newborns and that meet and maintain the standards of care required for the delivery of above-mentioned interventions including the criteria of the Baby Friendly Hospital Initiative
- Human resources with the required range of competencies to deliver those interventions at the respective delivery levels who are trained, in sufficient numbers, recruited and retained at service; these include:
  - trained community health workers
  - skilled health professionals such as midwives, nurses and doctors in maternity facilities
  - specially trained staff for advanced newborn care units
- A health care financing system that covers newborn care, both the service delivery and the health promotion aspects
- Programmatic leadership that plans for, guides and supports service delivery and health promotion for newborn care, within the continuum of care, and monitors and evaluates results.

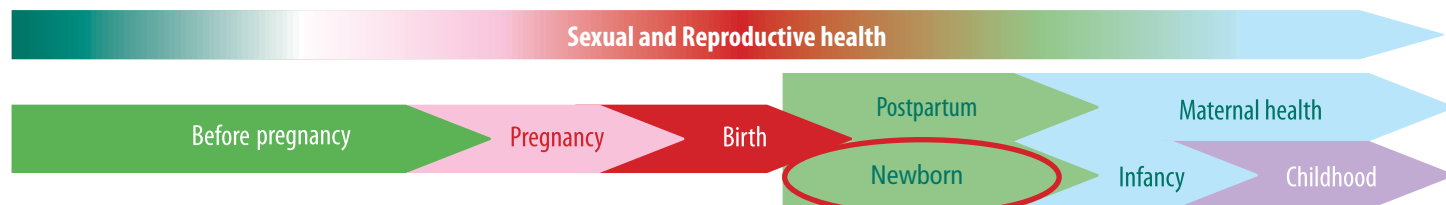
#### Indicators

- Neonatal and early neonatal mortality rates.
- Percentage of newborn infants put to the breast within 1 hour of birth (DHS, MICS)
- Percentage of newborns receiving postnatal care visit within 2 days of birth (DHS, MICS)
- Early neonatal deaths (within 7 days) of babies weighing 2500g or more in facilities

#### Further reading

1. World Health Organization, United Nations Population Fund, UNICEF and The World Bank. *Pregnancy, childbirth, postpartum and newborn care: a guide for essential practice*. Geneva, World Health Organization, 2006. <[www.who.int/making\\_pregnancy\\_safer/documents/924159084x/en/index.html](http://www.who.int/making_pregnancy_safer/documents/924159084x/en/index.html)>
2. World Health Organization. *WHO recommended interventions for improving maternal and newborn health*. Geneva, World Health Organization 2007. <[http://www.who.int/making\\_pregnancy\\_safer/documents/who\\_mps\\_0705/en/index.html](http://www.who.int/making_pregnancy_safer/documents/who_mps_0705/en/index.html)>
3. World Health Organization, UNICEF and The World Bank. *Managing newborn problems: A guide for doctors, nurses and midwives*. Geneva, World Health Organization 2003. <[http://www.who.int/making\\_pregnancy\\_safer/documents/9241546220/en/index.html](http://www.who.int/making_pregnancy_safer/documents/9241546220/en/index.html)>

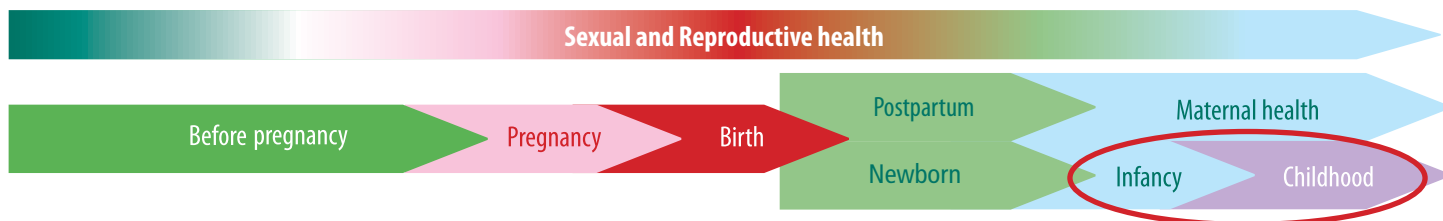
## Sexual and Reproductive health



# Newborn care

Interventions at Home/COMMUNITY level	Key supplies and commodities needed
<p>Promotion and support for:</p> <ul style="list-style-type: none"> <li>■ Exclusive breastfeeding</li> <li>■ Thermal protection</li> <li>■ Infection prevention: general hygiene, hand washing, cord care and safe disposal of baby's faeces</li> <li>■ Care of a small baby without breathing and feeding problems: frequent breastfeeding, skin-to-skin contact</li> <li>■ Prevention of indoor air pollution</li> <li>■ Newborn stimulation and play</li> <li>■ Recognition of problems, illness and timely care-seeking</li> <li>■ Support for routine care and follow up visits</li> <li>■ Birth registration</li> </ul> <p><b>Situational:</b></p> <ul style="list-style-type: none"> <li>■ Promotion and provision of insecticide treated bed nets</li> <li>■ Adherence to ARVs for PMTCT</li> </ul>	<ul style="list-style-type: none"> <li>■ Counselling, health education and promotion materials</li> <li>■ Weighing scales</li> <li>■ Thermometers</li> <li>■ Timing devices</li> <li>■ Child's health record and immunization cards</li> <li>■ Insecticide treated bed nets</li> </ul>
Interventions at FIRST LEVEL HEALTH FACILITIES	Key supplies and commodities needed
<p><u>All of the above plus:</u></p> <ul style="list-style-type: none"> <li>■ Rooming in</li> <li>■ Promotion, protection and support for exclusive breastfeeding</li> <li>■ Eye infection prophylaxis</li> <li>■ Immunization</li> <li>■ Presumptive treatment of congenital syphilis</li> <li>■ Monitoring and assessment of well being and response to maternal concerns</li> <li>■ Additional follow-up for at-risk babies</li> <li>■ Treatment of local infections (skin, cord, eye, mouth)</li> <li>■ Identification, initial management and referral of a newborn with any sign of severe illness, injury or malformation</li> <li>■ Care of preterm / low birth weight without breathing problems: support for breast(-milk) feeding, Kangaroo Mother Care</li> <li>■ Recording and reporting</li> </ul>	<p><u>All of the above plus:</u></p> <ul style="list-style-type: none"> <li>■ On site tests (Syphilis, HIV)</li> <li>■ Vaccines</li> <li>■ ORS, Zinc</li> <li>■ Oral and parenteral antibiotics, treatment for local infections</li> <li>■ Utensils for breastmilk expression and cup feeding</li> <li>■ Record keeping materials</li> </ul>
Situational:	Key supplies and commodities needed
<p><u>All of the above plus:</u></p> <ul style="list-style-type: none"> <li>■ ARV regimens for PMTCT including ART</li> <li>■ Support for safer infant feeding options</li> </ul>	<p><u>All of the above plus:</u></p> <ul style="list-style-type: none"> <li>■ Antiretroviral drugs</li> <li>■ Cotrimoxazole drugs</li> </ul>
Interventions at REFERRAL FACILITIES	Key supplies and commodities needed
<p><u>All of the above plus:</u></p> <ul style="list-style-type: none"> <li>■ Management of a newborn with severe problems: general care of a sick newborn and specific care for: <ul style="list-style-type: none"> <li>□ Preterm babies with breathing problem or unable to feed orally (includes provision of KMC)</li> <li>□ severe infection</li> <li>□ severe birth asphyxia</li> <li>□ other: severe jaundice, malformations</li> </ul> </li> </ul>	<p><u>All of the above plus:</u></p> <ul style="list-style-type: none"> <li>■ Oxygen</li> <li>■ IV fluids</li> <li>■ NG tubes,</li> <li>■ Binders for KMC</li> <li>■ Baby warmers / incubators</li> <li>■ Blood and blood transfusion sets</li> <li>■ Phototherapy</li> <li>■ Laboratory - biochemical and microbiology test kits</li> </ul>





## Infancy and childhood care

### Components

- Interventions to improve nutrition.
- Promote Immunization and use of insecticide treated bed nets.
- Provision of Integrated management of childhood illnesses, care of children infected with HIV.
- Promotion of early child development.

### Benefits and potential impact

- Improved care during infancy and childhood.
- Saving 3 million lives each year if universally applied.
- Promotes child health, growth and development.
- Reduces important risk factors for cardiovascular disease in later life.

### Health system requirements needed to support the delivery of the intervention

#### Policies

- Access to free health care at the point of delivery for all children regardless of their socio-economic situation.
- National adaptation of recommendations on management of pneumonia, diarrhoea, malaria and severe uncomplicated malnutrition by trained community health workers.
- National strategies based on the Integrated Management of Childhood Illness Strategy (IMCI), the Global Strategy for Infant and Young Child Feeding (YCF) and Global Immunization and Vaccines strategy (GIVS), Management of paediatric HIV.

#### Service delivery

- Costed national scale-up plans that promote comprehensive service delivery including linkages for timely referral and management of complications.
- Skilled human resources.
- Community-based services including by trained community health workers.

#### Indicators

- Percentage of infants under six months exclusively breastfed.
- Percentage of one-year-old children immunized against measles.
- Percentage of children 0-59 months with diarrhoea who received oral rehydration therapy and/or increased fluids, with continued feeding.
- Percentage of children 0-59 months with signs of pneumonia who received an antibiotic.
- Infant and under 5 mortality rate.

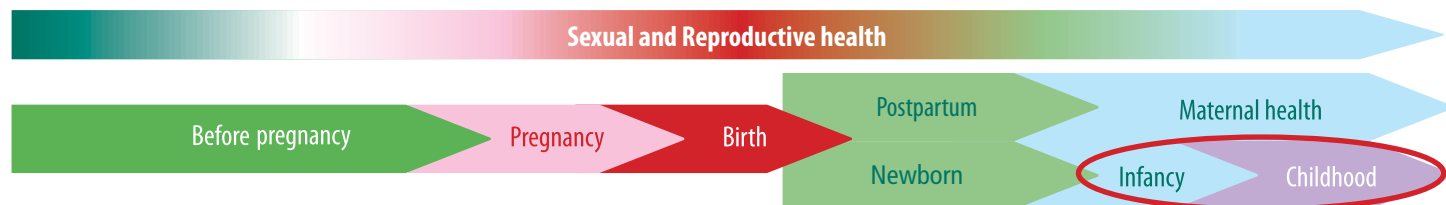
#### Situational

- Percentage of children 0-59 months who received antimalarial treatment within 24 hours of onset of fever.
- Percentage of HIV-infected children 0-5 years receiving lifelong antiretroviral therapy.

#### Further reading

1. World Health Organization. *Pocket Book of Hospital Care for Children: Guidelines for the Management of Common Illnesses with Limited Resources*. Geneva: World Health Organization, 2005. <[http://www.who.int/child\\_adolescent\\_health/documents/9241546700/en/index.html](http://www.who.int/child_adolescent_health/documents/9241546700/en/index.html)>
2. World Health Organization. *The Treatment of Diarrhoea: A manual for physicians and other senior health workers*. Geneva, World Health Organization 2005. <<http://whqlibdoc.who.int/publications/2005/9241593180.pdf>>
3. Siddhartha Gogia & Harshpal Singh Sachdev. *Community health worker visits to prevent neonatal death. Home visits by community health workers to prevent neonatal deaths in developing countries: a systematic review*. World Health Organization 2005 <<http://www.who.int/bulletin/volumes/88/9/09-069369.pdf>>

## Sexual and Reproductive health



# Infancy and childhood care

Interventions at Home/COMMUNITY level	Key supplies and commodities needed
<ul style="list-style-type: none"> <li>■ Promotion and support for:                             <ul style="list-style-type: none"> <li>□ Exclusive breastfeeding</li> <li>□ Appropriate complementary feeding</li> <li>□ Child stimulation and play</li> <li>□ Hand washing</li> <li>□ Sanitation and appropriate disposal of faeces</li> <li>□ Recognition of signs of illness and timely care-seeking</li> <li>□ Home care during illness</li> </ul> </li> <li>■ Provision and promotion of insecticide treated bed nets</li> <li>■ Identification and referral of children with signs of severe illness</li> <li>■ Identification and management of diarrhoea, pneumonia and malaria</li> </ul>	<ul style="list-style-type: none"> <li>■ Advocacy materials and counselling cards</li> <li>■ Insecticide treated bed nets</li> <li>■ Rapid diagnostic tests for malaria</li> <li>■ Medicines:                             <ul style="list-style-type: none"> <li>□ ORS and zinc tablets</li> <li>□ Antibiotics for pneumonia</li> <li>□ Antimalarial drugs</li> </ul> </li> </ul>
Interventions at FIRST LEVEL FACILITIES	Key supplies and commodities needed
<p><u>All of the above plus</u></p> <ul style="list-style-type: none"> <li>■ Immunization</li> <li>■ Identification and referral of children with signs of severe illness</li> <li>■ Integrated management of diarrhoea, pneumonia, fever (malaria and measles), uncomplicated severe acute malnutrition (IMCI).</li> <li>■ Assessment of nutritional status and feeding counselling</li> <li>■ Micronutrient supplementation</li> </ul>	<p><u>All of the above plus</u></p> <ul style="list-style-type: none"> <li>■ Vaccines and equipment</li> <li>■ Rapid diagnostic tests for HIV and malaria</li> <li>■ Medicines:                             <ul style="list-style-type: none"> <li>□ Parenteral antibiotics and antimalarials</li> <li>□ Antiretroviral drugs</li> <li>□ Cotrimoxazole</li> </ul> </li> <li>■ Ready-to-Use Therapeutic Foods</li> <li>■ Micronutrient supplements</li> </ul>
Situational	
<ul style="list-style-type: none"> <li>■ HIV testing and counselling and prevention of mother-to-child transmission of HIV</li> <li>■ Provision of integrated management of childhood illness and cotrimoxazole prophylaxis and antiretroviral therapy for HIV- exposed &amp; HIV-infected children</li> <li>■ Early infant diagnosis in HIV exposed children</li> </ul>	<p><u>All of the above plus:</u></p> <ul style="list-style-type: none"> <li>■ Antiretroviral drugs</li> <li>■ Cotrimoxazole</li> </ul>
Interventions at REFERRAL FACILITIES	Key supplies and commodities needed
<ul style="list-style-type: none"> <li>■ Management of children with severe illness</li> <li>■ Management of children with severe complicated malnutrition</li> </ul>	<p><u>All of the above</u></p> <ul style="list-style-type: none"> <li>■ Parenteral and oral anticonvulsants</li> <li>■ Intravenous fluids</li> <li>■ Oxygen</li> <li>■ F100, F75</li> </ul>





For more information contact:

Family and Community Health  
World Health Organization  
Avenue Appia 20,  
CH-1211 Geneva 27,  
Switzerland  
[www.who.int](http://www.who.int)

[islamm@who.int](mailto:islamm@who.int)  
[masone@who.int](mailto:masone@who.int)  
[mbizvom@who.int](mailto:mbizvom@who.int)

