

A National Clinical Guideline for Antenatal Care  
*Short Version - Recommendations*

Title of the report: A National Clinical Guideline for Antenatal Care. Short version

Published: 12/2005

Order number: IS-1339/E

ISBN-978-82-8081-078-1

Published by: Directorate for Health and Social Affairs, Norway  
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[www.shdir.no](http://www.shdir.no)

The report can be ordered from: Directorate for Health and Social Affairs, Norway,  
Printed Matter Distribution Centre  
Email: [trykksak@shdir.no](mailto:trykksak@shdir.no)  
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When ordering, please quote the order number: IS-1339

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## ***Dear Reader!***

This short version of the national clinical guideline for antenatal care has been produced for midwives, doctors and other health care personnel who are involved with antenatal care. The aim is that all health care personnel shall have knowledge about and a common understanding of what the services consist of.

Antenatal care is a unique part of the health services. It includes all antenatal check-ups, measures and referrals that are required during a normal pregnancy.

Antenatal care is a service for all pregnant women. Our desire is to ensure a secure framework and a clear content for this service. Antenatal care shall contribute to reducing social inequalities in health. Extra attention and care for people in high-risk groups is therefore particularly important. It is also important to provide the right conditions for pregnant women who have special needs. This is a big challenge and demands committed multi-disciplinary and multi-sectorial cooperation in order to be successful.

Pregnant women are experts on their own life and the feelings and expectations related to the condition in question. Health care personnel are experts on diagnostic and prognostic measures and treatment related to the issues raised during a consultation. In other words, patients and health care personnel are equal experts in their own fields. Health care personnel have a special responsibility for ensuring that patients set their own agenda and as far as possible understand what is offered from a professional perspective.

An important aim for the Directorate is to base professional advice and decisions on the best available knowledge. This national clinical guideline shifts the focus from control to information, advice and guidance. In this way it becomes easier for pregnant women and their families to assume responsibility for their own health. This is in line with recent knowledge about what works best, and with what pregnant women themselves want.

The Directorate for Health and Social Affairs looks forward to doctors, midwives and others who are directly involved with antenatal care implementing this clinical guideline in their practice.

*Bjørn-Inge Larsen*  
*Director General*  
*Directorate for Health and Social Affairs, Norway*

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## Grading of evidence

|  |           |
|--|-----------|
| Evidence that is based on systematic review and meta-analysis of randomized controlled trials.   | Level 1 a |
| Evidence that is based on at least one randomized controlled trial.  | Level 1 b |
| Evidence that is based on at least one well-designed controlled study without randomization.   | Level 2 a |
| Evidence that is based on at least one other type of well-designed quasi-experimental study.   | Level 2 b |
| Evidence that is based on well-designed, non-experimental descriptive studies, such as comparative studies, correlation studies or case studies. | Level 3   |
| Evidence obtained from expert committee reports or opinions, and/or clinical experience of respected authorities.                                | Level 4   |

## Grading of recommendations

|          |   |
|----------|---|
| <b>A</b> | Requires the support of evidence that is based on systematic review and meta-analysis of randomized controlled trials or at least one randomized controlled trial.<br>(Evidence categories 1a and 1b)             |
| <b>B</b> | Requires the support of evidence from at least one well-designed controlled study without randomization, or at least one other type of well-designed quasi-experimental study.<br>(Evidence categories 2a and 2b) |
| <b>C</b> | Requires the support of well-designed non-experimental descriptive studies, such as comparative studies, correlation studies or case studies<br>(Evidence category 3)   |
| <b>D</b> | Requires the support of expert committee reports or opinions and/or clinical experience of respected authorities.<br>(Evidence category 4)  |
| √        | Recommendations for practice based on the clinical experience of the group that has developed the guideline.  |

# 1 Woman-centred care and informed decision making

## 1.1 Information about routine examinations

At every routine examination, the midwife or doctor should inform the woman about the purpose of the test (tests and examinations) and clearly inform her that she has the right either to accept or to refuse the test. Women should be given written and verbal information, in line with the recommendations of WHO. [D]

Doctors and midwives must know the consequences of the test, and they should know how this information ought to be given. In particular, they should inform about the possibility of false positive and false negative results. ✓

## 1.2 Preparation during pregnancy for birth and parenthood

In order to minimize anxiety and uneasiness and to make women more satisfied with antenatal care, pregnant women should be given access to information through courses and written material. [A]

## 1.3 Preparation for breastfeeding

Pregnant women should be offered counselling about breastfeeding, in groups or individually. Preparation for breastfeeding includes practical and theoretical information and teaching about breastmilk and breastfeeding. Pregnant women who wish to breastfeed can be given support and guidance from women who have experience of breastfeeding, for example from Ammehjelpen (an organization of women that provides help with breastfeeding). [A]

Additional information about the value of breastfeeding for pregnant women and their babies can be useful for women who are influenced against breastfeed by the opinions of people in their circle of acquaintances. [D]

If the woman has previously given birth, she, the midwife or the doctor should make a note in the health record card during the first trimester about her breastfeeding experience. Similarly, the midwife or doctor should make a note during the pregnancy that they have given information about breastfeeding. Women who have had breast surgery, or who have previous negative breastfeeding experience, may need extra support and guidance during pregnancy. In addition, the doctor or the midwife should inform pregnant women about what they can expect of mother/child-friendly hospitals, in line with the recommendations of Nasjonalt Ammesenter (NAS) (the National Breastfeeding Centre). ✓

|   |
|---|
| <p>The organization that provides help with breastfeeding:<br/>Ammehjelpen: <a href="http://www.ammehjelpen.no">www.ammehjelpen.no</a><br/>The National Breastfeeding Centre: Nasjonalt ammesenter (NAS):<br/><a href="http://www.rikshospitalet.no/view/avd_info.asp?department=Ammesenteret">http://www.rikshospitalet.no/view/avd_info.asp?department=Ammesenteret</a></p> |
| <p>How to breastfeed your child (Hvordan du ammer ditt barn).<br/>Order number: IS-2092<br/>The brochure can be ordered from the Directorate for Health and Social Affairs, Norway.<br/>The brochure is not available in English.</p>   |

#### **1.4 Measures and arrangements to increase parent participation**

A pregnant woman should be given information and support so that she is able to make informed decisions. Information should not contain advertisements. She should have access to information about where antenatal care is provided and who provides it. This also applies to free choice of the place where she will give birth. At the first antenatal check-up, the midwife or doctor should inform the woman about the types of antenatal care that are available and what she can choose from, give advice about lifestyle and habits, provide an overview of routine examinations and inform about the possibilities for obtaining financial support. Each time the woman has a check-up, the midwife or the doctor should give her clear information and explanations, and give her the opportunity to discuss things or ask questions about topics she is interested in. ✓



## 2 Care for pregnant women

### 2.1 Who should provide antenatal care?

Women with a normal pregnancy should be cared for by a midwife or a general medical practitioner, or by a general medical practitioner and a midwife working in cooperation. Routine referral to a gynaecologist at set times for women with uncomplicated pregnancies do not appear to improve antenatal outcome more than referral to a gynaecologist when complications occur. [A]

The woman herself should choose whether to attend a general medical practitioner, a midwife or both. ✓

### 2.2 Continuity of care during pregnancy, birth and the post-natal period

Women should be offered continuity of care during pregnancy, birth and the post-natal period. This means being cared for by a minimum number of professionals, who the woman feels comfortable with, during the whole of her pregnancy. [A]

A system with clear routines should be established for antenatal services, so that women who need check-ups in addition to basic care are taken care of and treated by the appropriate health care personnel when a problem arises. [D]

### 2.3 Documentation of check-ups

Structured patient records for pregnancy, such as the health record card for pregnant women, should be used, and pregnant women should take care of their health record card themselves. All professionals who are involved must clearly sign the card with their full name and contact details, in order to facilitate cooperation. ✓

### 2.4 The number of antenatal check-ups and the timing of check-ups

The number of check-ups for healthy women with normal pregnancies can be safely reduced in relation to current practice. [A]

Up to and including the 40<sup>th</sup> week of pregnancy, a basic programme of eight check-ups is recommended. This includes an ultrasound examination between the 17<sup>th</sup> and 19<sup>th</sup> weeks. Extra check-ups should be carried out in week 41, and after this time the routines for postterm pregnancy should be followed. [D]

## 2.5 Ultrasound examination during pregnancy

It is recommended that pregnant women should be offered an ultrasound examination between the 17<sup>th</sup> and 19<sup>th</sup> weeks of pregnancy, in order to determine the expected date of delivery. [A]

The following things should be checked during the same examination: the number of fetuses, the position of the placenta and the anatomy of the fetus. [D]

Routine ultrasound examination is the best method for determining the expected date of delivery. [B]

Pregnant women should be given both written and verbal information in advance about the purpose of the ultrasound examination. They should also be informed that the examination is voluntary. ✓

Guideline for the use of ultrasound during pregnancy.  
Use of ultrasound in normal antenatal care and fetal diagnostics. IS 23/2004  
Information about ultrasound during pregnancy. IS 1228B.  
These brochures can be ordered from the Directorate for Health and Social Affairs, Norway.  
The brochures are not available in English.

## 2.6 Fetal diagnostics

Recent research has shown that the risk for a fetus having a chromosomal disorder can be assessed during the 11-13 weeks of pregnancy on the basis of the woman's age and an early ultrasound examination, using an evaluation of illumination of the neck. The reliability of the assessment can be improved by analysing markers in a blood sample in addition to ultrasound examination. This provides a better basis for assessing the need for amniocentesis. Women thus obtain a better basis for deciding whether to have amniocentesis, and this will reduce the risk of miscarriage with amniocentesis. [B]

It is essential to inform pregnant women as soon as possible (at the first check-up) that they have the right to be given amniocentesis if they fulfil one or more of the requirements laid down by the authorities. The right to have amniocentesis includes an early ultrasound examination during weeks 11-13 of pregnancy, blood tests and genetic counselling. [D]

Genetic fetal diagnostics. About the availability of fetal diagnostic services. I-0998B. Information for parents.

A good start. Guidelines for health care personnel for use in diagnosis of disabilities in fetuses and children. IS-1008.

These brochures can be ordered from the Directorate for Health and Social Affairs, Norway. They are not available in English.

The Norwegian Biotechnology Advisory Board:  
Has links to legislation that regulates fetal diagnostics, and other relevant  
information:  
<http://www.bion.no/>

## 3 Lifestyle considerations

### 3.1 Work

Pregnant women should be informed, both verbally and in writing about their social security rights in relation to pregnancy and birth. [D]

For most women, it is safe to be active and to continue to work during pregnancy. ✓

Benefits available for pregnancy, birth and adoption.  
Can be ordered from the local social security office  
[http://www.trygdeetaten.no/default.asp?strTema=familie&path=f\\_oedsel\\_mrog\\_mradopsjon](http://www.trygdeetaten.no/default.asp?strTema=familie&path=f_oedsel_mrog_mradopsjon)

Rights for parents with small children.  
Order number Q-0867.  
Can be ordered from the Government Administration Services  
or: <http://www.dep.no/bfd/norsk/publ/veiledninger/index-b-n-a.html>

Facts about work environment and pregnancy.  
Answers to questions that the Norwegian Labour Inspection Authority frequently receives about legislation in this area.  
<http://www.arbeidstilsynet.no/info/tema/gravide.html>

A draft Norwegian version of the European Commission's directive is available at:  
<http://www.arbeidstilsynet.no/publikasjoner/brosjyrer/pdf/gravide.pdf>

Pregnant women at work and the form for adaptation for/relocation of pregnant women.  
Can be ordered from:  
<http://www.arbeidstilsynet.no/publikasjoner/bestilling>  
or from the address given in Chapter 16.6 in the guidelines.

The website gives a short description of the aim of the form, and how to order a paper version or a print-out:  
<http://www.arbeidstilsynet.no/publikasjoner/skjemaer/skje474b.html>

Work environment and pregnancy (brochure) from the Norwegian Labour Inspection Authority can be ordered from:  
<http://www.arbeidstilsynet.no/publikasjoner/brosjyrer/bros474.html>

Pregnant and what next? About sick-leave and measures for pregnant women who are working. Berit Morland. Ideas bank for sick-leave and work.  
Tiden Norsk Forlag AS. Oslo. 2002.  
Can be ordered or downloaded free from:  
<http://www.idebanken.org/default.asp?show=art&artID=175&exp=17>

The above brochures are not available in English

### 3.2 Advice about diet

In general, pregnant women should try to eat a diet that is as varied as possible. That is to say:

- ❖ products that contain carbohydrate, such as wholemeal bread, pasta, rice and potatoes
- ❖ products that are rich in protein, such as lean meat, fish, beans and lentils
- ❖ a lot of fibre, found in unrefined corn products such as wholemeal bread and crisp bread, muesli, fruit and vegetables
- ❖ an adequate amount of dairy products (milk, yoghurt and cheese), preferably low-fat products
- ❖ as little as possible of products that contains sugar, such as soft drinks, juice and sweets.

Pregnant women should be given information about food that can give increased risk for themselves or the fetus. Detailed information about safety from environmental poisons, particularly in fish and shellfish and certain types of meat (venison, whale and seal) can be found at [www.matportalen.no](http://www.matportalen.no) [D]

The brochure "Nutrition during Pregnancy" ("Ernæring i svangerskapet" IS-2184) is recommended for all pregnant women. Pregnant women of Pakistani origin should be offered the brochure "Food, Motion and Well-being – a Better Life with Diabetes" ("Mat, bevegelse og trivsel – et bedre liv med diabetes" IS-1146). This brochure also contains nutritional advice for women who do not have diabetes. ✓

Nutrition during pregnancy. IS-2184  
Norwegian recommendations for nutrition and physical activity. IS-1219  
Food, activity and well-being – a better life with diabetes. IS-1146

These brochures can be ordered from the Directorate for Health and Social Affairs, Norway. They are not available in English.

### 3.3 Dietary supplements

#### 3.3.1 Folate

Women who are planning to be pregnant should be informed that it is recommended to take folate one month before conception. Pregnant women should take folate during the first 12 weeks of pregnancy. This reduces the risk of having a child with spina bifida. The recommended dose is 0.4 mg daily. [A]

If the woman has previously had a child with spina bifida, if she herself has spina bifida, or if the father of the child has spina bifida, then it is recommended that she should take

extra folate in the dose 4 mg per day from one month before conception and during the first two to three months of the pregnancy. [D]

More information is available at [www.folat.org](http://www.folat.org)  
Material for pregnant women and guidelines for health care workers can be ordered in eight different languages.  
Material can also be ordered from the Directorate for Health and Social Affairs, Norway.

### **3.3.2 Iron**

Iron supplements should not be recommended to pregnant women as a standard procedure. Routine iron supplements do not promote the health of either the woman or the fetus, and they cause unpleasant side-effects. This only leads to higher ferritin and haemoglobin levels. [A]

It is recommended that pregnant women should have their haemoglobin level measured at the first check-up, at the same time as other blood tests are taken. Measurement of haemoglobin level is also recommended in week 28, when the haemoglobin level is at its lowest, so that if the woman has anaemia this can be corrected before the birth. [B]

### **3.3.3 Vitamin A**

A daily dose of cod liver oil is recommended. Liver as a main course in a meal is not recommended; as it contains too large amounts of vitamin A. Pregnant women should avoid taking several different dietary supplements that contain vitamin A. [D]

### **3.3.4 Vitamin D**

Pregnant women should be advised to take 10 µg of vitamin D per day. Pregnant and nursing women are advised to take cod liver oil to meet their vitamin D requirements. 5 ml of cod liver oil contain 10µg of vitamin D. Alternatively pregnant women can choose a multivitamin product or vitamin D drops. [D]

## **3.4 Food-acquired infections**

### **3.4.1 Listeriosis**

Pregnant women should make sure that all meat they eat is thoroughly cooked. In addition, they should avoid using vacuum packed products that are close to the end of their shelf-life. This applies to cold meats, cured and smoked fish and certain types of cheese. [D]

The Food Gateway (Matportalen) contains information about food, produced by the Norwegian authorities. [www.matportalen.no](http://www.matportalen.no)  
Information for pregnant women is also available here.

Norwegian Institute of Public Health, see infectious diseases: Handbook on control of infectious diseases for municipal health services. [www.fhi.no](http://www.fhi.no)

### **3.4.2 Toxoplasmosis**

Pregnant women should be given information about primary preventive measures for preventing infection:

- ❖ wash your hands before handling food
- ❖ thoroughly wash all fruit and vegetables
- ❖ thoroughly cook all raw meat and fast food.

[D]

### **3.5 Dental health of pregnant women**

Women should avoid having fillings during pregnancy. Measures for ensuring good oral health during pregnancy include having an adequate and varied diet and avoiding eating between meals, thorough daily tooth brushing, use of fluoride toothpaste twice a day, and use of additional fluoride preparations as needed. The mouth should be rinsed with either water or fluoride mouth rinse if the woman has frequent vomiting or acid regurgitation.

[D]

Teeth for life. Health promotion and prevention. IS-2659  
This report can be ordered from the Directorate for Health and Social Affairs, Norway. It is not available in English.

### **3.6 Prescribed medicines**

Few medicines have been ascertained to be safe for use during pregnancy. Therefore, medicines should only be prescribed when the advantages for the women outweigh the risks for the fetus.

[D]

### **3.7 Over-the-counter medicines**

Few over-the-counter medicines have been ascertained to be safe for use during pregnancy. Pregnant women should therefore use as few over-the-counter medicines as possible.

[D]

### **3.8 Herbal medicines**

Documentation about the effect and safety of most of the herbal medicines that are available for pregnant women is lacking. Pregnant women should therefore not use herbal medicines.

[D]

### **3.9 Physical activity**

Training to strengthen the muscles in the pelvic floor is particularly important during pregnancy and after the birth.

[A]

Women who have previously not been physically active ought to be moderately active during pregnancy and gradually increase their activity (up to 30 minutes per day).

[A]

Women who have been regularly physically active before their pregnancy should continue with this at an appropriate level. They can continue to participate in high intensity activities. Fitness training improves the pumping action of the heart and the ability of the muscles to take up and use oxygen. Fitness training includes all activities in which one uses large muscle groups dynamically over time, for example walking, jogging, cycling, dancing, low impact aerobics without running and hopping, gymnastics and swimming. [D]

Muscle training during pregnancy is important: the muscles of the back, stomach and pelvic floor need to bear the weight of the child. Strong back and stomach muscles can prevent bad posture and pain in the lower back. Strong muscles will be needed later, to lift and carry the child after the birth. Exercises to strengthen the muscles should include 8-12 repetitions of each exercise. Hold for 6-8 seconds and repeat each series of exercises 2-3 times, preferably 2-3 times a week. [D]

Activities where there is a high risk of falling (such as riding and alpine ski sports) and contact sports such as handball, basketball and ice hockey, can increase the risk of trauma, and should be avoided. Pregnant women should also avoid diving. [D]

Pregnant women should avoid overheating of the body. The risk of overheating is eliminated if the activity is carried out for short periods, for example at 15-minute intervals. ✓

Physical activity and health. Recommendations.  
Report no. 2/2000. IS-1011.  
This report can be ordered from the Directorate for Health and Social Affairs, Norway. It is not available in English.  
  
Booklet: Physical activity and health.  
Journal of the Norwegian Medical Association. Mars 2002

### 3.10 Sexual intercourse

Pregnant women should be informed that sexual intercourse in pregnancy is not known to carry any risk. [B]

It is normal for sexual desire to vary during pregnancy. Couples should be encouraged to discuss this openly. ✓

### 3.11 Alcohol

Women should not drink alcohol during pregnancy. [D]

Alcohol can damage the fetus. It is advantageous to abstain from alcohol during all stages of pregnancy. [C]



Women with high-risk alcohol consumption should be referred to a centre that can provide multidisciplinary care. Health care personnel should deal with the situation sensitively, so that women who abuse alcohol do not try to avoid contact with health services. ✓

### 3.12 Tobacco

Pregnant women who smoke should be given information about the increased risks for the child if they continue to smoke (such as low birth weight and premature birth). It should be stressed that to stop smoking is beneficial in all stages of pregnancy. Counselling on how to stop smoking has been shown to increase the number of pregnant women who stop smoking, to increase mean birth weight and to reduce the prevalence of low birth weight (though the effect is not large). Therefore an offer of help to stop smoking should be an obligatory and routine part of all antenatal care. Counselling should be given on an individual basis. Group therapy, and types of behavioural therapy based on self-help brochures, may also be useful. [A]

Pregnant women who do not manage to stop smoking should be given advice about reducing the use of tobacco as much as possible. [B]

Pregnant women who smoke should be offered the brochure: Smoke-free Pregnancy and the Stop Smoking Programme for Pregnant Women (Røykfri graviditet og Røykesluttprogram for gravide). ✓

The telephone helpline for smokers 800 400 85 is a free counselling service regarding tobacco and stopping smoking.

Smoking-free pregnancy (brochure for pregnant women and their partners)  
IS-1221

Stop smoking for pregnant women IS-1215.

This brochure can be ordered from the Directorate for Health and Social Affairs, Norway. It is not available in English.

More information is available at: [www.tobakk.no](http://www.tobakk.no)

### 3.13 Hashish

Knowledge about the effect of hash during pregnancy is limited. In line with the precautionary principle, since there is a positive relationship between use of hash and cigarette smoking, it is recommended that women should be advised not to smoke hash during pregnancy. The use of hash is forbidden in Norway. [C]

### 3.14 Air travel

Long-haul air travel increases the risk of venous thrombosis. It is uncertain whether the risk is greater for pregnant women. Use of support stockings reduces the risk in the general population. [B]

Pregnant women should contact the airline company in advance to check the company's rules. Airline companies normally assess the length of the plane journey and the stage of the pregnancy. ✓

### 3.15 Use of seat belts

Pregnant women should be given information about correct use of seat belts: three-point seat belts that fit above and below the bump. [B]

### 3.16 Travelling abroad, malaria prophylaxis and vaccinations

Pregnant women should take the necessary vaccinations and follow the recommended malaria prophylaxis in malaria areas. They should follow the recommendations of the Norwegian Institute of Public Health and the WHO. Experts in the area should assess the risks and the advantages of each type of vaccination for each individual pregnant woman. [D]

Information is available on the website of the Norwegian Institute of Public Health: [www.fhi.no](http://www.fhi.no)

Health care personnel can get advice about vaccines and vaccination from the Norwegian Institute of Public Health.

WHO has information on its website: [www.who.int/ith/](http://www.who.int/ith/)

### 3.17 Travel insurance

Pregnant women who plan to travel abroad should check the special regulations and advice for pregnant women regarding aeroplane journeys, vaccinations and travel insurance. ✓

#### European Health Insurance Card

As a member of the Norwegian National Insurance Scheme, Norwegian citizens are entitled to health care and essential medical treatment, the same as inhabitants in the country they are visiting. The European health insurance card is evidence for this. The card is valid in all EEC countries. It is also valid in the Nordic countries, but Norway has separate agreements with these countries that ensure the rights of Norwegian citizens.

Everyone, including pregnant women, can obtain a health insurance card from their local social security office. The health card certifies the holder's right to be provided with health care immediately as needed. The card is valid for three years, only for the person named on the card. The card does not replace travel insurance. For example, it does not cover extra expenses for the journey home.

The form for ordering the card can be downloaded from: [www.trygdeetaten.no](http://www.trygdeetaten.no)



## 4 Common symptoms of pregnancy

### 4.1 Nausea and vomiting in early pregnancy

Pregnant women should be reassured that nausea and vomiting usually resolve spontaneously between weeks 16-20 of pregnancy, and that nausea and vomiting are not usually associated with a poor pregnancy outcome.

If a woman wishes to have treatment or is considering having treatment, the following types of treatment can be effective in reducing symptoms: acupuncture, antihistamines, root ginger capsules and P6 Neiguan point acupressure. [A]  
(There is less experience with the use of second generation antihistamines than first generation antihistamines).

Many women find that eating small, frequent meals reduces the symptoms. Some women find that rest helps. Information about self-help and non-pharmaceutical remedies should be available for pregnant women who suffer from nausea and vomiting.

Hyperemesis gravidarum can cause fluid and electrolyte imbalance and nutritional problems, due to vomiting that begins early in pregnancy. Women with this condition should be referred to a specialist for assessment, treatment and follow-up. ✓

### 4.2 Heartburn

Pregnant women with symptoms of heartburn should be given information about life-style, habits and nutrition. ✓

A doctor or midwife should recommend antacids and alginic acid preparations to women with lasting troublesome symptoms. These preparations are prescription-free and effectively ease the symptoms. [A]

### 4.3 Constipation

Women who suffer from constipation during pregnancy should be offered nutritional counselling, with particular emphasis on increasing the amount of fibre-rich foods in the diet, such as unrefined corn products, vegetables, fruit, berries and potatoes. If this does not help, a midwife or doctor can recommend bulk-forming preparations or fibre supplements. Laxatives should be avoided. [A]

Some women find that physical activity and increased fluid intake help. ✓

### 4.4 Haemorrhoids

Pregnant women who suffer from haemorrhoids should be given information about diet, physical activity and fluid intake. If these measures do not relieve the symptoms, ointments that are normally used for haemorrhoids can be recommended. In severe cases, surgical treatment can be considered. ✓

#### 4.5 Varicose veins and oedema

Pregnant women who have varicose veins and oedema of the legs should be informed that these are normal symptoms that are not dangerous. Support stockings can relieve the symptoms, but will not prevent varicose veins. [A]

Some women find that the following measures help:

- ❖ sitting with the legs raised
- ❖ lying with a pillow under the buttocks (varicose veins of the vulva)
- ❖ lying down and resting now and then.

√

#### 4.6 Vaginal discharge

Women should be informed that increased vaginal discharge is a normal physiological change during pregnancy. If it is accompanied by itching, soreness, unpleasant odour or pain during urination, the woman may have an infection. An examination by a doctor is then necessary. √

Women who have a candida infection (thrush) during pregnancy can be given local treatment with clotrimazole for one week (ointment and vaginal pessaries). [A]

The safety of oral/systemic treatment of candida infection during pregnancy is uncertain, and is not recommended. √

#### 4.7 Pelvic girdle pain and backache

Pregnant women who suffer from pelvic girdle pain should be offered an appropriate treatment programme with a physiotherapist, including special, stabilizing exercises. [A]

[A]

Pregnant women can try exercises in a swimming pool, acupuncture and physiotherapy. [C]

[C]

The National Association for Women with Pelvic Girdle Pain (Landsforeningen for kvinder med Bekkenløsningsplager – LKB): <http://www.lkb.no/>

European Guidelines on the Diagnosis and treatment of pelvic girdle pain:  
[www.backpaineurope.org](http://www.backpaineurope.org)

#### 4.8 Tiredness

Pregnant women should be informed that it is normal to feel tired during the first trimester of pregnancy, and that this usually improves during the second trimester. In cases of extreme tiredness, the pregnant woman should rest as much as possible and should get help with work in and out of the home. Other causes, such as iron deficiency, should be eliminated. √

√

#### **4.9 Stretch marks**

Pregnant women should be informed that there is little research on stretch marks, and that knowledge about this theme is limited. There is no evidence that creams that are claimed to remove stretch marks work. ✓

#### **4.10 Leg cramps**

Pregnant women should be given information that leg cramps usually go over, and that they are associated with pregnancy. Some women find that massage, stretching and movement can relieve cramps, and are worth trying. ✓

## 5 Clinical examination of pregnant women

### 5.1 Weight

A pregnant woman's height and weight should be measured at the first check-up in pregnancy, during weeks 8-12, in order to calculate her body mass index (BMI). Weight, height and BMI should be noted on the health record card for pregnant women. [B]

Pregnant women should be weighed regularly during pregnancy, as an indicator of diet, life-style and habits. Pregnant women who are under-weight or over-weight should be given individual counselling on diet and physical activity, in addition to the general counselling that all pregnant women receive. [D]

With routine weighing, it is important to use the same weighing scales each time. Women can weigh themselves on their own weighing scales at home, and note their weight on their health record card for pregnant women. ✓

Information about overweight can be found at: [www.fhi.no](http://www.fhi.no)

BMI is calculated in the following way:

Weight in kilos is divided by height squared.

For example, a woman who weighs 65 kilos and who is 1.70 metres high:

$$\begin{aligned} \text{BMI} &= 65 / (1.7 \times 1.7) \\ &= 22.5 \end{aligned}$$

### 5.2 Breast examination

Routine breast examination during pregnancy is not recommended for the promotion of breastfeeding. [A]

### 5.3 Gynaecological examination

Women who are under 25 years of age should be offered a gynaecological examination (GE) in order to take a chlamydia test, or if a GE is indicated after an assessment of the woman's case history. We recommend a cervical smear test every third year. If the time for the test is during pregnancy, then this test should be offered early in the pregnancy. ✓

Routine gynaecological examination in order to assess stage of gestation is not recommended. GE does not provide reliable information about the risk of giving birth prematurely or about mechanical disproportions. [B]

## 5.4 Female genital mutilation

Women who have undergone female genital mutilation should be identified early in their pregnancy. This should be done in a respectful and sensitive way.

Assessment during pregnancy in cooperation with an obstetric or gynaecological out-patient department or maternity unit should form the basis for planning how and where the birth should take place. [C]

Female genital mutilation is not in itself an indication for a Caesarean section. The following should be recorded on the health record card for pregnant women: the status of the vulva, the woman's preference for pain control during the birth and, if appropriate, the time for carrying out deinfibulation. ✓

The following brochure can be ordered from the Government Administration Services:  
We are OK: An information booklet on female genital mutilation and arguments for the practice. Produced for young girls from communities in which female genital mutilation is practised. Focus on prevention.  
In Urdu, English and Somali.  
Brochure on legislation and the ban on female genital mutilation: I-1053 B.

The following brochure can be ordered from the Directorate for Health and Social Affairs, Norway:  
Guideline on female genital mutilation for health care personnel in Norway: IS-2723. Information and practical advice for clinicians.  
Can be downloaded from: <http://www.shdir.no/assets/10263/ik-2723.pdf>

Practising new regulations on the duty to prevent female genital mutilation, according to the Female Genital Mutilation Act: IS-1193.  
Can be downloaded from: <http://www.shdir.no/assets/12804/IS-1193.pdf>

## 5.5 Sickle cell anaemia and thalassaemia

When a pregnant woman from an endemic area has anaemia and microcytosis, one should not just consider iron deficiency, but also whether the woman has haemoglobinopathy that needs to be assessed by a specialist. [C]

The person who carries out the antenatal check-up should be aware of this condition, so that he or she can seek any necessary specialist help. Haemoglobinopathy may require referral of the woman to a haematologist, and genetic counselling may be required for future pregnancies. One should be especially aware of certain ethnic groups that can be affected by this condition. [D]

## 5.6 Blood grouping and antibodies

It is recommended that all pregnant women should have a blood test to determine their blood group and antibody status early in pregnancy. Women who are rhesus negative



should be screened for antibodies two more times, during weeks 28 and 36. Women who develop rhesus antibodies should be referred to a specialist. It is recommended that all rhesus negative women who give birth to a rhesus positive baby are offered 1500 IU of anti-D within 72 hours after the birth to prevent the development of antibodies. [A]

### **5.7 Thrombocyte antibodies**

At present routine investigation of red cell alloantibodies is not recommended. ✓

### **5.8 Asymptomatic bacteriuria**

At the first antenatal check-up, the woman should be asked about previous urinary infections. [D]

If the woman has previously had recurrent infections, urine cultures with the correct test technique for identifying asymptomatic bacteriuria should be taken. Treatment should not be given before a positive result is verified using a control test. [B]

The usual practice in Norway is to test the urine with urine test strips for leucocytes and nitrites at every check-up. This is ineffective and expensive, and this practice should be discontinued. [D]

### **5.9 Asymptomatic bacterial vaginosis**

Routine examination for bacterial vaginosis is not recommended. [A]

### **5.10 Streptococcus group B**

If streptococci group B. is detected in the urine, this should be noted on the health record card for pregnant women, so that the maternity unit can give antibiotic prophylaxis (penicillin i.v.) during the birth. [D]

There is no scientific basis for recommending routine screening of pregnant women in order to identify carriers of streptococcus group B. [A]

### **5.11 Genital chlamydia**

Routine examination of all pregnant women under 25 years of age for asymptomatic genital chlamydia is recommended. Other women should be assessed for whether a test should be recommended, according to their medical history. [C]

### **5.12 Hepatitis B**

A pregnant woman should be offered serological testing for hepatitis B if she, her previous sexual partner, or her present sexual partner:

- ❖ was born or grew up in a medium or highly endemic area
- ❖ was previously or is now an injecting drug user
- ❖ has had a blood transfusion abroad

- ❖ has had a sexual relationship with an injecting drug user
- ❖ has had a sexual relationship with a bisexual man
- ❖ has been exposed to the risk of infection at work
- ❖ has had hepatitis B.

It is particularly important to remember to offer a test to pregnant women who came to Norway many years ago as an adopted child, or as an immigrant from a land where the prevalence of hepatitis B is high. [A]

### 5.13 Hepatitis C

We do not recommend routine examination for hepatitis C for pregnant women, because there is no evidence that this reduces the risk of infection for the child. [C]

A test should be taken for hepatitis C virus if the woman provides information that indicates the need for a test. [D]

### 5.14 HIV

Since mother-to-child transmission can be substantially reduced, we recommend routine examination of pregnant women for HIV antibodies. Current practice should continue. [A]

Everyone who carries out antenatal check-ups should have clear guidelines for referring HIV-positive women, so that they are ensured treatment by a team of specialists. ✓

Pregnant women should be given the brochure “The Offer of an HIV-test to all Pregnant Women”, so that they are informed about this. ✓

The offer of an HIV test for all pregnant women.  
 This brochure can be ordered from the Norwegian Institute of Public Health  
 or from: folkehelseinstituttet@fhi.no

### 5.15 Rubella (German measles)

Pregnant women who cannot document that they have antibodies against rubella should be offered screening. Women who are not immune against rubella should be recommended to be vaccinated after the birth. Finding out that the woman does not have antibodies probably has no effect on the pregnancy, but if the woman is vaccinated after the birth, this will probably reduce the risk of infection during subsequent pregnancies. [B]

The woman can be vaccinated in a maternity unit or health centre, by a midwife or a doctor. Midwives and doctors must have clear guidelines about where and when they should vaccinate pregnant women. ✓

### 5.16 Syphilis

All pregnant women should be offered syphilis serology at the first antenatal check-up. Women who are at higher risk, such as women from the former Soviet Union and Africa, should be offered a further test in the last trimester, or before they leave the maternity unit. The positive predictive value of the test is low (the probability for a false positive result is high). Women with a positive test should be referred to a specialist for assessment and appropriate treatment. [B]

### 5.17 Toxoplasmosis

We do not recommend routine serological screening for toxoplasmosis, because the risks of screening can outweigh the benefits. [B]

Pregnant women should be given information about primary preventive measures for preventing infection:

- ❖ wash your hands before handling food
- ❖ thoroughly wash all fruit and vegetables
- ❖ thoroughly cook all raw meat and fast food
- ❖ use gloves when doing work in the garden
- ❖ avoid cat faeces when caring for animals.

[C]

### 5.18 Genital herpes

Pregnant women with a primary outbreak of genital herpes round about the expected date of delivery should be referred to a specialist. If there is doubt about whether the outbreak is primary or secondary, this can be checked by taking a blood test. ✓

### 5.19 Gestational diabetes

An oral glucose tolerance test should be taken for pregnant women if:  
- glucose is detected with urine test strips in a morning urine sample  
- the woman has an increased risk of gestational diabetes.

Risk factors for pregnant women are:

- ❖ age > 38 years
- ❖ a parent or a sibling with type 1 or type 2 diabetes
- ❖ overweight with a BMI > 27 kg/m<sup>2</sup> at the beginning of the pregnancy
- ❖ previously detected pregnancy diabetes
- ❖ an immigrant from a developing country

[D]

### 5.20 Pre-eclampsia

Risk factors for developing pre-eclampsia should be assessed. Risk factors include:

- ❖ age
- ❖ nullipara

- ❖ a long time between pregnancies
- ❖ previous pre-eclampsia
- ❖ multiple births
- ❖ genetic factors
- ❖ high BMI at the first antenatal check-up
- ❖ diabetes or hypertension.

[C]

Pregnant women should be informed about the symptoms of severe pre-eclampsia, since this can give a poorer prognosis for the mother and child. Symptoms include headache, sight disturbances (flickering), pain under the ribs, vomiting and sudden swelling of the face, hands or feet.

[D]

When blood pressure is measured, a urine test for protein should also be done. All health care personnel should use standard equipment and techniques for measuring blood pressure so that valid comparisons can be made.

[C]

Pregnant women with pre-eclampsia should be referred to an obstetric out-patient clinic.

[D]

Protein in the urine can be detected using urine test strips. Everyone who carries out antenatal check-ups should be aware of the risk of false positive and false negative results, in particular that the result is dependent on the concentration (specific density) of the urine and vaginal discharge.

√

### 5.21 Postterm birth

Pregnancy is defined as postterm 14 days after the expected date of delivery as determined by ultrasound. The woman should be referred to an obstetric out-patient clinic or maternity unit.

[A]

This must be adapted to the established routines at the maternity unit.

### 5.22 Depression

Pregnant women should be asked whether they have previously had any mental illness. Women who have previously had serious mental illness should be assessed by a general medical practitioner and should be referred for psychiatric assessment if necessary.

[B]

Pregnant women who have symptoms of depression should be detected. If a midwife carries out the antenatal check-up, she should consider referring the woman to a general medical practitioner.

[D]

There is no evidence from preliminary research that antenatal teaching prevents post-natal depression.

[A]

Organization Adults for Children: 23 10 06 10: [www.vfb.no](http://www.vfb.no)  
 Angstringen Norway: 22 22 35 30: [www.angstringen.no](http://www.angstringen.no)

### 5.23 Violence and sexual abuse

The use of screening tools to detect violence in the home is currently not recommended, since we do not know what effect measures against violence in the home have. [B]

Particular attention should be paid to signs and symptoms of abuse or episodes of violence. Women should be given the opportunity to talk about violence in the home at their antenatal check-up. [D]

It should be made clear that violence is unacceptable, and women who are the victims of abuse should be given support, and, if necessary, help to contact the local crisis centre. People who provide antenatal check-ups should have an overview of local services that are available for victims of violence and sexual abuse, for refugees and for women who have suffered trauma. ✓

Norwegian Center for Studies on Violence and Traumatic Stress (NKVTS):

<http://www.nkvts.no/>

The Centre carries out research and development work, teaching, skills development, counselling and dissemination of information about violence, assault, forced migration, disasters and traumatic stress.

The Center offers services for professionals and help services.

Crisis secretariat: <http://www.krisesenter.com/>

The Support Centre Against Incest: 23 31 46 50: [www.sentermotincest.no](http://www.sentermotincest.no)

Mental health telephone helpline: 810 30 030 (open 24 hours a day):

[www.mentalhelse.no](http://www.mentalhelse.no)

### 5.24 Abdominal palpation and fetal presentation

Assessment of fetal presentation by routine abdominal palpation is not always accurate. Assessment of fetal presentation is recommended from week 36. The findings at this stage are relevant for further follow-up and planning of the birth. [C]

If fetal malpresentation is suspected, the woman should be referred for an ultrasound examination from week 36 for diagnosis and follow-up. ✓

If the baby is in a breach position in week 36, manual turning should be considered in an obstetric out-patient clinic. [A]

### 5.25 Measurement of symphysis-fundal distance

It is recommended that symphysis-fundal distance should be measured at every antenatal check-up after the 24<sup>th</sup> week of pregnancy. The person who takes the measurement should plot the result on a growth curve in the health record card for pregnant women. [C]

The same person should take the measurement each time. If there is large variation, the pregnant woman should be referred to an antenatal out-patient clinic for further assessment. ✓

### **5.26 Routine monitoring of fetal movements**

Routine monitoring of fetal movements, using a registration form, is not currently recommended for healthy pregnant women with normal pregnancies. [A]

Pregnant women should be informed that they should contact a midwife, general medical practitioner or hospital if they notice that there are fewer movements, or that there is no movement. ✓

### **5.27 Auscultation of the fetal heart**

If the woman detects fetal movements, routine auscultation of the fetal heart at every ante-natal check-up is unnecessary. The person who examines the woman can use either a fetal stethoscope or an ultrasound Doppler apparatus. ✓

# Appendix

## **Recommendations of the World Health Organisation (WHO)**

The World Health Organisation (WHO) has introduced a new model for antenatal care with a minimum of four check-ups. A critical review of the scientific foundation has shown that the content and scope of antenatal care is more based on ritual and tradition than evidence.

A systematic review has compared the WHO model with few check-ups with a standard model with more check-ups (5-7). The outcomes were low birthweight (< 2500 gram), pre-eclampsia and eclampsia, severe anaemia after birth and urinary infection that required treatment. The review found no significant differences between the two groups. The conclusion was that a model with fewer antenatal check-ups is just as good as a standard model with more check-ups, for these important outcomes. The WHO has estimated that the proportion of pregnant women with a condition or a risk factor that requires special care in addition to the usual care, is about 25 per cent.

The WHO model is applicable to healthy pregnant women with normal pregnancies. Women with special risk factors should be referred to more specialized health services. The criteria for the model are, among other things, sufficient time for counselling and information. The services should be easily available for pregnant women, and women should receive written and verbal information about who they can contact 24 hours a day.

In addition, the WHO recommends that pregnant women should not have to wait unnecessarily. Women who do not have an appointment should not be turned away, even if they do not need emergency care. Pregnant women should feel welcome and opening times at clinics for antenatal care should be user-friendly.

Examinations and tests should be carried at times that suit the woman, for example on the same day as the check-up. The WHO model specifies the content of each check-up. The WHO means that teamwork between professionals and the pregnant woman is decisive for the safety of the woman and the fetus.

## **WHO – Values and principles for antenatal care**

Implementation of the WHO model is dependent on the following ten principles:

- Care for normal pregnancy and birth should be demedicalized
- Care should be based on appropriate or necessary technology
- Care should be decentralized
- Care should be evidence-based
- Care should be multidisciplinary
- Care should be comprehensive
- Care should be centred on the family
- Care should be adapted to culture
- Care should involve women in decision-making processes
- Care should have respect for private life, dignity and confidentiality

In this context, medicalization is defined as inappropriate use of medical intervention with the use of technology carried out by personnel in antenatal care. Demedicalization means changing care in such a way that inappropriate medical measures are not used.

### **Method for developing the guideline**

In February 2003, the Directorate for Health and Social Affairs, Norway, appointed a working group that was given the task of developing a proposal for a guideline for antenatal care. The group included:

Atle Klovning, Senior Lecturer, Specialist in General Medical Practice (leader of the group)

Bjørn Backe, Senior Consultant, Professor, Specialist in Obstetrics and Gynaecology

Ellen Blix, Midwife, Mph

Britt Ingeborg Eide, Clinic Leader, Midwife

Synne Holan, Midwife, Mph

Mariann Mathiesen, Specialist in General Medical Practice

Johanne Aarseth, Midwife

The task of developing the guideline was based in the Department for Primary Health Services, with Senior Adviser Brit Roland as the project leader.

The following departments in the Directorate for Health and Social Affairs, Norway, have made a contribution:

Department for Primary Health Services,

Department for Specialised Health Care,

Department for Guidelines, Priorities and Quality,

The Departments for Nutrition, Substance Abuse and Physical Activity.

A consumer study of antenatal care, commissioned by the Directorate for Health and Social Affairs, Norway, was carried out among pregnant women. In addition, a draft guideline was distributed for comment to user organizations, professional



organizations, special interests organizations, some municipalities and regional health authorities. The results obtained from the consumer study, and the feedback gained when the draft guideline was distributed for comment, have been used in developing the guideline.

### Grading the evidence

The Directorate has chosen to use the same grading as the one used by the National Institute for Clinical Excellence (NICE), Great Britain in its guideline. The grading is formulated on the basis of levels of evidence.

Different systems are to be found for describing the persuasive strength of scientific evidence. The intention is to clarify the quality of the evidence for every question that is to be answered. Grading in levels can help the user of the guideline to find out what evidence the recommendations are based on, and to what degree they can rely on the results of the studies that the recommendations are based on.

The table shows how the documentation is categorized in this guideline:

|  |           |
|--|-----------|
| Evidence that is based on systematic review and meta-analysis of randomized controlled trials.   | Level 1 a |
| Evidence that is based on at least one randomized controlled trial.  | Level 1 b |
| <hr/>  |           |
| Evidence that is based on at least one well-designed controlled study without randomization.   | Level 2 a |
| Evidence that is based on at least one other type of well-designed quasi-experimental study.   | Level 2 b |
| <hr/>  |           |
| Evidence that is based on well-designed, non-experimental descriptive studies, such as comparative studies, correlation studies or case studies. | Level 3   |
| <hr/>  |           |
| Evidence obtained from expert committee reports or opinions, and/or clinical experience of respected authorities.                                | Level 4   |

### Recommendations

In this national clinical guideline, the Directorate has chosen to use letter categories for the recommendations: [A] [B] [C] [D] based on the guideline from Great Britain. The strength of the recommendations is dependent on an assessment of the research-based evidence. The sign √ indicates recommendations for practice based on the clinical experience of the group that has developed the guideline. The table below shows how the level of evidence relates to the grading of the recommendations.

|  |  |
|--|--|
|  | Requires the support of evidence that is based on systematic review and meta-analysis of randomized controlled trials or at least one randomized controlled trial. |
|--|--|

|          |  |
|----------|--|
| <b>A</b> | (Evidence categories 1a and 1b)  |
| <b>B</b> | Requires the support of evidence from at least one well-designed controlled study without randomization, or at least one other type of well-designed quasi-experimental study. (Evidence categories 2a and 2b) |
| <b>C</b> | Requires the support of well-designed non-experimental descriptive studies, such as comparative studies, correlation studies or case studies (Evidence category 3)   |
| <b>D</b> | Requires the support of expert committee reports or opinions and/or clinical experience of respected authorities. (Evidence category 4)  |
| √        | Recommendations for practice based on the clinical experience of the group that has developed the guideline.   |

### Genetic counselling

|  |   |
|--|---|
| Rikshospitalet HF<br>Department for Medical Ethics,<br>0027 Oslo, Norway<br>Telephone +47 23 07 45 18<br>www.rikshospitalet.no                                 | Haukeland Hospital/Helse Bergen HF<br>Department for Medical Genetics<br>5021 Bergen, Norway<br>Telephone +47 55 97 54 75<br>www.medgen.no  |
| Ullevål University Hospital HF<br>Institute for Medical Genetics<br>P.O Box 1036 Blindern,<br>0317 Oslo, Norway<br>Telephone +47 22 11 98 60<br>www.ulleval.no | Universitetssykehuset i Nord-Norge HF<br>Department for Medical Genetics<br>9038 Tromsø, Norway<br>Telephone +47 77 64 54 10<br>www.rito.no |
| St. Olavs Hospital HF<br>Unit for Medical Genetics<br>O. Kyrresgate 17<br>7006 Trondheim, Norway<br>Telephone +47 73 86 97 87<br>Mailto:nsfm@st.olav.no        |   |

### Information about acknowledgement of paternity

|  |
|--|
| <p>Paternity can be acknowledged using the form IA 55-00.10 "Acknowledgement of paternity".</p> <p>The form should be sent to the local Population Register.</p> |
|--|

## Refugees and asylum seekers

|   |  |
|---|--|
| <p>The brochures:<br/>         "General medical practitioners' meeting with refugees" and<br/>         "Health services for refugees and asylum seekers".<br/>         are available at: <a href="http://www.legeforeningen.no">www.legeforeningen.no</a></p> | <p>The booklets:<br/>         "Mental health of refugees – normal reactions and prevention of mental problems"<br/>         "Communication using a interpreter" and<br/>         Directive: UDI 23/94<br/>         "Guidelines for meeting expenses for interpreter services ".<br/>         is available on the Website of the Norwegian Ministry of Foreign Affairs:<br/> <a href="http://www.udi.no">www.udi.no</a></p> |
| <p>Instruction book:<br/>         "Health services for asylum seekers and refugees" Directorate for Health and Social Affairs, Norway: IS-1022.<br/> <a href="http://www.shdir.no/publikasjoner">www.shdir.no/publikasjoner</a></p>                           | <p>NAKMI booklets 1/2005:<br/>         Local health and social services in large towns have started to use so-called natural helpers to improve communicate with families from minority groups.<br/>         The booklets can be ordered by email: <a href="mailto:post@nakmi.no">post@nakmi.no</a></p>  |

## Addresses for ordering publications and brochures

|   |   |
|---|---|
| <p>Printed Matter Distribution Centre<br/>         Directorate for Health and Social Affairs, Norway<br/>         P.O. Box 7000. Dep.<br/>         0130 Oslo, Norway<br/>         Telephone +47 24 16 33 68<br/>         Telefax: +47 24 16 33 69<br/>         email: <a href="mailto:trykksak@shdir.no">trykksak@shdir.no</a></p>                            | <p>Government Administration Services<br/>         P.O. Box 8169 Dep.<br/>         0034 Oslo, Norway<br/> <a href="http://www.publikasjoner.dep.no">www.publikasjoner.dep.no</a><br/>         Telephone: +47 22 24 98 60<br/>         Telefax: +47 22 24 27 86<br/>         email: <a href="mailto:publikasjonsbestilling@ft.dep.no">publikasjonsbestilling@ft.dep.no</a></p> |
| <p>Publications of the Norwegian Labour Inspection Authority:<br/>         Gyldendal Akademisk<br/>         P.O. Box 6730 St. Olavs plass<br/>         0130 Oslo, Norway<br/>         Order telephone +47: 23 32 76 61<br/>         Telefax: +47 23 32 76 98<br/>         email: <a href="mailto:kundeservice@gyldendal.no">kundeservice@gyldendal.no</a></p> | <p>Norwegian Institute of Public Health<br/>         Publication Centre<br/>         P.O. Box 4404 Nydalen<br/>         0403 Oslo, Norway<br/>         Telefax +47 23 40 81 05<br/>         email: <a href="mailto:publikasjon@fhi.no">publikasjon@fhi.no</a></p>   |



## References

This short version is based entirely on the document A Guideline for Antenatal Care, 2005, Directorate for Health and Social Affairs, Norway. A comprehensive list of references is to be found in the main document.

The document A Guideline for Antenatal Care (Retningslinjer for svangerskapsomsorgen) IS-1179. ISBN 82-8081-067-6” can be ordered from:

Directorate for Health and Social Affairs, Norway  
Printed Matter Distribution Centre  
email:trykksak@shdir.no

or the document can be downloaded as a pdf file from:

[www.shdir.no/publikasjoner](http://www.shdir.no/publikasjoner)



Sosial- og helsedirektoratet

(tekst til baksiden av retningslinjen)

### **Legislative basis**

In principle, national clinical guidelines can be regarded as recommendations and advice, and should be based on sound, updated professional evidence. Guidelines are meant to be aids for professionals in the assessments they must make in order to achieve sound professional standards and provide high quality services

National clinical guidelines from the Directorate for Health and Social Affairs, Norway, are not directly legally binding for the recipients, but to a large extent they can be directive for the choices that shall be taken. By following updated national clinical guidelines, professions will contribute to achieving the demands of sound professional standards as laid down in the legislation. If one chooses solutions that deviate substantially from current national clinical guidelines, then one ought to take great care with the justification for the choice, with informed consent and with documentation.