NWO-I Policy

Wish to Have Children (m/f), Pregnancy and Breastfeeding

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1. Introduction

Within Dutch research, NWO-I has an exemplary role to play as an employer. NWO-I seeks to offer an inclusive, diverse, open, sustainable and safe working environment for its employees. This policy and these measures for employees with a wish to have children, pregnant employees and employees who breastfeed form part of this inclusive working environment. Besides its own ambition, there are also statutory measures that NWO-I must take as an employer.

In this policy and the associated guidelines and checklist, the terms man and woman (male/female) are used. In these documents, the terms are used in their biological sense and are used to refer to begetting a child and becoming pregnant, and they are not used to refer to gender identity and gender expression.

For whom is this information intended?

This detailed information is intended for employees (m/f) who wish to have children, pregnant employees, employees who breastfeed and for supervisors.

Damage to the employee's DNA or the development of the unborn child as a consequence of (daily) activities must be prevented as much as possible. Supervisors are responsible for the working conditions of their employees. Therefore, the measures to be taken, in accordance with the risks, are determined by the supervisor in consultation with the employee (m/f), and possibly with support from experts. Based on this document, the correct working conditions can be provided.

This document relates to questions from everyday practice, such as:

- What is a good preparation after the employer is notified of a wish to have children, a pregnancy or the wish to breastfeed?
- Are measures required if an employee notifies you that she is pregnant?
- And what needs to be arranged if an employee wants to breastfeed or express breast milk?

Guidelines and checklist

Brief guidelines and a checklist have been drawn up to quickly determine the risks for the fertility and/or unborn child that are associated with the employee's activities. Based on these guidelines and checklist, it can easily be determined which activities an employee performs and which of those activities form a risk. The guidelines and checklist have been included as annexes to this policy.

2. General approach

Active provision of information

An employer only knows whether there exists a wish to have children, a pregnancy or if an employee breastfeeds once they have been notified about this by the employee. However, employees will often not want to directly discuss questions about the wish to have children or about pregnancy and working with their supervisor. Yet the chance of a congenital abnormality is greatest during the first three months of the pregnancy[1] and most women have been pregnant for at least two weeks before they discover that they are expecting a child.

Therefore, upon entering into service and subsequently at regular intervals, all employees should be actively made aware of the risks with respect to the wish to have children and pregnancy and the possibility to take additional measures. It is especially important to inform young employees who might have a wish to have children later.

If employees are pregnant or have a wish to have children and do not or do not yet want to discuss this with their supervisor, then they can also pose their questions during the occupational health clinic or the occupational health service (in the case of the wish to have children) or during the preventative consultation of the occupational health physician (in the case of pregnancy). Employees can also address their questions to employees of the P&O[2] department, the health and safety coordinator or the confidential adviser of the institute/office. However, to be able to take specific additional measures, the wish to have children or the pregnancy must be known to the employer.

It is particularly important for employees to notify their employer about their wish to have children or their pregnancy at an early stage in case they work with hazardous substances, biological agents and/or radiation.

When the wish to have children or an employees' pregnancy has been shared with the employer, this employee should once again be explicitly made aware of the available information and possibilities. The employer should actively offer the possibilities that an employee could request on the basis of statutory or NWO-I regulations. An employee should not feel uncomfortable about making use of these regulations. Employees who make use of these regulations will not suffer any negative consequences.

[1] Arboportaal, Kinderwens, zwanger, borstvoeding en werk (in Dutch).
[2] In this document, the abbreviation P&O is used for the personnel affairs department. This also refers to the HR of HRM (Human Resource Management).

3. Notifications and measures

The risks to and measures for pregnant employees and those who wish to have children, need to be part of the risk assessment and evaluation (RI&E in Dutch)

After receiving a notification of a wish to have children, a pregnancy or breastfeeding, it might be necessary to take additional measures that supplement the standard measures to protect:

- the employee with a wish to have children who performs activities that influence fertility;
- the pregnancy period;
- the unborn child;
- the breast milk;
- the infant;
- the pregnant employee.

NWO-I has drawn up a checklist[3] to determine which measures are necessary.

An employee has the right to the measures from the moment of notification onwards. In the ideal situation, it is made immediately clear which additional measures are needed and these can – if necessary – be applied straightaway. In practice, a brief period of time is often needed to organise matters.

Wish to have children (m/f)

In the case of a wish to have children, the supervisor and employee jointly determine whether an employee carries out activities that could pose fertility risks. They jointly determine whether and, if yes, which measures are needed. During this process, both the supervisor and employee can call upon support from internal experts or the occupational health physician.

Pregnancy

An employer has obligations from the moment that the employee informs them about her pregnancy. To notify the employer, the pregnant employee should submit a written pregnancy statement[4] to the P&O department of the institute or office, or send it by mail.
From that moment onwards, a supervisor must take additional measures where necessary. The statutory obligations are stated in the Working Hours Act Section 4.3 and in the Working Conditions Decree Chapter 9.

[3] Checklist after receiving a notification of a wish to have children (m/f), pregnancy and breastfeeding
[4] Based on the Working Hours Act Article 4:5 para 1, the employer can request a written statement from a physician or midwife.

Breastfeeding

From the moment that an employee notifies an employer that she wants to breastfeed (directly to the baby or by means of expressing breast milk during working hours), the employer must take additional measures where necessary, for a period of at least nine months after the birth. During the first nine months after the birth of a child, an employee has the right to devote up to a maximum of one-quarter of her working hours to breastfeeding or expressing breast milk. These hours are paid working hours. Here it should also be noted that the workload of the employee should be matched to her effective working hours (therefore not a 100% workload in the case of 75% effective working time). This should also be taken into account when agreements are made in the context of hybrid working.
If an employee wants to breastfeed for more than nine months, then that is possible if agreements are made about this. The institute or office will then ensure that the right facilities are available.

Lactation room
Each institute/office will have a Lactation room available for breastfeeding or expressing breast milk. This room must at least satisfy the following requirements:

- It must be a quiet and separate room with sufficient privacy;
- It must be possible to lock the room from the inside;
- It must be hygienic, clean and without any hazardous substances;
- There must be a chair, settee and/or bed that is comfortable to sit or lie on;
- The climate must be pleasant: sufficient fresh air, not too warm, not too cold and free of draughts;
- There must be a fridge to store the expressed breast milk;
- There should preferably also be a sink with hot and cold running water.

If, due to circumstances, no suitable room is available, then the employee will be given the opportunity to breastfeed or to express breast milk at home.
If the occupancy of the Lactation room allows it, it is also available to guests.

Working Hours Act §4.3 Female employees, valid[1] per 3 February 2023

Work and pregnancy
Article 4:5
1 The work of a pregnant employee is organised in such a way that due consideration has been given to her specific circumstances. The employer satisfies, in compliance with the second to fifth paragraphs, the obligation applicable to him emerging from the first sentence, within a reasonable period after a request to this and has been made by the pregnant employee. If required, a written statement from a physician or midwife from which it is apparent that the employee concerned is pregnant, can be submitted with this request

2 The pregnant employee has the right to alternate the work with one or more breaks in addition to those stated in Article 5:4 or the breaks prescribed in or in accordance with Article 5:12. This extra break or, respectively, separate breaks jointly total no more than one-eighth of the working hours applicable to her per shift. The breaks referred to in the previous sentence are valid for the application of this law and the regulations based on this, such as the working hours.

3 The pregnant employee is entitled to work according to a stable and regular pattern of work and rest.

4 The pregnant employee aged 18 years or older cannot be required to carry out more work than:
a. 10 hours per shift;
b. an average of 50 hours per week in each period of 4 successive weeks, and
c. an average of 45 hours per week in each period of 16 successive weeks.

5 The pregnant employee cannot be required to carry out work on night shifts, unless the employer can make it plausible that this cannot be reasonably expected from him.

6 The employer enables the pregnant employee to undergo the necessary pregnancy examinations. She retains her right to the remuneration agreed upon by unit of time if she was not able to carry out her work due to the referred to pregnancy examination.

7 Each provision that deviates from this article (from the first through to the sixth paragraph) to the detriment of the female employee will be void.

Childbirth
Article 4:6
The employer organises the work in such a way that a female employee:

a. carries out no work within 28 days before the probable date of giving birth, as stated in a written statement from a physician or midwife in which the likely date of childbirth is given, as provided by the female employee to the employer. The period meant in the first sentence is extended with the period that occurs between the probable date of childbirth and the actual date of childbirth;
b. does not perform work within 40 days after giving birth.

Work after giving birth
Article 4:7
Article 4:5, with the exception of the sixth paragraph, shall apply mutatis mutandis with respect to a female employee during a period of 6 months after giving birth.

Right to breastfeeding
Article 4:8
1 During the first 9 months of the child's life, a female employee who breastfeeds a child has, if she has informed the employer of this, the right to stop her work for the purpose of breastfeeding her child in the necessary quiet and privacy or to express the breast milk. The employer provides her with the opportunity to do this and, when necessary, makes available a suitable room that can be locked.

2 The breaks, as intended in the first paragraph, take place as often and as long as is necessary but do not total more than one-quarter of the working hours per shift. The time and duration of the breaks is determined by the concerned female employee after consultation with the employer.

3 The duration of the breaks, as meant in this article, is valid for the application of this law and the regulations based on this, such as working hours, for which the female employee retains her right to the remuneration agreed upon by unit of time.

4 Each provision that deviates from this article (from the first through to the sixth paragraph) to the detriment of the female employee will be void.

[1] The current version of the Working Hours Act can be found at wetten.overheid.nl [only available in Dutch].

Laws and regulations 1 Working Hours Act §4.31

Working Conditions Decree Chapter 9 valid[1] per 3 February 2023

Article 1.40. Definition
In this chapter, the word directive is understood to mean: Directive no 92/85/EEC of the Council of the European Community of 19 October 1992 concerning measures to advance the improvement of the safety and health of female employees during pregnancy, after childbirth and during breastfeeding (PbEG 1992, L 348).

Article 1.41. Risk inventory and evaluation
If in a company or institution, a pregnant employee or a breastfeeding employee is working or usually works there, then in the risk inventory and evaluation (as meant in article 5 of the law, particular attention is paid to the non-exhaustive list of agents, procedures and working conditions, included in Annexe 1 of the directive.

Article 1.42. Organisation of the work

1. Without prejudice to Article 4:5 of the Working Hours Act, the employer will organise the work of a pregnant employee or a breastfeeding employee in such a way, will design the workplace in such a way, will apply such production and working methods and, if necessary, will enable the use of such work tools so that the employee's work does not pose a risk for her safety and health, and does not cause a setback in the pregnancy or for breastfeeding.
2. If compliance with the first paragraph is not reasonably possible, then a temporary change to the work or a temporary change to the work and breaks schedule is required to prevent any danger to the safety and health of the pregnant employee and the employee during breastfeeding, and to prevent posing any risks to the pregnancy or breastfeeding.
3. If compliance with the second paragraph is not reasonably possible, then the pregnant employee and the breastfeeding employee will temporarily be given different work.
4. If compliance with the third paragraph is not reasonably possible, then the pregnant employee and the breastfeeding employee will temporarily be released from performing the work.

Article 1.42a. Providing information
The employer assumes responsibility for the effective provision of information concerning the risks of the work during pregnancy and breastfeeding and for the measures that are taken to prevent the risks. The provision of information takes place within two weeks after the pregnant employee or breastfeeding employee has notified the employer about their pregnancy or about combining work and breastfeeding.

1 The current version of the Working Conditions Decree can be found at wetten.overheid.nl.

Laws and regulations 2 Working Conditions Decree Chapter 92

4. Risk factors during working hours

During working hours, every employee can be exposed to various factors that can pose a fertility risk, a risk to the pregnancy and to the unborn child, or to the health of the pregnant employee. For example, pregnant women are more susceptible to infections after exposure to biological agents. Measures must be taken to reduce these risks. In the risk assessment & evaluation, it is mandatory to explicitly itemise the work risks for women who are pregnant or who breastfeed.
Table 1 provides an overview of factors that can form a risk during a certain period. For each risk factor, a specific module with focal points has been provided.

Risk factor	***Period****	***Module***
Physical strain	P B	A
Exposure to hazardous substances (*CMR substances, nanomaterials or solvents*)	C P B	B
Exposure to biological agents	C P B	C
Ionising radiation	C P B	D1
Non-ionising radiation	C P	D2
Magnetic fields	P	D3
Harmful noise	P	D4
Vibrations and ultrasonic vibrations	P	D5
Working under hyperbaric conditions (*such as diving activities or fire extinguishing activities*)	P	D6
Travel and expeditions	P	E
Night work	P B	F
Stress or psychological strain	P B	G
Extreme temperature	C P	H
Emergency response activities	P B	I

* C = wish to have children P = pregnancy B = breastfeeding

Table 1 Risk factors

5. Additional measures

As soon as possible after notifying the employer about a wish to have children or a pregnancy, the supervisor and employee jointly determine the standard and additional measures required to prevent or limit risks. Use the checklist in the document 'Guidelines after notifying the employer about the wish to have children (m/f), pregnancy and breastfeeding'. Adjustments to the work and rest periods and the use of a rest area should also be discussed during this meeting in the case of a pregnancy or breastfeeding. In case of doubt about the risks or measures to be taken, the health and safety coordinator or occupational health physician can be consulted.

Like in the case of standard measures, the statutory work hygiene strategy should always be followed when taking additional measures. Namely, first tackle the source, then collective protection and, lastly, individual protection.

Possible measures are:

1. Adjustment of the work activities (e.g. substituting chemicals[5], different working environment, assistance with lifting);
2. More protection[6] (e.g. personal protective equipment);
3. More and/or extended periods of rest;
4. Exempt from the duties if the above measures are not feasible (e.g. no expedition).

For these measures, the following rules apply:

- The additional measures apply for so long as there is a wish to have children, a pregnancy or as long as the employee breastfeeds, or for a part of these periods;
- The additional measures must be considered in the mentioned sequence. A subsequent measure may only be taken if a previous measure was not reasonably possible;
- The additional measures do not need to be the same for each phase (a wish to have children, a pregnancy, breastfeeding).

The additional measures set can have consequences for the workload of colleagues. The supervisor ensures this information is disseminated and that the measures agreed upon are realised. The supervisor ensures that colleagues are not overburdened.

[5] NB. If (structural) substitution of CMR chemicals is possible, then this should always be done.
[6] NB. Only applicable for direct risks, e.g. during breastfeeding.

6. Considerations in the case of additional measures

Various considerations play a role in determining the additional measures. Please consider these in a systematic way. This will result in a conscious weighting and a better substantiation of the additional measures. For example:

- A precautionary principle applies in the case of exposure to a work risk for which the effects on a wish to have children, a pregnancy, the unborn child or breastfeeding have not been examined, or for which the research outcomes are not unequivocal. This means that as long as the risks are not known, the employee is not exposed to this risk during the period of the wish to have children, a pregnancy or breastfeeding. Consult the occupational health physician or another expert (such as an occupational hygienist) for a risk assessment.

- Are the occupational risks already harmful in the case of a wish to have children or in the (early stages of) pregnancy? This applies to at least harmful substances, including nanomaterials, biological agents, ionising radiation and work stress. If an employer is notified of a pregnancy, there often is too little time to carefully consider which additional measures may be required. The time factor is important.

- Individual measures have advantages as well as disadvantages. An advantage is that the additional measures precisely meet the specific requirements for the work situation and the employee. A disadvantage can be the time required to realise an appropriate package of measures. How does this time (hours, days, weeks, months?) relate to the obligation of the employer to protect the employee from the moment they have been notified about the wish to have children or the pregnancy?

- Which additional measures can be realised within the institute/office? For example, there might be possibilities to give pregnant or employees who breastfeed other tasks or to offer them different work. Or there may exist possibilities to provide personnel support by deploying (expert and experienced) staff from a labour pool.

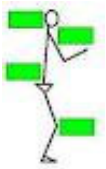
Please take these considerations into account when drawing up the RI&E and during the standard evaluation of measures.

7. Risk-specific modules

In this part, additional measures for the various occupational risks are considered. With these, the employee (m/f) and the supervisor can make a preventative estimation of the risks. For each module, or part of a module, it is stated for which situation it applies: the wish to have children, a pregnancy and/or breastfeeding.

Module A: Physical strain

pregnancy - breastfeeding



Physical strain is understood to mean:

- using strength during tasks such as carrying, lifting, pushing and pulling;
- strenuous working postures, including standing for long periods, bending, squatting or kneeling;
- energetic strain, such as walking or going up and down stairs;
- repetitive movements.

During the pregnancy and the period of breastfeeding, additional measures are needed.

Pregnancy or breastfeeding

Examine the activities of the pregnant employee to check whether she must:

- use too much physical strength
- maintain a strenuous posture
- expend too much energy?

Table 2 provides an overview of aspects that influence physical strain.

	Performing work while standing (e.g. working at a reception desk)	Working while sitting (e.g. computer work)	Using strength (such as lifting, pushing and pulling)	Stretching (forwards, upwards, downwards)	Bending, squatting, kneeling	Walking (including walking stairs)
Weight increase	X	Only during standing up and sitting down again	X	X	X	X
Change in body dimensions, such as abdomen size	X	X	X	X	X	
Moving body's centre of gravity/changing the body's balance	X	Only during standing up and	X	X	X	X

		sitting down again				
Avoiding contact between the surroundings and a pregnant woman's belly	X	X	X	X		
Same activity costs more energy/heavier load on blood circulation and breathing	X	(X)	X	X	X	X

Table 2 Changes during pregnancy that can influence aspects of physical strain

There are limit values for physical strain that may not be exceeded by pregnant women and by women who breastfeed (see Table 3). These limit values are based on scientific research. Physical strain and long working hours increase the chances of premature birth.
During pregnancy, a woman's physical fitness and work capacity change due to softening of the tissues under the influence of hormones. In some cases, their blood pressure can also be lower. During the last months of the pregnancy, the belly gets in the way of physical work as well. Consequently, pregnant women can tire more quickly and/or damage tissues during a physical effort that previously did not cause any problems. In addition to limits on physical efforts, pregnant women therefore also require a greater number of rest periods.

When describing the activities, please also take into account the physical strain involved for transport, e.g. moving roll containers.

Pregnancy period	***Limit values***
During the entire pregnancy, up to 6 months after childbirth and during breastfeeding	• Prevent the need to bend, squat or kneel as much as possible; • Prevent the need to lift weights by hand as much as possible; • It is not allowed to lift weights of more than 10 kg at once.
From the 20th week of the Pregnancy	Do not lift weights of more than 5 kg by hand more than 10 times per day.
From the 30th week of the Pregnancy	Do not lift weights of more than 5 kg by hand more than 15 times per day; It is forbidden to require pregnant employees to squat, kneel, bend or operate foot pedals while standing for more than 1 hour per day.
Throughout the entire pregnancy	Standing should be limited as much as possible, especially during the third trimester of the pregnancy.

Table 3 Limit values for physical strain during pregnancy

Module B: Hazardous substances

Wish to have children- pregnancy - breastfeeding

Working with hazardous substances can have a negative influence on an employees' fertility, on the foetus or the unborn child or on the breast milk. Carcinogenic substances can also reach the child and cause cancer. Mutagenic substances can lead to abnormalities in the unborn child. Reprotoxic substances can also lead to abnormalities in the child or the male and/or female sex cells. Therefore, exposure to these CMR substances needs to be controlled *before* a pregnancy as well. Reprotoxic substances also include substances that can reach the child via breastfeeding.

Due to both their composition and shape, nanomaterials (particles in one or more dimensions smaller than 100 nm) can be reactive and can have consequences for the development of an unborn child. For employees with a wish to have children, pregnant women and employees who breastfeed, working with nanomaterials is to be treated as working with a CMR substance.

Self synthesised substances for which no risk assessment has been completed yet are to be treated as CMR substances.

Every employer is obliged to take measures that are aimed at preventing and limiting (the effects of) exposure to hazardous substances. In the case of a wish to have children, a pregnancy and the period of breastfeeding, additional measures are necessary. Information about hazardous substances can be obtained from the Risk Assesment and Evaluation (RI&E), from the harmful substances registration and information in the Material Safety Data Sheet (MSDS). Furthermore, you should not forget that harmful gasses/substances can be released via machines or equipment.
Not every chemical substance is harmful to an employee' fertility, an employee's pregnancy or the unborn child. On the website of the Ministry of Social Affairs and Employment, it can be ascertained whether specific substances are relevant. Changes in these lists are published in the Dutch Government Gazette (Staatscourant).

There are three categories that jointly provide an overview of substances that can be harmful.

1. Substances that belong to the following categories:
   - organic solvents (mainly in paints, varnishes, glues, cleaning agents and ink);
   - heavy metals and their compounds (in particular, cadmium, mercury, lead, manganese and thallium);
   - anaesthetic gases/inhalation anaesthetics;
   - drugs for which the package insert states the harmful effects for pregnancy (for example, cytostatics and chemotherapeutics);
   - plant protection products and biocides;
   - polycyclic aromatic hydrocarbons (PAHs, for example, in soot);
   - substances that can influence the oxygen level of the blood, such as carbon monoxide;
   - substances synthesised by you for which a risk assessment has not yet been completed;
   - nanomaterials.

2. Substances that occur on one or more lists of the Ministry of Social Affairs and Employment (SZW list):

- the list of reprotoxic substances;
- the list of carcinogenic substances and processes;
- the list of mutagenic substances.

These lists are updated and published twice per year. They can be found at www.arboportaal.nl under 'SZW list carcinogenic substances and processes' [in Dutch].

3. Substances for which the label or the warning stated in the MSDS, the so-called H statements (H stands for Hazard)(See Table 4) reads:

No.	H statement
H340	May cause genetic defects
H341	Suspected of causing genetic defects
H350	May cause cancer
H351	Suspected of causing cancer
H360	May damage fertility or the unborn child
H361	Suspected of damaging fertility or the unborn child
H362	May cause harm via breastfeeding

Table 4 Relevant H statements

Wish to have children

Pay attention to the following warnings when you use hazardous substances:

- SZW list → the list for reprotoxic substances
- The following H statements
    - H340: May cause genetic defects
    - H341: Suspected of causing genetic defects
    - H360: May damage fertility or the unborn child
    - H361: Suspected of damaging fertility or the unborn child

Pregnancy

For a substance to be harmful to the pregnancy or the unborn child:

- it must be taken up through inhalation, the skin or by swallowing;
- the substance must be able to reach the unborn child via the mother's body. This concerns substances that end up in the mother's blood and can pass through the placental barrier.
- The following H statements
    - H350: May cause cancer
    - H351: Suspected of causing cancer
    - H360: May damage fertility or the unborn child
    - H361: Suspected of damaging fertility or the unborn child

Not relevant during pregnancy are substances that are not taken up or that cannot reach the unborn child via the body of the mother.

Breastfeeding

During breastfeeding, specific attention should be paid to exposure to substances that can influence the infant via breastfeeding. Pay attention to the following warnings:

- SZW list → the list for reprotoxic substances, as long as the substance is stated in the column 'Breastfeeding'
- The H statement H362: May cause harm via breastfeeding.

Module C: Biological agents

wish to have children- pregnancy - breastfeeding

Biological agents include viruses, bacteria, fungi and yeasts. The official definition is "genetically modified or non-genetically modified cell cultures, human endoparasites and microorganisms". Consideration should also be given to biological products that can be formed by biological agents, such as proteins, prions and fatty acids.
Exposure to biological agents can lead to infectious diseases. Biological agents can have (severe) harmful consequences for the pregnancy, the unborn child and the infant via breastfeeding. Every employer must take measures aimed at preventing and limiting (the effects of) exposure to biological agents. In the case of a wish to have children, a pregnancy and the period of breastfeeding, additional measures are necessary.

When work is done with biological agents, then the health risks associated with these should be known at all times. That is particularly the case for the wish to have children, a pregnancy and the period of breastfeeding. The risks of biological agents are regularly updated in accordance with the latest scientific research.
Extra information can be found via the Dutch health and safety portal (Arboportaal[7]) and in the Pregnancy Memorandum Biological Agents (in Dutch) of the National Institute for Public Health and the Environment (RIVM) (**Error! Reference source not found.**).

A wish to have children

1. Determine which biological agents an employee who has expressed a wish to have children is exposed to. Make use of Table 5.

Pathogen	Disease (Latin name)	Disease (common name)	Frequently occurring source
Chlamydia	Chlamydia trachomatis	Chlamydia infection	Laboratory activities
Mumps virus	Paramyxovirus	mumps	Contacts among children
Retrovirus human immunodeficiency virus (HIV)	HIV infection/AIDS	HIV/AIDS	Laboratory activities Contact with blood

Table 5 High-risk biological agents in the case of a wish to have children

2. Let the occupational health physician determine whether the employee is immune to the microorganism concerned.
3. If necessary, take measures to prevent exposure (see the below subheading Pregnancy, point 4)

[7] https://www.arboportaal.nl/onderwerpen/biologische-agentia-en-kwetsbare-groepen

Pregnancy

1. Determine which biological agents the employee may be exposed to. Hereafter, we refer to these as the relevant biological agents. Amongst other things, consult the RI&E.
2. In Table 6, verify whether the relevant biological agents can have harmful consequences for the pregnancy or the unborn child.

Pathogen	Disease (Latin name)	Disease (common name)	Frequently occurring source
Toxoplasma gondii (parasite)	Toxoplasmosis	Toxoplasmosis	Contact with animals Meat processing
Listeria monocytogenes (bacteria)	Listeriosis	Listeriosis	Animals and foodstuffs infected with listeriosis
Rubella virus	Rubella	German measles	Contact with children
Cytomegalovirus	Cytomegalic inclusion body disease	Cytomegalic inclusion body disease	Contact with children
Herpes simplex virus	Herpes simplex	Herpes simplex	Saliva contacts
Varicella-zoster virus	Varicella	Chickenpox	Contact with children
Borrelia burgdorferi (bacteria)	Lyme borreliosis	Lyme disease	Outdoor work
Retrovirus human immunodeficiency virus (HIV)	HIV infection/AIDS	HIV/AIDS	Laboratory activities Contact with blood
Humane parvovirus B19	Erythema infectiosum	Parvo B19 (Fifth disease)	Contact with children
Hepatitis B virus	Hepatitis B	Hepatitis B	Laboratory activities Contact with blood
Measles virus	Morbilli	Measles	Contact with children

Table 6 High-risk biological agents in the case of pregnancy

3. Let the occupational health physician determine whether the employee is immune to the relevant biological agents.
4. Take additional measures for relevant biological agents to which the pregnant employee is not immune:
    - Give revised information about the infection sources and the standard (hygienic) measures. The (hygienic) measures for pregnant women are the same as for other employees.
    - Establish which additional measures are needed on top of the standard (hygienic) measures that must be taken by all employees. Please refer to Table 7 for this.

Disease	Additional measures during the pregnancy
Toxoplasmosis	Prohibit work during which exposure can occur (= statutory prohibition).
Listeriosis	Exempt from activities involving living and dead animals infected with listeriosis.
Rubella (German measles)	Prohibit work during which exposure can occur (= statutory prohibition).
Cytomegalic inclusion body disease	In the case of infection in the work environment: stricter hand hygiene, especially in the case of contact with saliva and urine. Avoid further contact with the source in the case of a clinically proven infection on the work floor (usually: do not cuddle the child and avoid contact with urine).
Herpes simplex	-
Chickenpox	In the case of an epidemic: For viruses, there is a certain period of time between infection with the pathogen and the occurrence of disease symptoms. This is called the incubation period. It is rarely worthwhile to stop pregnant women working in the event of a pandemic outbreak. The infection has usually already occurred before the outbreak of the first disease symptoms. However, if during the incubation period, a person has not or has scarcely been at the location of the epidemic, avoiding this location is, of course, worthwhile.
Lyme disease	-
HIV/AIDS	-
Parvo B19	In the case of an epidemic: <see under chickenpox>
Hepatitis B	-
Measles	In the case of an epidemic: <see under chickenpox>

Table 7 Additional measures in case of a pregnancy

Breastfeeding

1. Verify whether the relevant biological agents can be passed on to the infant through breastfeeding. Of the eleven biological agents included in Table 3, this applies, for example, to cytomegalic inclusion body disease and HIV (both via human breast milk) and Herpes simplex and Hepatitis B (both via injuries to the nipple).
2. Give revised information about the infection sources and the standard (hygienic) measures. For employees who breastfeed, the same (hygienic) measures often apply as for other employees.
3. Take the same additional measures as during pregnancy for agents that can be passed on to the infant via breastfeeding.

Module D: Physical factors

wish to have children- pregnancy - breastfeeding

The following physical factors are considered:

- ionising radiation
- non-ionising radiation
- magnetic fields
- vibrations
    - ultrasonic vibrations & ultrasound
- sound (noise)
- working under hyperbaric conditions (diving)

Radiation

Radiation can roughly be subdivided into

- ionising radiation
- non-ionising radiation

Particle radiation is always ionising. Two forms of electromagnetic radiation are also ionising, namely gamma radiation and X-rays generated in an X-ray device. The other forms of electromagnetic radiation are non-ionising.

D.1 Ionising radiation

wish to have children- pregnancy - breastfeeding

Exposure to ionising radiation can have harmful consequences for fertility, pregnancy and the unborn child.
Exposure can occur through external radiation (e.g. through an X-ray) or via internal contamination (e.g. due to the intake of radioactive substances as a consequence of contamination). Both forms of exposure must be prevented during pregnancy. During breastfeeding, mainly internal contamination should be prevented as radioactive substances can end up in the child via the breast milk.

Ionising radiation also has detrimental effects on the sperm production of men. The production of sperm cells takes place in rapidly dividing tissue. Rapidly dividing tissue is sensitive for ionising radiation as a result of which the semen production can be negatively affected by exposure to such radiation.

Wish to have children or pregnancy

If there exists a wish to have children or a pregnancy, then the employee should consult with the supervisor or coordinating radiation expert as soon as possible to itemise the work activities during which ionising radiation

is used. The radiation expert can then determine whether the norm of 1 millisievert (mSv) per year will be exceeded by the employee.
If the annual dose is higher than 1 mSv (or there is a reasonable chance of this occurring), then the radiation expert should take measures in consultation with the employee.

Breastfeeding
In the period of breastfeeding, employees are exempted from activities in which a more than slight risk exists of radioactive contamination of the body (Decree Basic Safety Standards Radiation Protection, Article 7.36). This means that an employee is exempted from activities with open (spreadable) radioactive substances.

D.2 Non-ionising radiation

wish to have children - pregnancy

Non-ionising radiation consists of:

- ultraviolet (UV) radiation → e.g. sun and laser arcs
- visible light and infrared (IR) radiation → e.g. sun, fire and hot objects
- lasers
- radiofrequency (RF) fields → e.g. portable telephones, radio and TV transmitters, radar, diathermy equipment (such as industrial sealing devices and heating equipment used in physiotherapy) and walkie-talkies

- ELF (extremely low-frequency) fields → e.g. high-voltage cables and electrical equipment

Ultraviolet radiation, visible light and infrared radiation lead to the heating up of tissues that can result in damage to the eyes and skin. These three types of radiation do not cause any additional problems for the wish to have children, pregnant women and during the period of breastfeeding.

Radiofrequency fields result in a thermic effect on (heating up of) tissues as a result of which, besides the eyes and skin, the internal organs can also be damaged. During pregnancy, exposure to radiofrequency electromagnetic fields can lead to congenital abnormalities due to severe hyperthermia (heating up) of the unborn child.
The frequency range between 80 MHz and 1500 MHz is harmful. The harmful frequency for the unborn child depends on the size of the child and therefore varies throughout the pregnancy. The exposure limit value for the unborn child is equal to that of the general population (= population), which is five times lower than that for the professional population (= employees).
For exposure to 100 kHz – 10 MHz, the limit value for the professional population is 0.4 W/Kg, and 0.08 W/Kg[8] for the general population. This means that the exposure limit value for the stated frequency range is 5 times lower for a pregnant employee than for a member of the professional population (see also Table 8).

[8] ICNIRP Guidelines for limiting exposure to electromagnetic fields (100 kHz to 300 GHz), International Commission on Non-Ionizing Radiation Protection (2020).

Exposure to high field strengths can, amongst other things, lead to reduced fertility and defects in the development of the unborn child.
Non-ionising radiation has no detrimental influences during the period of breastfeeding.

	Population	Employee	Population	Employee
Frequency range	SAR[9] (W/kg)		E field strength (V/metre)	
100 kHz – 1 MHz	0.08	0.4	28	620
Ratio Employee/population	5x		22x	

Table 8 Limit values and field strength values for employees and the general population

Wish to have children or pregnancy
Determine whether the employee carries out activities during which exposure to high field strengths of extremely low-frequency fields and strong radiofrequency fields (can) occur. If that is the case, then determine whether the statutory limit values for the general population are exceeded. If the latter is the case, then the employee should be exempted from the activities.

[9] SAR: Specific Absorption Rate

D.3 Magnetic fields

pregnancy

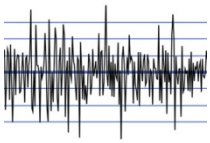
The effects of strong magnetic fields on the developing human body are not yet known. When moving through a static magnetic field, electric currents and, as a result, heat can be generated in the body. Other effects include light effects in the eye, nausea/dizziness and disorientation.
The effect of magnetic fields with respect to the wish to have children is not yet known, and no exposure limits have been established either.

Pregnancy
Pending further research, a safe limit that is adhered to for pregnant women are the exposure values as included in EU Directive 2013/35/EU. Pregnant employees may not be exposed to magnetic fields equal to or higher than 0.5 mT.

D.4 Vibrations

pregnancy

D.4.1 Mechanical vibrations



A mechanical vibration is an oscillating movement. Employees come into contact with vibrations through direct contact with vibrating parts of machines, vehicles, a vibrating floor or a vibrating workpiece.
A distinction is drawn between hand/arm vibrations and body vibrations.
Hand/arm vibrations are not harmful during pregnancy.
In the case of body vibrations, the entire body is set in motion.
It is suspected that exposure to body vibrations leads to a higher risk of a premature birth, and that they increase the risk of back complaints during the pregnancy. Therefore, for this type of vibration, additional regulations apply to pregnant employees.
At present, vibrations appear to have no influence on fertility and breastfeeding.

Pregnancy
Pregnant employees are exempted from activities that involve body vibrations of more than 0.25 m/s^2.

D.4.2 Ultrasonic vibrations and ultrasound

pregnancy

An ultrasonic vibration is a mechanical vibration that propagates with the speed of sound in a solid substance, liquid or in the air. Sources of ultrasonic vibrations include medical equipment for diagnosis and treatment, ultrasonic welding devices, ultrasonic drills (such as used by the dentist), ultrasonic equipment for industrial non-destructive materials research (such as welding needles), and ultrasonic cleaning baths.

Ultrasound arises when the ultrasonic vibration passes on the mechanical energy to the air. Ultrasound cannot be heard by humans. It is sound with a small wavelength and a frequency above 20 kHz. Besides 'real' ultrasonic vibrations, most industrial ultrasonic devices also produce components between 8 and 20 kHz. These are sometimes referred to as 'upper sonics' or Low Frequent Ultra Sonics (LFUS).
As far as is currently known, ultrasonic vibrations and ultrasound have no influence on fertility and breastfeeding.

Pregnancy
Pregnant employees may not perform any activities in which direct contact is made with an ultrasonic vibration source with a frequency above 20 kHz during which the exposure is higher than 110 dB per third-octave band. This is a statutory prohibition.

D.5 Sound (noise)

pregnancy

Sound is a wave movement that propagates in air. Too much sound (harmful sound) has a negative influence on the unborn foetus. That is because sound waves pass through the abdominal cavity of the mother.
Noise can lead to irreversible hearing damage in the unborn child. This effect can occur acutely due to peak noises (such as in the case of shooting) or occur in the longer term due to prolonged exposure to too high sound levels. Harmful sound can also cause stress in the mother (see also Module G). This can lead to changes in the hormone balance, the heart and blood circulation, such as an increase in blood pressure. These non-specific changes in the mother can negatively influence the unborn child, such as a lower birth weight and premature birth.
As far as is currently known, sound has no influence on fertility or breastfeeding.

Pregnancy
Pregnant women must be exempted from activities if they are exposed to equivalent sound levels from 80 dB(A) and upwards and peak sounds from 112 Pa and upwards. NB: This concerns absolute values because it is about the influence on the unborn child. Hearing protection does not provide any protection for the unborn child.
The normal values for employees are 87 dB(A) and 200 Pa, respectively.

D.6 Working under hyperbaric conditions

pregnancy

Working under hyperbaric conditions can take place during activities with breathing apparatus in enclosed spaces, respirators (ships, emergency response activities) and diving activities. In the last case, the deeper an employee dives, the higher the pressure becomes due to the overlying water. The increased oxygen pressure can have negative effects on the unborn child. During the development of a child, abnormalities to the eyes can develop in the womb as a result of which a child can become blind. The chance of a miscarriage is also increased.
It further appears that pregnant women are more susceptible to decompression sickness. Decompression sickness (or the bends) can occur in people who are exposed to increased air pressure. If they too quickly enter into an environment with a lower pressure, nitrogen bubbles may develop in the blood. In serious cases, this can lead to unconsciousness or (temporary) paralysis or even death. If a pregnant woman develops decompression disease, then that can have consequences for the unborn child. As the blood circulation of the unborn child comes from that of the pregnant mother, nitrogen bubbles can also circulate in the body of the child, where they can cause irreversible damage.

Pregnancy
Pregnant women may not carry out any activities under hyperbaric pressure. This is a statutory prohibition.

NB: Pregnant employees who may still travel on ships (see Module E.2) cannot be deployed for emergency responses using breathing apparatus. This should be taken into account when planning the deployment for emergency responses.

Module E: Trips and expeditions

pregnancy

Please note: in this chapter, trips and expeditions refer to journeys made in the context of work activities. This does not concern private trips. Private trips do NOT fall under the responsibility of the employer.

This chapter outlines the risk and the measures to be taken during trips and expeditions. In the case of doubt or questions, you are advised to contact an expert, such as the occupational health physician or a gynaecologist.

Trips and/or expeditions during pregnancy can pose several risks, especially during the first three months. These risks include (tropical) diseases, but also local conditions during the trip and/or expedition, and the available medical facilities.

- Many diseases can have severe consequences during the pregnancy;
- Travelling by ship or flying is safe but many ferry operators and airlines do not allow it during the last weeks of pregnancy;
- Travelling to remote areas or areas with a poor healthcare system is not wise. The possibilities to obtain medical care in the event of illness or if something goes wrong during pregnancy are then too limited.

Besides the measures stated in this module, the measures in the four previously mentioned risk-specific modules also apply during trips and expeditions:

A: Physically demanding work
B: Harmful substances
C: Biological agents
D: Work stress

The pregnant employee is expected to take the initiative to limit the risks as much as possible during trips and expeditions. If the pregnant employee has questions or doubts about trips and expeditions, she can always seek advice from experts such as the occupational physician or a gynaecologist.
The employer is responsible for informing pregnant employees as quickly as possible about where they will carry out activities with respect to trips and expeditions. That will allow the employee to inform themselves about the (medical) conditions that are applicable during a trip or expedition.

Pregnancy

A pregnant employee is never obliged to travel if this involves an increased risk.

E.1 Flying

If you are pregnant and you want to make a trip by plane, then several rules apply. Most airlines allow pregnant women to fly up to week 37 of the pregnancy (or, in the case of multiple pregnancy: 32 weeks). For a pregnancy between 32 to 37 weeks, many airlines require a medical statement from a physician or gynaecologist, which states that the woman is allowed to fly and also mentions how advanced the pregnancy is. The pregnant woman will also need to sign a statement that releases the airline of any responsibility in the event of complications during the trip.

E.2 Travel by ship

Travelling by ship is only permitted in the case of an uncomplicated pregnancy in the 13th to the 28th week. The first and last trimester of the pregnancy and the recovery period after childbirth (postpartum) are considered an unsuitable period and travelling by ship is not permitted then.
Travelling by ship during the second trimester of the pregnancy is only permitted on ships in limited sailing areas (for example, the Wadden Sea), so that adequate medical facilities can be quickly reached. In an unlimited sailing area (for example, an ocean), travelling by ship is permitted on ships where a doctor is present with sufficient skills in gynaecology. Extra attention should be paid to a first pregnancy and to previous pregnancies with complications in the case history.

The final decision about wanting to be considered for approval for this period is made by the pregnant woman herself. In the case of a pregnancy, the employee must be able to hand over a medical statement from a physician or gynaecologist, which states that the person concerned is healthy and fit enough to work on board a ship.

NB: Pregnant employees who are permitted to travel by ship cannot be deployed for emergency response actions using hyperbaric air (see Module D.6).

E.3 Medical statement

A medical statement is required for flying or travelling by ship and can also be necessary at immigration checkpoints. Pregnant women are advised to consult their treating physician or gynaecologist before travelling and to request a medical statement in English with a date that falls within ten days of the outward journey. The statement must include the following:

- confirmation that it concerns a normal pregnancy;
- the probable date of childbirth;
- that you are in a good state of health;
- that the treating physician or gynaecologist knows no reasons that could keep you from making the trip/working.

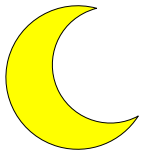
E.4 Vaccination

If people stay in “risk areas”, then it is necessary to ensure that they receive the right vaccinations.
Whether or not a pregnant woman should be vaccinated is decided on an individual basis and should be decided by experts in the area of travel advice. For each pregnant woman, the risk of disease (place, duration, preventing disease), the disease burden (consequences of an infection) and possible side effects of vaccines should be carefully considered. Therefore, a pregnant woman with travel plans to, for example, the (sub)tropics should be referred for individual advice to a municipal health service or travel clinic. Some diseases, such as malaria, have a relatively large chance of a severe disease course in the case of pregnancy.

You can read more on the website of the National Coordination Centre for Travel Vaccinations (LCR) http://www.lcr.nl.
The LCR has also published a leaflet (in Dutch) about pregnant women travelling to the tropics (see Annexe III).

Module F: Night work and shiftwork

pregnancy - breastfeeding



Night work and shiftwork can have harmful consequences for the pregnancy and the unborn child. Furthermore, shiftwork and night work are an important cause of pregnancy-related work absence.
The Working Hours Act therefore sets up frameworks for the work and rest periods of pregnant women, employees up to 6 months after giving birth and employees who breastfeed.
(See also the box Laws and Regulations 1 Working Hours Act §4.3)
The provisions prescribe the following:

- the limitation of regular working hours in general and night work in particular
- extra breaks
- maximising the number of working hours per day, month and quarter
- the possibility to undergo pregnancy examinations
- the possibility to breastfeed/express breast milk.

Pregnancy
There are statutory provisions concerning the limitation of shiftwork and night work:

- The pregnant employee has the right to a stable and regular work and breaks pattern.
- A pregnant employee cannot be obliged to do night work (between 24.00 and 06.00 hours) unless the employer provides plausible arguments that this cannot reasonably be required of him (this is not applicable in the case of NWO-I).
- The work is organised in such a way that due consideration is given to her specific circumstances. If a request to this effect is made by a pregnant employee, then the employer will satisfy this within a reasonable period.

For the pregnant employee, a tangible effort should be made to organise the shifts as follows:

- Exempt from work between 23.00 and 7.00 hours.
- A recovery period of at least 12 hours between shifts.
- Limitation of stand-by shifts (= on-call availability).
- Ideally: only work day shifts.

Let these agreements come into effect as quickly as possible, preferably within two weeks after:

- Notification of the pregnancy.
- The submission of a request by a pregnant employee to adjust the working hours.

A transition period can be agreed upon to solve organisational problems.
Prevent an increase in the work pressure of colleagues (due to additional irregular shifts).

As long as the pregnant employee still has irregular working hours, shiftwork or night work, then her work, in general, must be discussed with her each month and, in particular, the working hours. Agree upon who will hold these meetings (preferably the direct supervisor). Ensure a room is available where the meeting cannot easily be disturbed or overheard. Determine whether the pregnant employee can keep up the current working hours (in combination with the amount of work) and, if necessary, make new agreements.

Breastfeeding, or the period up until six months after giving birth

Shiftwork and night work do not influence breastfeeding. Additional measures aimed at shiftwork and night work are not necessary with respect to breastfeeding. However, during the first nine months, the woman has the right to have the opportunity and time to breastfeed her child or to express breast milk. During the first six months after giving birth (independent of whether or not an employee is breastfeeding), the Working Hours Act allows the woman to refuse night shifts.

Module G: Stress or psychological strain

pregnancy - breastfeeding

Stress or psychological strain has detrimental consequences for the pregnancy, the unborn child and breastfeeding. Stress also leads to pregnancy-related work absence and a later resumption of work after giving birth. Stress is caused by psychosocial workload, an umbrella term for aggression and violence, work pressure, bullying and sexual intimidation that causes stress. Every employer must take measures aimed at preventing and limiting psychosocial workload.
During the pregnancy and breastfeeding, additional measures are needed for two risks, namely aggression and violence, and work pressure.

Pregnancy

G.1.1 Aggression and violence

Attention for aggression and violence during the pregnancy is important for at least two reasons. Aggression and violence can lead to stress. In addition, the pregnant employee is visibly extra vulnerable. As the pregnancy advances, the woman is (visibly) less capable of adequately responding to incidents as well. Her response time can become lower and she can be less capable of physically responding to aggression and violence. The latter can be threatening for the woman, immediate colleagues and can hinder the adequate performance of duties.

G.1.2 Work pressure

The balance between work pressure and work capacity can rapidly change during pregnancy. It is therefore important to keep an eye on pregnant employees who have to deal with work pressure. By consciously monitoring this, it is possible to prevent an imbalance.
The following additional measures are important to manage the work pressure.

- Once a month, ask the pregnant employee about her work in general and the work pressure in particular. Agree who will hold these meetings (preferably the direct supervisor). Ensure a room is available where the meeting cannot easily be disturbed or overheard. A casual question during work, like “is everything okay?”, is not enough. It is important to find a (new) balance in the combined professional and private workload.
- Take measures if the work pressure is too high. Determine together with the pregnant employee exactly what the sticking point is. For example, is there too much work, are the work days too long/overtime, is the work too difficult or are the deadlines too tight? Agree upon measures to reduce the work pressure.

Breastfeeding

G.2.1 Aggression and violence

The visible extra vulnerability that occurs during pregnancy no longer exists during the period of breastfeeding. Therefore, during the period of breastfeeding, it is not necessary to relieve the employee from activities in which aggression and violence often occur. However, after giving birth, employees often need time for their level of fitness and physical resilience to return to normal.
If aggression and violence lead to stress, then additional measures are needed during the period of breastfeeding. Stress can reduce the let-down reflex and lead to a reduced production of breast milk.

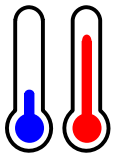
G.2.2 Work pressure

In the breastfeeding period, stress as a consequence of work pressure must be avoided for the same reasons as in the case of aggression and violence. Stress can reduce the let-down reflex and lead to a reduced production of breast milk.

Consider the same measures as proposed during pregnancy.

Module H: Extreme temperatures

wish to have children - pregnancy



Extremely high and low temperatures have a negative influence on fertility and on the unborn child. As far as is currently known, extreme temperatures have no influence on breastfeeding
Examples of (extremely) low temperatures are 4°C (working in refrigeration cells) or temperatures below zero (working in freezer cells).
(Extremely) high temperatures are temperatures of 25°C or higher. Examples of this are working in climate rooms and working outside on hot summer days.

Wish to have children
Men who are exposed to extreme heat or cold can experience a reduced sperm count. It is wise to take that into account if circumstances permit it.
For women, it is not known to what extent exposure to extreme cold or heat influences their fertility.

Pregnancy
During pregnancy, it is not wise to work in hot or cold conditions. Under these conditions, the blood pressure can rapidly decrease (which can pose the risk of fainting) and the blood supply to the uterus can decrease as a result of this.
Pregnant women who are exposed to extreme heat during the last three months of pregnancy can experience physical stress. There is a higher risk of giving birth to a baby with a weight that is too low or of giving birth prematurely.

Measures
When taking measures to prevent hypothermia during work activities, the following must be thought of:

1. Adjust the work and rest periods;
2. Provide proper clothing;
3. Exempt pregnant employees from those work activities.

For work activities carried out during high temperatures, the following measures can be taken:

1. Adjust the work and rest periods;
2. Provide enough water;
3. Exempt pregnant employees from those work activities.

Module I: Emergency response activities

pregnancy - breastfeeding

The realisation of emergency response tasks can be associated with stress and psychological strain. Module G makes clear that these factors can possibly have an influence on pregnant employees.

Pregnancy
It is inadvisable to deploy pregnant emergency responders in the case of a fire or evacuation. That is because during a deployment in the event of a calamity, no guarantees can be given about how things will develop. A calamity is always dynamic and unpredictable! Circumstances such as hazardous substances, work pressure and physical strain are not known in advance.
Pregnant women may not wear breathing masks during emergency response practices and deploying them with such masks is not permitted (see Module D.6, working under hyperbaric conditions).

Breastfeeding
Employees who breastfeed can consult with the emergency response coordinator as to whether they can or want to continue fulfilling their emergency response task.

Emergency response staffing
If a pregnant employee cannot be deployed for (certain) emergency response activities, then this should be taken into account in the planning of the emergency response staffing so that enough deployable emergency responders are always present.

Annexe I. Online information sources

14 February 2023

Table 9 lists Dutch websites with additional information and the most recent version of laws and regulations.

Website		Themes
wvoi.nl/cao-oi-nl/collectieve-arbeidsovereenkomst-onderzoekinstellingen	WVOI (the Employers' Association of Research Institutes) which includes NWO, NWO-I & the National Library of the Netherlands (KB)	Collective Labour Agreement (CAO)
rivm.nl/cib	Centre for Infectious Disease Control of the RIVM	Biological agents
rivm.nl/documenten/kinderen-krijgen-denk-na-over-risicos-op-uw-werk	National Institute for Public Health and the Environment	Comprehensive information about the wish to have children, pregnancy, breastfeeding and work
wip.nl sri-richtlijnen.nl	Workgroup Infection Prevention Partnership for Guidelines Infection Prevention	Biological agents
kiza.nl + helpdesk	Knowledge System Infectious Diseases and Work	Biological agents
arboportaal.nl	Ministry of Social Affairs and Employment (SZW)	-Comprehensive information about working conditions -List of reprotoxic substances, carcinogenic substances and processes, and mutagenic substances
arboportaal.nl/onderwerpen/zwanger	Ministry of Social Affairs and Employment (SZW)	Comprehensive information about the wish to have children, pregnancy, breastfeeding and work
ser.nl/nl/thema/arbeidsomstandigheden/Grenswaarden-gevaarlijke-stoffen	Social and Economic Council of the Netherlands (SER)	Limit values for hazardous substances
erfocentrum.nl erfelijkheid.nl	Erfocentrum, National information Centre for genetics and heritability	Comprehensive information about genetics and heritability (not specifically focussed on work)
zwangerwijzer.nl	Erfocentrum, National information Centre for genetics and heritability	Comprehensive information about pregnancy (not specifically focussed on work)
borstvoeding.nl lalecheleague.nl	La Leche League	Comprehensive information about breastfeeding (specifically during work)

Website		Themes
overheid.nl	Dutch government	Working Conditions Act, Working Conditions Decree, Working Conditions Provisions, Working Hours Act, Sickness Benefits Act, Work and Care Act, Radiation Protection Decree
lcr.nl	National Coordination Centre Travellers' Vaccinations	Vaccination

Table 9 Online information sources

Annexe II. Guidelines Wish to Have Children (m/f), Pregnancy and Breastfeeding

Guidelines Wish to Have Children (m/f), Pregnancy and Breastfeeding

The employer has the statutory duty to ensure that the employee and child are exposed to as few risks as possible. This applies from the moment that the employee (m/f) has indicated a wish to have children or notifies the employer of her pregnancy (f). Independent of a pregnancy or the wish to have children, any damage to the DNA of employees and their unborn children as a consequence of daily work activities must be prevented as much as possible. Measures should be taken to ensure that damage to the DNA of the employee or the unborn child as a consequence of the work is prevented as much as possible.
Supervisors are responsible for the working conditions of the employees in their own team. The measures are therefore determined by the supervisor in consultation with the employee (m/f). To estimate the risks and to advise about the measures to be taken, please involve an employee from P&O[1] and the health & safety coordinator in the discussion.

Which action do the supervisor and employee (m/f) take?

1) The supervisor and employee (m/f) immediately determine the risks with the help of Table 1 from the checklist (see annexe).
2) Ascertain which risks the employee is exposed to.
3) Establish the measure to be taken to limit the risks as much as possible (see checklist in the annexe). The employee is responsible for adhering to the agreements. Apply the following strategy for this (in the sequence stated below):

    1. Adjust the duties (*e.g. substituting chemicals, different working environment, assistance with lifting*)
    2. Provide more protection (*e.g. personal protective equipment*)
    3. Provide more and/or extended periods of rest;
    4. Exemption from duties if above measures are not feasible (e.g. no expedition).

4) In the case of pregnancy and breastfeeding: familiarise yourself with the rights of the employee (*Table 2 of the checklist*) and state where the lockable restroom is.

Figure 1 provides a flowchart of the actions.

The NWO policy with reference to the underlying statutory obligations can be found in the NWO-I policy Wish to Have Children (m/f), Pregnancy and Breastfeeding.

The terms m/f and the symbols ♂ ♀ are used in their biological sense to refer to conceiving a child and becoming pregnant, and they are not used to refer to gender identity and gender expression.

[1] In this document, the abbreviation P&O is used to denote the Personnel and Support Department. It also refers to the HR or HRM (Human Resources Management) Department.

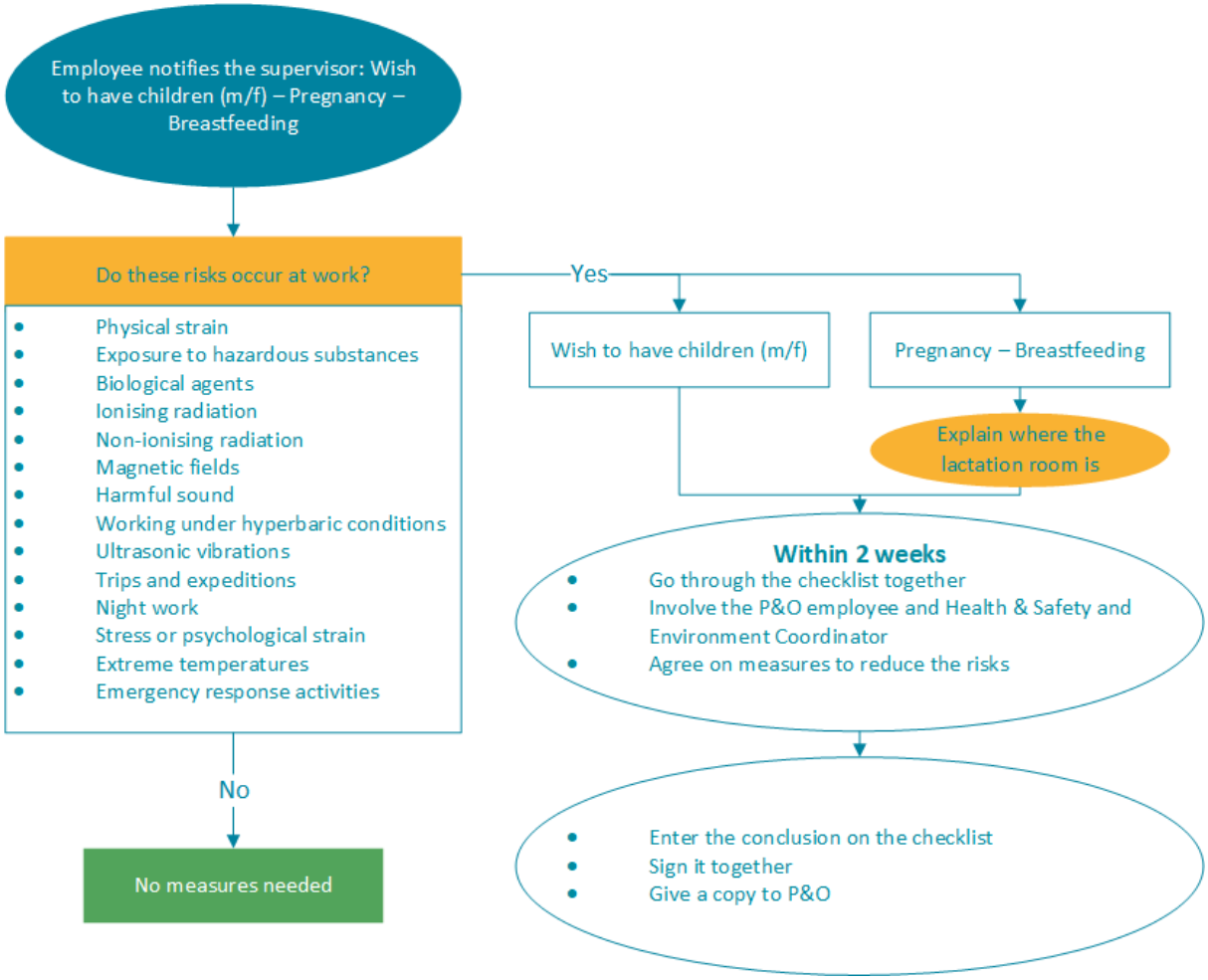


Figure 1 Diagram of actions after being notified by the employee1

Annexe III. Checklist Wish to Have Children (m/f), Pregnancy and Breastfeeding

Checklist Wish to Have Children (m/f), Pregnancy and Breastfeeding

Measures (solutions) in order of importance:

1. Changes to the duties (e.g. substitute materials, different working environment, assistance with lifting);
2. More protection, for example, personal protective equipment;
3. More and/or extended periods of rest;
4. Exemption from duties (if the above measures are not feasible).

In cases of doubt: consult an expert. Persistent doubt: do NOT perform the duties.

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14 February 2023

The terms m/f and the symbols ♂ ♀ are used in their biological sense to refer to conceiving a child and becoming pregnant and they are not used to refer to gender identity and gender expression.

Inventory of risks and measures to be taken (m/f)

m/f	Risk factor	Module	Symbol	Risk? (Yes/No)	Measures to be taken/comments
♀	Physical strain *heavy work/repetitive movements/static load in the case of computer work/standing - vibrations <0.25 m/s²*	A			
♂ ♀	Carcinogenic substances *H350, H351* Mutagenic substances *H340, H341* Reprotoxic substances *H360d, H360f, H361d, H361f, H362*	B			FORBIDDEN during pregnancy + period of breastfeeding ADVICE: Do not use in the case of a wish to have children
♀	Nanomaterials	B			ADVICE: Do not use in the case of a wish to have children
♂ ♀	Solvents *Xylene, toluene, chloroform, etc.*	B			
♂ ♀	Biological agents *human material- bacteria-viruses-parasites-fungi-experimental animals*	C			
♂ ♀	Ionising radiation *radioactive sources-X-ray equipment-accelerators*	D			
♂ ♀	Non-ionising radiation *high field strength: ELF fields, RF fields, etc.*	D			
♀	Magnetic fields	D			FORBIDDEN in the case of pregnancy: magnetic field > 0.5 mT
♀	Harmful noise *working with/near machines*	D			FORBIDDEN in the case of pregnancy: sound > 80 dB(A) or peaks > 112 Pa
♀	Working under hyperbaric pressure *diving, wearing breathing apparatus, working in confined spaces*	D			FORBIDDEN during pregnancy
♀	Vibrations or ultrasonic vibrations *machines, vehicles, ultrasonic bath, sonicator*	D			FORBIDDEN during pregnancy: body vibrations > 0.25 m/s2 + direct contact or >20kHz + >110 dB(A) per third octave band
♀	Trips and expeditions	E			FORBIDDEN during pregnancy: travelling on a ship from 27th week; travelling by plane from 37th week
♀	Night work	F			
♀	Stress or psychological pressure *Work pressure-home situation*	G			
♂ ♀	Extreme temperatures *Weather conditions, refrigeration/freezer cells, warm rooms*	G			
♀	Emergency response activities	I			

Rights during pregnancy/ the period of breastfeeding (f)	
The pregnant employee has the right to:	**Discussed?**
Regular work and rest periods during pregnancy *agree on frequency*	
Pregnancy examinations during work time	
Preventative medical consultation with the company doctor if desired *depends on the risks*	
Pregnancy and childbirth leave; *information from P&O Department*	
Additional information about pregnancy and work	
Until six months after childbirth	
A suitable room that can be locked ……. (enter a room number)	
Extra rest periods *up to a maximum of 1/8 of the working hours*	
No obligation to do overtime and night shifts	
In the case of breastfeeding up to 9 months after childbirth[1]	
A suitable room that can be locked where the employee can express breast milk ……. (enter a number)	
Expressing breast milk or breastfeeding during work *up to a maximum of 1/4 of the working hours*	

Conclusion (tick what is applicable)	
☐	The employee can carry out the work safely if all described measures are taken.
☐	In the current position, it is not possible to carry out the activities safely. In relation to the activities, it is important to offer other tasks on a temporary basis. (See agreements made)
Agreements made (see also Table 1)	
Date:	
Employee:	Supervisor:

A copy will be provided to the P&O department to be kept in the personnel file.

[1] If an employee wants to breastfeed for more than 9 months, then that is possible when agreements are made about this. The institute or office will then ensure that the right facilities are available.

Annexe IV. RIVM - Pregnancy Memorandum Biological Agents (in Dutch)

Rijksinstituut voor Volksgezondheid
en Milieu
*Ministerie van Volksgezondheid,
Welzijn en Sport*

Zwangerschapsnotatie Biologische Agentia

Auteur: F.S. Meerstadt-Rombach
Project: Werknemersgezondheid en Infectieziektebestrijding
Projectnummer: V/205014/05/IW
RIVM/CIb

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Status: definitief

1 Inleiding

In onderstaande notatie staat vermeld bij welke biologische agentia een substantieel risico bestaat voor zwangere werknemers of voor hen die zwanger willen worden. De Arbeidsomstandighedenwet (Arbowet) verplicht werkgevers om blootstelling van werknemers aan ziekmakende biologische agentia te voorkomen. Daar waar de werknemer gevoeliger is voor nadelige effecten op de gezondheid dient aanvullende bescherming te worden geboden. De Arbowet vereist dus van werkgevers dat zij extra aandacht besteden aan de risico's die zwangeren ondervinden door blootstelling aan biologische agentia en hierover voorlichting geven naast het bieden van (extra) beschermende maatregelen. Het uitgangspunt hierbij is de risico-inventarisatie en -evaluatie (RI&E).

Zwangere (of potentieel zwangere) werknemers zijn een bijzondere groep waar het biologische agentia betreft. Er zijn mogelijke effecten op de vruchtbaarheid van de vrouw, de zwangerschap, de gezondheid van het kind, de perinatale periode en lactatie. Ook kunnen effecten een rol spelen die de vruchtbaarheid van de man beïnvloeden.

De mogelijke ernst van de gevolgen –variërend van verminderde vruchtbaarheid bij de man of vrouw, gezondheidsklachten bij de zwangere, vroeg-foetale dood tot ernstige aangeboren afwijkingen– heeft ook consequenties voor de werkgever en de samenleving als geheel.

Kennis over het voorkomen van infectieziekten op het werk in relatie tot (potentële) zwangerschap is in ontwikkeling en berust vooralsnog hoofdzakelijk op casuïstiek

2 Methodiek

Het schema uit het Kennissysteem Infectieziekten en Arbeid (www.kiza.nl) is als basis gebruikt en vergeleken en aangevuld met gegevens van de RIVM themasite 'zwangerschap en infectieziekten' (www.rivm.nl) en met informatie uit de bestaande LCI-richtlijnen. Incidenteel is informatie nagezocht op de site van de Centers for Disease Control and Prevention (www.cdc.gov) en de Stichting Beroepsopleiding Huisartsen (www.sboh.nl). De verzamelde gegevens zijn toegevoegd aan de communautaire classificatielijst behorende bij de Richtlijn 2000/54/EG van het Europees Parlement en de Raad van 18 september 2000 betreffende de bescherming van de werknemers tegen de risico's van blootstelling aan biologische agentia op het werk (zevende bijzondere richtlijn in de zin van artikel 16, lid 1, van Richtlijn 83/391/EEG). Biologische agentia die niet voorkomen in het overzicht van KIZA zijn niet meegenomen in deze annotatie. Dit betekent niet dat deze geen bijzonder risico kunnen vormen ten aanzien van fertiliteit en zwangerschap. Daarnaast kunnen bepaalde pathogenen een 'normaal' gezondheidsrisico vormen door ziekteverschijnselen rond conceptie, zwangerschap of geboorte. Naar gelang de kwetsbaarheid van betrokkenen (inclusief de pasgeborene) is dan sprake van een normaal in plaats van een bijzonder gezondheidsrisico.

Binnen het gegeven budget kan slechts tot een globale aanvulling van mogelijke nadelige gezondheidseffecten voor de werknemer/werkneemster met een zwangerschapswens of zwangere werkneemster gekomen worden. De rapportage is gebaseerd op voorhanden zijnde gegevens uit bestaande bronnen en kent derhalve duidelijk zijn beperkingen; er heeft geen verdiepend literatuuronderzoek/systematische review plaatsgevonden of toetsing met externe

deskundigen. Een evaluatie ten aanzien van de gestelde kennisvragen en producten zal moeten volgen met als afweging een voorstel tot vervolg of uitbreiding.

3 Classificatielijst

De letters in de notatie verwijzen naar effecten op/tijdens:

Fertiliteit	F	Vruchtbaarheid van vrouw (of man)
Intra-uteriene periode	IU	Periode van vrucht/kind in de baarmoeder
Vroeggeboorte of abortus	V/A	Geboorte voor de uitgerekende datum of miskraam
Perinatale periode	Per	Tijdsperiode kort voor en kort na de geboorte
Postnatale periode	Post	Periode volgend op de geboorte
Lactatie	L	Borstvoeding
Zwangere	Z	Risico voor de zwangere zelf

BACTERIËN

Biologisch agens	**Classificatie en noten*** **	**Risico's rond zwangerschap**
Actinobacillus actinomycetemcomitans	2	
Actinomadura madurae	2	
Actinomadura pelletieri	2	
Actinomyces gerencseriae	2	
Actinomyces israelii	2	
Actinomyces pyogenes	2	
Actinomyces spp	2	
Arcanobacterium haemolyticum (Corynebacterium haemolyticum)	2	
Bacillus anthracis	3	
Bacteroides fragilis	2	
Bartonella bacilliformis	2	
Bartonella quintana (Rochalimaea quintana)	2	
Bartonella (Rhochalimaea) spp	2	
Bordetella bronchiseptica	2	
Bordetella parapertussis	2	
Bordetella pertussis	2 V	Post
Borrelia burgdorferi	2	IU[1]
Borrelia duttonii	2	
Borrelia recurrentis	2	
Borrelia spp	2	

[1] Een congenitale Lymeborreliose is zeldzaam en het verband tussen de incidenteel beschreven aangeboren afwijkingen en een in de zwangerschap doorgemaakte Lymeborreliose is vaak niet duidelijk.

Biologisch agens	**Classificatie en noten*** **	**Risico's rond zwangerschap**
Brucella abortus	3	IU, V/A, Z
Brucella canis	3	IU, V/A, Z
Brucella melitensis	3	IU, V/A, Z
Brucella suis	3	IU, V/A, Z
Burkholderia mallei (Pseudomonas mallei)	3	
Burkholderia pseudomallei (Pseudomonas seudomallei)	3	
Campylobacter fetus	2	
Campylobacter jejuni	2	
Campylobacter spp	2	
Cardiobacterium hominis	2	
Chlamydia pneumoniae	2	
Chlamydia trachomatis	2	F, V/A, Per
Chlamydia psittaci (gevogeltestammen)	3	V/A, Z
Chlamydia psittaci (niet-gevogeltestammen)	2	
Clostridium botulinum	2 T	
Clostridium perfringens	2	
Clostridium tetani	2 T,V	Per, Post
Clostridium spp	2	
Corynebacterium diphtheriae	2 T,V	
Corynebacterium minutissimum	2	
Corynebacterium pseudotuberculosis	2	
Corynebacterium spp	2	
Coxiella burnetii	2	IU, V/A, Z
Edwardsiella tarda	3	
Ehrlichia sennetsu (Rickettsia sennetsu)	2	
Ehrlichia spp	2	
Eikenella corrodens	2	
Enterobacter aerogenes/cloacae	2	
Enterobacter spp	2	
Enterococcus spp	2	
Erysipelothrix rhusiopathiae	2	
Escherichia coli (met uitzondering van de niet-athogene stammen)	2	
Escherichia coli, verocytotoxicogene stammen (bijv. 157:H7 of 0103)	3 (**) T	
Flavobacterium meningosepticum	2	
Fluoribacter bozemanae (Legionella)	2	
Francisella tularensis (type A)	3	
Francisella tularensis (type B)	2	
Fusobacterium necrophorum	2	

Biologisch agens	Classificatie en noten***	Risico's rond zwangerschap
Gardnerella vaginalis	2	
Haemophilus ducreyi	2	
Haemophilus influenzae	2	
Haemophilus spp	2	
Helicobacter pylori	2	
Klebsiella oxytoca	2	
Klebsiella pneumoniae	2	
Klebsiella spp	2	
Legionella pneumophila	2	
Legionella spp	2	
Leptospira interrogans (alle serotypes)	2	IU, V/A, Post, L, Z
Listeria monocytogenes	2	IU, V/A, Per, Post, Z
Listeria invanovii	2	
Morganella morganii	3	
Mycobacterium africanum	3 V	
Mycobacterium avium/intracellulare	2	
Mycobacterium bovis (uitgezonderd BCG-stam)	3 V	
Mycobacterium chelonae	2	
Mycobacterium fortuitum	2	
Mycobacterium kansasii	2	
Mycobacterium leprae	3	
Mycobacterium malmoense	2	
Mycobacterium marinum	2	
Mycobacterium microti	3 (**)	
Mycobacterium paratuberculosis	2	
Mycobacterium scrofulaceum	2	
Mycobacterium simiae	2	
Mycobacterium szulgai	2	
Mycobacterium tuberculosis	3 V	IU, V/A, Per, Post, Z
Mycobacterium ulcerans	3 (**)	
Mycobacterium xenopi	2	
Mycoplasma caviae	2	
Mycoplasma hominis	2	
Mycoplasma pneumoniae	2	
Neisseria gonorrhoeae	2	
Neisseria meningitidis	2 V	
Nocardia asteroides	2	
Nocardia brasiliensis	2	

Biologisch agens	**Classificatie en noten*** **	**Risico's rond zwangerschap**
Nocardia farcinica	2	
Nocardia nova	2	
Nocardia otitidiscaviarum	2	
Pasteurella multocida	2	
Pasteurella spp	2	
Peptostreptococcus anaerobius	2	
Plesiomonas shigelloides	2	
Porphyromonas spp	2	
Prevotella spp	2	
Proteus mirabilis	2	
Proteus penneri	2	
Proteus vulgaris	2	
Providencia alcalifaciens	2	
Providencia rettgeri	2	
Providencia spp	2	
Pseudomonas aeruginosa	2	
Rhodococcus equi	2	
Rickettsia akari	3 (**)	
Rickettsia canada	3 (**)	
Rickettsia conorii	3	
Rickettsia montana	3 (**)	
Rickettsia typhi (Rickettsia mooseri)	3	
Rickettsia prowazekii	3	
Rickettsia rickettsii	3	
Rickettsia tsutsugamushi	3	
Rickettsia spp	2	
Salmonella arizonae	2	
Salmonella enteritidis	2	
Salmonella typhimurium	2	
Salmonella paratyphi A, B, C	2 V	
Salmonella typhi	3 (**) V	
Salmonella (andere serologische variëteiten)	2	
Serpulina spp	2	
Shigella boydii	2	
Shigella dysenteriae (type 1)	3 (**) T	
Shigella dysenteriae (verschillend van type 1)	2	
Shigella flexneri	2	
Shigella sonnei	2	
Staphylococcus aureus	2	
Streptobacillus moniliformis	2	
Streptococcus pneumoniae	2	
Streptococcus pyogenes	2	Post, Z

Biologisch agens	**Classificatie en noten*** **	**Risico's rond zwangerschap**
Streptococcus suis	2	
Streptococcus spp	2	
Treponema carateum	2	
Treponema pallidum	2	
Treponema pertenue	2	
Treponema spp	2	
Vibrio cholerae (inclusief El Tor)	2	
Vibrio parahaemolyticus	2	
Vibrio spp	2	
Yersinia enterocolitica	2	
Yersinia pestis	3 V	
Yersinia pseudotuberculosis	2	
Yersinia spp	2	

VIRUSSEN (*)

Biologisch agens	**Classificatie en noten** ***	**Risico's rond zwangerschap**
Adenoviridae	2	
Arenaviridae		
LCM-Lassa-Virus-Complex (Oude Wereldarenavirussen):		
Lassavirus	2	
Lymfocytair choriomeningitisvirus (neurotrope stammen)	3	IU, V/A, Z[2]
Lymfocytair choriomeningitisvirus (andere stammen)	2	
Mopeiavirus	2	
Andere LCM-Lassa-complexvirussen	2	
Tacaribe-Virus-Complex (Nieuwe Wereldarenavirussen):		
Guanaritovirus	4	
Juninvirus	4	
Sabiavirus	4	
Machupovirus	4	
Flexalvirus	3	
Andere Tacaribe-complexvirussen	2	
Astroviridae	2	
Bunyaviridae		
Belgrado (ook bekend als Dobrava)	3	
Bhanja	2	
Bunyamweravirus	2	
Germiston	2	
Oropouchevirus	3	
Sin nombre (vroeger Muerte Canyon)	3	
California-encefalitisvirus	2	
Hantavirussen:		
Hantaan (Koreaanse hemorragische koorts)	3	
Seoulvirus	3	
Puumalavirus	2	
Prospect Hillvirus	2	
Andere Hantavirussen	2	
Nairovirus:		
Kongo/krim hemorragische koorts	4	
Hazaravirus	2	
Flebovirussen:		
Rift Valley-koorts	3 V	
Zandvliegkoorts	2	
Toscanavirus	2	
Andere als pathogeen bekend staande bunyaviridae	2	
Caliciviridae		
Hepatitis E-virus	3 (**)	IU, V/A, Z
Norwalkvirus	2	IU

[2] Bron: CDC Fact sheet

Biologisch agens	Classificatie en noten ***	Risico's rond zwangerschap
Andere Caliciviridae	2	
Coronaviridae	2	
Filoviridae		
Ebolavirus	4	
Marburgvirus	4	
Flaviviridae		
Australië-encefalitis (Murray Valley-encefalitis)	3	
Middeneuropees tekenencefalitisvirus	3 (**) V	
Absettarov	3	
Hanzalova	3	
Hypr	3	
Kumlinge	3	
Denguevirus (types 1 tot en met 4)	3	
Hepatitis C-virus	3 (**) D	Per, Post, Z
Hepatitis G-virus	3 (**) D	
Japanse B-encefalitis	3 V	
Kyasanur Forest	3 V	
Louping ill	3 (**)	
Omsk (a)	3 V	
Powassan	3	
Rocio	3	
Russische voorzomer-meningo-encefalitis (a)	3 V	
St. Louis-encefalitis	3	
Wesselsbronvirus	3 (**)	
West-Nijlvirus	3	
Gele koorts	3 V	
Andere als pathogeen bekend staande flavivirussen	2	
Hepadnaviridae		
Hepatitis B-virus	3 (**) V, D	IU, Per, Post,
Hepatitis D-virus (Delta) (b)	3 (**) V, D	L, Z
Herpesviridae		
Cytomegalovirus	2	
Epstein-Barrvirus	2	IU, Per
Herpesvirus simiae (B virus)	3	
Herpes simplexvirussen (types 1 en 2)	2	
Varicella-zoster-herpesvirus	2	IU[3], Per, Post
Humaan B-lymfotroopvirus (HBLV-HHV6)	2	IU, Per, Post, Z
Humaan herpesvirus 7	2	
Humaan herpesvirus 8	2 D	
Orthomyxoviridae		
Influenzavirussen (types A, B en C)	2 V (c)	Post, Z
Door teken overgedragen orthomyxoviridae: Dhori- en Thogotovirussen	2	

[3] Risico voor ongeboren vrucht; dit is zeldzaam maar er bestaat risico op een miskraam, congenitale afwijkingen (huid, ogen, zenuwstelsel) en intra uteriene vruchtdood

Biologisch agens	**Classificatie en noten** ***	**Risico's rond zwangerschap**
Papovaviridae		
BK- en JC-virussen	2 D (d)	
Humaan papillomavirus	2 D (d)	
Paramyxoviridae (bofvirus)		
Mazelenvirus (rubeola)	2 V	V/A, Post, Z
Bofvirus	2 V	F (man)
Newcastle diseasevirus	2	
Para-influenzavirussen (types 1 tot en met 4)	2	
Respiratoir-syncytiumvormend virus	2	
Parvoviridae		
Humaan parvovirus (B 19)	2	IU, V/A
Picornaviridae		
Acuut hemorragisch conjunctivitisvirus (AHC)	2	
Coxsackievirus	2	IU, Per, Post
Echovirussen	2	
Hepatitis A-virus (humaan enterovirus type 72)	2 V	
Poliomyelitisvirus	2 V	IU, Z
Rhinovirus	2	
Poxviridae		
Buffelpokkenvirus (e)	2	
Koepokkenvirus	2	
Olifantenpokkenvirus (f)	2	
Melkersknobbelvirus	2	
Molluscum contagiosumvirus	2	
Apenpokkenvirus	3 V	
Orfvirus		
Konijnenpokkenvirus (g)	2	
Vacciniavirus	2 V	
Variolavirus (maior en minor)	4 V	
„Whitepox" virus (variola virus)	4 V	
Yatapokkenvirus (Tana en Yaba)	2	
Reoviridae		
Coltivirussen	2	
Humane rotavirussen	2	
Orbivirussen	2	
Reovirussen	2	
Retroviridae		
Humane immunodeficiëntievirussen (AIDS)	3 (**) D	IU, Per, L, Z
Humane T-lymfotrope virussen (HTLV) (types 1 en 2)	3 (**) D	
Simian immunodeficiëntievirus (SIV) (h)	3 (**)	
Rhabdoviridae		
Rabiesvirus	3 (**) V	
Vesiculairestomatitisvirus	2	

Biologisch agens	Classificatie en noten ***	Risico's rond zwangerschap
Togaviridae		
Alfavirussen		
Eastern paardenencefalomyelitis	3 V	
Bebaruvirus	2	
Chikungunyavirus	3 (**)	
Evergladesvirus	3 (**)	
Mayarovirus	3	
Mucambovirus	3 (**)	
Ndumuvirus	3	
O'nyong-nyongvirus	2	
Ross Rivervirus	2	
Semliki Forestvirus	2	
Sindbisvirus	2	
Tonatevirus	3 (**)	
Venezolaanse paardenencefalomyelitis	3 V	
Western paardenencefalomyelitis	3 V	
Andere bekende alfavirussen	2	
Rubivirus (rubella)	2 V	IU, V/A, Z
Toroviridae	2	
Niet-geclassificeerde virussen		
Equine morbillivirus	4	
Nog niet geïdentificeerde hepatitisvirussen	3 (**) D	
Onconventionele agentia die in verband worden gebracht met overdraagbare spongiforme encefalopathieën (TSE):		
De ziekte van Creutzfeldt-Jakob	3 (**) D (d)	
Variant van de ziekte van Creutzfeldt-Jakob	3 (**) D (d)	
Bovine spongiforme encefalopathie (BSE) en andere daaraan verwante dierlijke TSE (i)	3 (**) D (d)	
Het Gerstmann-Sträussler-Scheinkersyndroom	3 (**) D (d)	
Koeroe	3 (**) D (d)	

(*) Zie Publicatieblad van de Europese Gemeenschappen Bijlage III communautaire classificatie, inleidende opmerkingen, punt 7.
(**) Zie Publicatieblad van de Europese Gemeenschappen Bijlage III communautaire classificatie, inleidende opmerkingen, punt 8.
*** Publicatieblad van de Europese Gemeenschappen, Bijlage III communautaire classificatie, aanwijzingen voor beheersmaatregelen en beheersingsniveaus.

(a) Tekenencefalitis.
(b) Het hepatitis D-virus kan slechts een pathogene uitwerking op de werknemer hebben indien er een gelijktijdige of secundaire infectie bij een hepatitis B-infectie optreedt. De vaccinatie tegen het hepatitis B-virus geeft derhalve aan werknemers die niet door het hepatitis B-virus besmet zijn, bescherming tegen het hepatitis D-virus (Delta).
(c) Alleen voor de types A en B.
(d) Aanbevolen ten aanzien van werkzaamheden die een rechtstreekse aanraking met deze agentia inhouden.

(e) Binnen deze onderverdeling kunnen twee virussen worden onderscheiden, een soort „buffelpokkenvirus” en een variant van het „vacciniavirus”.
(f) Variant van het „koepokkenvirus”.
(g) Variant van het „vacciniavirus”.
(h) Er zijn thans geen aanwijzingen dat mensen door andere retrovirussen van apen kunnen worden geïnfecteerd. Als voorzorgsmaatregel wordt bij werkzaamheden die blootstelling aan deze retrovirussen meebrengen, beheersingsniveau 3 aanbevolen.
(i) Er zijn geen aanwijzingen voor infecties bij de mens door de agentia die verantwoordelijk zijn voor andere dierlijke TSE. Niettemin wordt beheersingsniveau 3 (**) aanbevolen als veiligheidsmaatregel voor laboratoriumwerkzaamheden, behalve voor laboratoriumwerkzaamheden
met betrekking tot een geïdentificeerde scrapieverwekker, waarvoor beheersingniveau 2 voldoende is.

PARASIETEN

Biologisch agens	**Classificatie en noten** ***	**Risico's rond zwangerschap**
Acanthamoeba castellani	2	
Anclyostoma duodenale	2	
Angiostrongylus cantonensis	2	
Angiostrongylus costaricencis	2	
Ascaris lumbricoides	2 A	
Ascaris suum	2 A	
Babesia divergens	2	
Babesia microti	2	
Balantidium coli	2	
Brugia malayi	2	
Brugia pahangi	2	
Capillaria philippinensis	2	
Capillaria spp	2	
Clonorchis sinensis	2	
Clonorchis viverrini	2	
Cryptosporidium parvum	2	
Cryptosporidium spp	2	
Cyclospora cayetanensis	2	
Dipetalonema streptocerca	2	
Diphyllobothrium latum	2	
Dracunculus medinensis	2	
Echinococcus granulosus	3 (**)	
Echinococcus multilocularis	3 (**)	
Echinococcus vogeli	3 (**)	
Entamoeba histolytica	2	
Fasciola gigantica	2	
Fasciola hepatica	2	
Fasciolopsis buski	2	
Giardia lamblia (Giardia intestinalis)	2	
Hymenolepsis diminuta	2	
Hymenolepsis nana	2	
Leishmania brasiliensis	3 (**)	
Leishmania donovani	3 (**)	
Leishmania ethiopica	2	
Leishmania mexicana	2	
Leishmania peruviana	2	
Leishmania tropica	2	
Leishmania major	2	
Leishmania spp	2	
Loa loa	2	
Mansonella ozzardi	2	
Mansonella perstans	2	
Naegleria fowleri	2	
Necator americanus	2	
Onchocerca volvulus	2	

Biologisch agens	Classificatie en noten ***	Risico's rond zwangerschap
Opisthorchis felineus	2	
Opisthorchis spp	2	
Paragonimus westermani	2	
Plasmodium falciparum	3 (**)	IU,V/A, Per, Z
Plasmodium spp (bij mensen en apen)	2	
Sarcocystis suihominis	2	
Schistosoma haematobium	2	
Schistosoma intercalatum	2	
Schistosoma japonicum	2	
Schistosoma mansoni	2	
Schistosoma mekongi	2	
Strongyloides stercoralis	2	
Strongyloides spp	2	
Taenia saginata	2	
Taenia solium	3 (**)	
Toxocara canis	2	
Toxoplasma gondii	2	IU, V/A
Trichinella spiralis	2	
Trichuris trichiura	2	
Trypanosoma brucei brucei	2	
Trypanosoma brucei gambiense	2	
Tryponosoma brucei rhodesiense	3 (**)	
Trypanosoma cruzi	3	
Wuchereria bancrofti	2	

SCHIMMELS EN GISTEN

Biologisch agens	Classificatie en noten ***	Risico's rond zwangerschap
Aspergillus fumigatus	2 A	
Blastomyces dermatitidis (Ajellomyces dermatitidis)	3	
Candida albicans	2 A	
Candida tropicalis	2	
Cladophialophora bantiana (vroeger: Xylohypha bantiana, Cladosporium bantianum of trichoides)	3	
Coccidioides immitis	3 A	
Cryptococcus neoformans var. neoformans (Filobasidiella neoformans var. neoformans)	2 A	
Cryptococcus neoformans var. gattii (Filobasidiella bacillispora)	2 A	
Emmonsia parva var. parva	2	
Emmonsia parva var. crescens	2	
Epidermophyton floccosum	2 A	
Fonsecaea compacta	2	
Fonsecaea pedrosoi	2	
Histoplasma capsulatum var. capsulatum (Ajellomyces capsulatus)	3	

Biologisch agens	**Classificatie en noten *****	**Risico's rond zwangerschap**
Histoplasma capsulatum duboisii	3	
Madurella grisca	2	
Madurella mycetomatis	2	
Microsporum spp	2 A	
Neotestudina rosatii	2	
Paracoccidioides brasiliensis	3	
Penicillium marneffei	2 A	
Scedosporium apiospermum (Pseudallescheria boydii)	2	
Scedosporium prolificans (inflatum)	2	
Sporothrix schenckii	2	
Trichophyton rubrum	2	
Trichophyton spp	2	

Bijlage I: Aanwijzingen voor beheersmaatregelen en beheersingsniveaus
Onderstaande tabel is overgenomen uit het Publicatieblad van de Europese gemeenschappen. De tabel geeft een toelichting op de gehanteerde nummering in de eerste kolom van bovenstaande lijst. Op basis hiervan wordt het voor de betreffende biologische agentia vereiste fysieke beheersingsnivo vastgesteld

BIJLAGE V

AANWIJZINGEN VOOR BEHEERSINGSMAATREGELEN EN BEHEERSINGSNIVEAUS

(Artikel 15, lid 3, en artikel 16, lid 1, onder a) en b))

Opmerking vooraf

Bij de toepassing van de maatregelen in deze bijlage wordt rekening gehouden met de aard van de werkzaamheden, de beoordeling van de risico's voor de werknemers en de aard van het betrokken biologische agens.

A. Beheersingsmaatregelen	B. Beheersingsniveaus		
	2	3	4
1. De arbeidsplaats moet gescheiden zijn van de plaatsen voor andere werkzaamheden in hetzelfde gebouw	Nee	Aanbevolen	Ja
2. De luchttoevoer naar en -afvoer van de arbeidsplaats moeten gefiltreerd worden met behulp van HEPA of soortgelijke middelen	Nee	Ja, op de luchtafvoer	Ja, op de luchttoevoer en de luchtafvoer
3. Alleen bevoegde werknemers hebben toegang	Aanbevolen	Ja	Ja, via een luchtsluis
4. De arbeidsplaats moet afgesloten kunnen worden om desinfectie mogelijk te maken	Nee	Aanbevolen	Ja
5. Specifieke desinfectieprocedures	Ja	Ja	Ja
6. De arbeidsplaats moet ten opzichte van de atmosfeer op een negatieve luchtdruk worden gehouden	Nee	Aanbevolen	Ja
7. Doeltreffende controle van dragers/overdragers, bijvoorbeeld knaagdieren en insecten	Aanbevolen	Ja	Ja
8. Voor water ondoorlaatbare oppervlakken die gemakkelijk zijn schoon te maken	Ja, voor werktafel	Ja, voor werktafel en bodem	Ja, voor werktafel, muren, bodem en plafond
9. Tegen zuren, alkaliën, oplosmiddelen en desinfectiemiddelen bestendige oppervlakken	Aanbevolen	Ja	Ja
10. Veilige opslag van biologische agentia	Ja	Ja	Ja, opslag met beveiligde toegang
11. Er moet een kijkvenster of iets dergelijks aanwezig zijn in de ruimten zodat men kan zien wat er binnen gebeurt	Aanbevolen	Aanbevolen	Ja
12. Een laboratorium dient een eigen uitrusting te omvatten	Nee	Aanbevolen	Ja
13. Geïnfecteerd materiaal, inclusief dieren, moet worden gehanteerd in een veiligheidskast of isolatieruimte of met gebruik van een andere passende afscherming	Alleen indien nodig	Ja, indien infectie via de lucht kan plaatsvinden	Ja
14. Incinerator voor karkassen van dieren	Aanbevolen	Ja (beschikbaar)	Ja, ter plaatse

Bron: Richtlijn 2000/54/EG van het Europees Parlement en de raad van 18 september 2000 betreffende de bescherming van de werknemers tegen de risico's van blootstelling aan biologische agentia op het werk (zevende bijzondere richtlijn in de zin van artikel 16, lid 1, van Richtlijn 83/391/EEG),
Publicatieblad van de Europese Gemeenschappen, Bijlage V, 17.10.2000
http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2000:262:0021:0045:NL:PDF

Bijlage II: Arbeidsomstandighedenbesluit, zoals deze geldt op 22 juli 2011

Artikel 4.87a. Voorkomen of beperken van blootstelling

1.Voor zover uit de resultaten van de beoordeling, bedoeld in artikel 4.85, blijkt dat er risico voor de veiligheid of gezondheid van de werknemers bestaat en dat het in verband met de aard van de arbeid niet uitvoerbaar is om biologische agentia te vervangen door biologische agentia die niet gevaarlijk zijn, worden, voor zover dit technisch uitvoerbaar is, zodanige andere maatregelen genomen dat blootstelling van werknemers aan biologische agentia wordt voorkomen en de risico's beperkt.

2.Voor zover de maatregelen, bedoeld in het eerste lid, technisch niet uitvoerbaar zijn, wordt blootstelling van werknemers aan biologische agentia tot een zodanig laag niveau teruggebracht als voor een adequate bescherming van de veiligheid en de gezondheid van de werknemers noodzakelijk is.

3.Ter uitvoering van het tweede lid worden ten minste de volgende maatregelen genomen:

a. de kans op blootstelling wordt zoveel mogelijk beperkt;

b. het aantal werknemers dat gevaar loopt aan een of meer biologische agentia te worden blootgesteld is niet groter dan voor het verrichten van de arbeid strikt noodzakelijk is;

c. er worden collectieve beschermingsmaatregelen genomen en, wanneer dit geen of geen afdoende bescherming biedt, worden persoonlijke beschermingsmiddelen ter beschikking gesteld;

d. bij de arbeid wordt de grootst mogelijke ordelijkheid en zindelijkheid betracht om te voorkomen dan wel de kans te beperken dat een of meer biologische agentia buiten de arbeidsplaats terecht komen;

e. biologische agentia worden zodanig bewaard en vervoerd en afvalstoffen worden op zodanige wijze verzameld, opgeslagen en verwijderd, zo nodig na passende behandeling en voorzien van een deugdelijk opschrift, dat de kans op blootstelling zoveel mogelijk wordt voorkomen alsmede wordt voorkomen dat zij in handen van onbevoegden kunnen geraken;

f. indien noodzakelijk en technisch mogelijk wordt onderzoek gedaan naar de aanwezigheid op de werkplek van biologische agentia buiten de eerste fysieke omhulling;

g. op de arbeidsplaats is een doeltreffende schriftelijke werkinstructie voor de werknemers voorhanden, waarvan ten minste deel uitmaken de bij de arbeid in acht te nemen procedures, waaronder een regeling voor het veilig omgaan met en het vervoeren van biologische agentia binnen het bedrijf of de inrichting alsmede

een doeltreffend noodplan voor het geval zich ongevallen of incidenten met biologische agentia voordoen.

Artikel 4.90. Registratie

1.In een register wordt bijgehouden welke werknemers aan biologische agentia van categorie 3 en 4 worden of kunnen worden blootgesteld.

2.In dit register wordt tevens per werknemer geregistreerd welke werkzaamheden hij heeft verricht en, voor zover dit te bepalen is, aan welk biologisch agens of welke biologische agentia hij als gevolg van deze werkzaamheden of als gevolg van een incident of ongeval, eventueel is blootgesteld.

3.Het in het eerste lid bedoelde register wordt ten minste tien jaar na de laatste blootstelling of mogelijke blootstelling bewaard.

4.In geval een werknemer is blootgesteld of mogelijk is blootgesteld aan een biologisch agens dat infecties tot gevolg kan hebben die:

a. naar bekend is hardnekkig of latent kunnen zijn;

b. op basis van de huidige stand van de techniek naar verwachting eerst jaren later kunnen worden onderkend;

c. een lange incubatietijd hebben;

d. ondanks behandeling steeds weer terugkeren, of

e. ernstige complicaties op lange termijn hebben, wordt het in het eerste lid bedoelde register een navenant langere tijd doch niet meer dan veertig jaar na de laatste blootstelling bewaard.

5.Iedere werknemer heeft recht op inzage in de hem betreffende gegevens uit het register.

6.Aan de bedrijfsarts, bedoeld in artikel 14, eerste lid, aanhef, van de wet, of de arbodienst wordt desgevraagd inzage verschaft in het register, bedoeld in het eerste lid.

§ 4. Arbeidsgezondheidskundig onderzoek

Artikel 4.91. Onderzoek en vaccins

1.Iedere werknemer die is of kan worden blootgesteld aan biologische agentia wordt, in aanvulling op artikel 18 van de wet, in de gelegenheid gesteld bij de aanvang van de arbeid waarbij blootstelling kan ontstaan, een arbeidsgezondheidskundig onderzoek te ondergaan.

2.Iedere werknemer die een infectie of ziekte heeft opgelopen als gevolg van blootstelling aan een biologisch agens, wordt, in aanvulling op het eerste lid, tussentijds in de gelegenheid gesteld een arbeidsgezondheidskundig onderzoek te ondergaan.

3.Iedere werknemer die aan een zelfde biologisch agens is blootgesteld als gevolg waarvan een andere werknemer een infectie of ziekte heeft opgelopen, wordt, in aanvulling op het eerste lid, tussentijds in de gelegenheid gesteld een arbeidsgezondheidskundig onderzoek te ondergaan.

4.Het arbeidsgezondheidskundig onderzoek vindt plaats met inachtneming van de praktische aanbevelingen, opgenomen in bijlage IV bij de richtlijn.

5.Indien het resultaat van het arbeidsgezondheidskundig onderzoek daartoe aanleiding geeft, worden doeltreffende maatregelen genomen om schade voor de gezondheid van de betrokken werknemer door blootstelling aan biologische agentia te voorkomen.

6.Voor zover mogelijk worden aan iedere werknemer die nog niet immuun is voor de biologische agentia waaraan hij is of kan worden blootgesteld, doeltreffende vaccins ter beschikking gesteld. Daarbij wordt bijlage VII bij de richtlijn in acht genomen.

7.Op verzoek van de werkgever of de betrokken werknemer wordt het in dit artikel bedoelde onderzoek opnieuw uitgevoerd. Het resultaat van het hernieuwde onderzoek treedt in de plaats van het daaraan voorafgaande.

8.Iedere werknemer heeft recht op inzage in het hem betreffende medisch dossier.

9.De resultaten van het in dit artikel bedoelde arbeidsgezondheidskundig onderzoek worden in passende vorm geregistreerd en ten minste tien jaar na de laatste blootstelling of mogelijke blootstelling bewaard. In gevallen als bedoeld in artikel 4.90, vierde lid, worden de resultaten een navenant langere tijd doch niet meer dan veertig jaar bewaard.

10.Iedere werknemer wordt geïnformeerd over de wijze waarop hij na beëindiging van de blootstelling in de gelegenheid wordt gesteld een arbeidsgezondheidskundig onderzoek te ondergaan.

Artikel 4.109. Arbeidsverboden enkele biologische agentia

Het is een zwangere werknemer verboden arbeid te verrichten waarbij zij kunnen worden blootgesteld aan de biologische agentia Toxoplasma en Rubellavirus, bedoeld in afdeling 9 van dit hoofdstuk, tenzij is gebleken dat zij hiervoor immuun is.

Annexe V. LCR – Travelling to the tropics while pregnant? (in Dutch)

Vaccinaties

De vaccinatie tegen gele koorts wordt alleen bij hoge uitzondering gegeven tijdens de zwangerschap. Een vaccinatie tegen bof, mazelen en rode hond (BMR) wordt niet gegeven tijdens de zwangerschap. De meeste andere vaccinaties kunnen tijdens de zwangerschap veilig gegeven worden. Uw reizigersadviseur houdt hier rekening mee tijdens uw persoonlijke advies.

Verkeer

Auto-ongevallen komen veel voor. Het is verstandig na een ongeval een arts te raadplegen. Tijdens de zwangerschap raadpleegt u ook een arts na een ogenschijnlijk gering letsel of als u na een ongeval (nog) niet direct klachten heeft.

Hoogte

Voor zwangeren bestaat bij een verblijf boven de 2500 meter een grotere kans op hoogteziekte. Middelen tegen hoogteziekte mogen niet gebruikt worden tijdens de zwangerschap. Het is bij zwangeren daarom extra belangrijk om niet te snel te stijgen. Het advies is om 4-5 dagen rust te nemen voordat u zich gaat inspannen. Zie ook de folder ‘Hoogteziekte’.

Reisapotheek

Tijdens de zwangerschap kunnen niet alle antibiotica en geneesmiddelen veilig worden gebruikt. Paracetamol is wel veilig en wordt aangeraden om hoge koortspieken te voorkomen. Sommige vrouwen hebben tijdens de zwangerschap sneller last van een vaginale schimmelinfectie. Reizen naar warme gebieden kan de kans hierop verhogen. In overleg met uw (huis)arts kunt u hiervoor een antischimmel middel meenemen. Overleg met de reizigersadviseur, uw (huis)arts of apotheek welke medicijnen tijdens de zwangerschap veilig gebruikt kunnen worden. Zie ook de LCR reizigersfolder ‘De Reisapotheek’.

Overige informatie

In Nederland eindigt ongeveer 10% van de zwangerschappen in een miskraam. Bedenk dat dit ook kan gebeuren als u op reis bent of net nadat u een vaccinatie heeft gekregen zonder dat dit met de reis of het vaccin te maken heeft.

Zie ook www.lcr.nl > advies per land
Zie ook www.lcr.nl > informatie over ziekten

Zwanger op reis naar de tropen?

Bent u van plan om op reis te gaan naar de tropen? Let op: u bent vatbaarder voor infectieziekten. Lees hier wat de risico's zijn en wat u kunt doen om een infectieziekte te voorkomen.

Een reis naar de tropen verhoogt het risico op infectieziekten die gevaarlijk kunnen zijn voor u en uw ongeboren kind. Een infectieziekte met hoge koorts kan de bevalling op gang brengen.
Het is verstandig om, voordat u een reis boekt, informatie in te winnen bij een deskundig reizigersadviseur. De adviseur vertelt u over de risico's van uw reis en wat u kunt doen om ziekten te voorkomen. Voorzien van goede informatie kunt u zelf afwegen of het belang van uw reis opweegt tegen de risico's.

Drie belangrijke tips:

- Ga bij koorts >38.5 ºC naar een arts.
- Pas extra zorgvuldig antimuggen-maatregelen toe.
- Houdt bij het kiezen van uw vakantiebestemming rekening met de kwaliteit van de gezondheidszorg in het desbetreffende land.

Malaria

Malaria is een infectieziekte die wordt overgebracht door een besmette mug. In de zwangerschap kan malaria ernstig verlopen. Malaria kan een miskraam of vroeggeboorte tot gevolg hebben. Een reis naar malariagebied tijdens de zwangerschap wordt daarom afgeraden.
Als u toch besluit te reizen naar een malariagebied waarvoor malariatabletten worden geadviseerd, is het belangrijk dat u de geadviseerde malariatabletten op de voorgeschreven manier inneemt. Soms maken zwangere vrouwen zich zorgen over de bijwerkingen van de tabletten en de mogelijke risico's voor het ongeboren kind. Bedenk hierbij dat malaria een gevaarlijke ziekte is en dat de reizigersadviseur u de tabletten adviseert die in uw geval veilig gebruikt kunnen worden.
Antimalariamiddelen beschermen echter nooit 100% tegen malaria. Pas daarom extra zorgvuldig anti-muggenmaatregelen toe.
De mug die malaria overbrengt steekt vanaf zonsondergang tot zonsopgang ('s avonds en 's nachts). Slaap daarom onder een geïmpregneerde klamboe. Gebruik ook een muggen-werend middel met DEET op de onbedekte huid. Zie voor meer informatie over doseringen tijdens de zwangerschap de folder 'DEET op reis'.
Als u tijdens of na een verblijf in malariagebied koorts of griepachtige verschijnselen krijgt, moet u zich zo snel mogelijk op malaria laten testen. Malaria kan snel levensbedreigend worden vooral bij zwangere vrouwen.

Zika, dengue en chikungunya

Zika, dengue (knokkelkoorts) en chikungunya zijn infectieziekten die worden overgedragen door een beet van een besmette mug. Deze muggen steken vooral overdag.
De symptomen van Zika, dengue en chikungunya lijken erg op elkaar, maar meestal verlopen de drie ziekten zonder klachten. Soms krijgen mensen koorts, gewrichtspijn, hoofdpijn en uitgesproken spierpijn. De ziekte lijkt dan op een griep. Ook kan huiduitslag ontstaan. In zeldzame gevallen verloopt dengue ernstig, met hoge koorts en inwendige bloedingen. Pas in de zwangerschap extra zorgvuldig muggen-werende maatregelen toe. Zie ook de folder ‘DEET op reis’ en de folder over CDZ.

Zika in de zwangerschap

Zika in de zwangerschap kan aangeboren afwijkingen bij het kind veroorzaken. De kans op het krijgen van de ziekte is niet overal even groot. Zwangere vrouwen moeten een reis naar Zika-gebied goed afwegen en bespreken met een deskundig reizigersadviseur.
Zika kan ook via seksueel contact worden overgedragen. Vrouwen die zonder partner reizen naar Zika-gebied wordt aangeraden om de zwangerschap tot een maand na terugkomst uit te stellen. Zika kan ook overgedragen worden via sperma. Mannen die in Zika-gebied zijn geweest wordt geadviseerd om nog twee maanden een condoom te gebruiken bij seksueel contact met vrouwen.

Diarree

Diarree is kan tot uitdroging leiden. Tijdens een zwangerschap bent u vatbaarder voor uitdroging. Let dus extra op de algemene maatregelen die geadviseerd worden ter voorkoming van diarree en uitdroging. Zie de ‘Algemene reizigersfolder’ en de folder ‘Reizigersdiarree’. Bovendien is de behandeling van langdurige of ernstige diarree moeilijker, omdat veel middelen niet gebruikt kunnen worden tijdens de zwangerschap. Denk hierbij aan stopmiddelen (loperamide) en sommige antibiotica.

Vliegreizen

Probeer te zorgen voor een zitplaats aan het gangpad voor meer beenruimte en comfort. Loop elk half uur een stukje. Drink voldoende water omdat in een vliegtuig de lucht erg droog is. De meeste luchtvaartmaatschappijen accepteren zwangere vrouwen na de 36e week niet vanwege een eventuele bevalling in het vliegtuig. Tot zeven dagen na de bevalling is vliegen af te raden, onder andere wegens de verhoogde kans op trombose. Vraag vóór het reserveren van uw reis naar het beleid van de luchtvaartmaatschappij. Als u ernstige bloedarmoede heeft of ooit trombose heeft gehad, bespreek dan uw reisplannen met uw verloskundige, huisarts of gynaecoloog.