

# Lab Policy for Future, Expecting, and New Parents at TEK

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## 1. Introduction

This policy is relevant to expecting parents, pregnant and breastfeeding women, as well as persons living with pregnant women or small babies.

It must be emphasized that a pregnancy is not a disease, and that work at the university does not in itself pose a risk to the pregnant woman or the unborn child. However, there are certain tasks that expecting/future parents, pregnant women, and breastfeeding women should not undertake for a period, as they may affect fertility, the unborn or breast-fed child.

A pregnancy is a natural and joyful event for the employee/student, but also for the university. As a workplace, the university also has a clear interest in employees having a (family) life alongside work/study. The university acknowledges its social responsibility to ensure a good and safe environment, also for pregnant women.

## 2. Purpose and Overall Principles

- To protect the fertility of future parents.
- To protect pregnant women, unborn children, and breast-fed children.
- Ensure that future parents experience TEK as a safe workplace.
- Ensure that pregnant women can stay at work/study for as long as possible.
- To indicate the options available so that pregnant/breastfeeding women can organize their work with the greatest possible consideration for the pregnancy/breast-fed children.
- To ensure uniform treatment of pregnant/breastfeeding women.
- To ensure a clear pregnancy policy.

To ensure a safe workplace, the pregnant woman, colleagues, and management must collaborate about complying with the rules for the work of pregnant women. The work must be organized in such a way that any risk factors are eliminated - either by substitution with other substances, physical aids, personal protection, or exemption from certain risky work procedures. If it is not possible to ensure a safe working environment for the pregnant woman by rearranging work processes and changed procedures, the pregnant woman must be transferred to other tasks.

It is the immediate manager, i.e., heads of research, supervisors, etc., who, in collaboration with the working environment representative, is responsible for ensuring that the work of pregnant woman is planned and carried out without danger to the pregnant woman/unborn child. They can seek help and guidance in this regard from the working environment group, from TEK's working environment consultant, SDU HR Work Environment Team, advisers, occupational medicine clinic, etc.

As soon as the immediate manager is aware that an employee is pregnant or breastfeeding, an individual written workplace assessment, APV, must be prepared, and work tasks that contain risk factors must not be carried out until they have been assessed and found to be safe. If it is not immediate manager who guides the pregnant woman in the laboratory, the laboratory supervisor should take part in the assessment, but it is still the immediate manager who is responsible.

The pregnant woman herself is also obliged, in collaboration with her colleagues, to create safe working conditions, as well as to comply with the rules for the work of pregnant women. For the sake of planning the work, the pregnant woman is encouraged to contact the immediate manager as early as possible in the pregnancy - especially if work is carried out in a laboratory.

Efforts must be made to ensure that the working environment is so safe that special measures for pregnant and breastfeeding women are unnecessary. In all areas, a general APV must be prepared at least every three years. In connection with this, the supervisor assesses in collaboration with the given working environment group/committee whether the workplace is also safe for pregnant and

breastfeeding women. If problems are identified for pregnant and breastfeeding women in the area, these problems must, as far as possible, be prevented.

To ensure a smooth and problem-free return to the job and the workplace, information meetings must be held for all employees who return after maternity leave with the immediate manager and colleagues. Here, the employee must be briefed on what has happened at the institute during the leave, where the institute is now, and what the current work tasks are. For some employees, it will also be important that close contact is maintained between the individual workplace and the employee during the maternity leave itself.

### 3. Particular Guidance for Those Who Plan to Become a Father or Mother

Regardless of whether you plan to become a parent or not, you must always protect yourself against exposure to dangerous substances and materials, infection, etc.

If you are planning to become a parent, however, it is particularly important that you pay attention to information in safety data sheets and risk assessments about the impact of substances on reproduction/fertility. Talk to your manager or your occupational health and safety representative if there are conditions in your work that worry you.

### 4. Particular Guidance for Those Who Live with a Pregnant Woman or a New-Born

If you live with a pregnant woman or a young/newborn child, you may be worried about whether you risk taking harmful substances and materials, infections, etc. home with you.

You must, of course, as always, protect yourself from exposure and comply with hygiene instructions and other guidelines.

Talk to your manager or your occupational health and safety representative, focusing on risk assessment and procedures, if there are conditions in your work that worry you.

If you are breastfeeding, also pay attention to information about breastfeeding in the safety data sheet and risk assessment and ensure that a risk assessment/APV is made for your work processes; see more in section 6 on Risk Assessment.

### 5. What Must the Employer/Manager Do?

According to the Danish Working Environment Authority's guideline regarding working environment for pregnant and breastfeeding women, an employer/manager must – when they become aware that an employee is pregnant or breastfeeding – ensure that a risk assessment (an APV) is worked out in collaboration with the pregnant/breastfeeding woman for the work processes/substances that the pregnant/breastfeeding woman is exposed to. In doing so, the employer must always carry out a risk assessment which is both about the danger level of the impact and its strength and duration. The employer's decision that the pregnant or breastfeeding woman can perform a certain task must therefore be made based on the context of her specific working conditions.

If the employer assesses that a risk may have a negative impact on the pregnancy or breastfeeding woman/breast-fed child, the employer must do the following in order of priority for the pregnant or breastfeeding woman:

- "Ensure technical measures or changed layout of the workplace or, if this is not sufficient or possible,
- Change the planning and organization of the work or, if this is not sufficient or possible,

- Transfer the pregnant or breastfeeding woman to other tasks or, if this is not sufficient or possible,
- Decide that the pregnant or breastfeeding women must not engage in the work in question.”

Source: *The Danish Working Environment Authority's guideline for the working environment of pregnant and breastfeeding women* (<https://at.dk/regler/at-vejledninger/gravides-ammendes-arbejdsmiljoe-a-1-8/>).

## 6. Risk Assessment

The pregnant woman herself is also obliged to create safe working conditions in cooperation with her colleagues and to comply with the rules for the work of pregnant women. It is important that a risk assessment is carried out as soon as possible during pregnancy.

You can find the template for risk assessment (APV) for pregnant and breastfeeding women here: <https://sdunet.dk/en/enheder/fakulteter/teknik/arbejdsmiljoe-og-personaleforhold/safety/graviditetspolitik-apv>

## 7. Ergonomic Impacts

The pregnant woman:

- Should avoid climbing ladders.
- Must organize the work in such a way that it is possible to alternate between sitting and walking/standing work.
- Must avoid lifting, pulling, pushing, and carrying.

Find more information in the guide from the Working Environment Authority: <https://at.dk/regler/at-vejledninger/gravides-ammendes-arbejdsmiljoe-a-1-8/>.

## 8. Vibrations

The pregnant woman must not be exposed to strong whole-body vibrations. These will especially come from centrifuges, but also other laboratory equipment such as large, fast-working shaking tables/shaking incubators.

## 9. Noise and Ultrasound

Knowledge about the significance of noise for the pregnant woman is limited, but heavy noise exposure above 85 dB(A) over a working day can potentially affect the unborn child, partly the ears, partly other parts of the organism. Hearing develops in the latter half of pregnancy and is likely to be damaged by strong low-frequency noise (below 500 Hz). The noise is dampened on the way through the skin, abdominal wall, uterus, and amniotic fluid to the unborn child's ears. This attenuation is very small at low frequencies. Pregnant women must therefore not be exposed to strong noise that contains low frequency (below 500 Hz).

In addition, the mother may react hormonally to loud noise, and this may have an impact on the general development of the unborn child, e.g., its weight at birth.

With ultrasound in air, the unborn child is protected by the mother's body, regardless of how powerful the ultrasound is.

The ultrasound will pass into the human tissue when the body is in contact with solid objects or liquids that oscillate with ultrasound frequencies. The ultrasound can pose a danger to both mother and child.

The ultrasound-carrying parts of an ultrasound device must be isolated from the parts that the operator touches during his/her work - and preferably with air. The ultrasound-carrying parts in devices, e.g., the horn of an ultrasonic welding device and objects/liquids, must also be shielded to avoid contact.

## 10. Chemical Exposure

Because the first third of the pregnancy is the most vulnerable period, the employer should be informed of the pregnancy as early as possible. The employer must of course be aware of the pregnancy before it is possible in practice for them to live up to the responsibility to "protect pregnant and breastfeeding employees from dangers which for them are particularly serious".

Certain chemical substances can be dangerous for the health of the pregnant woman and the unborn child.

Even when a company complies with applicable limit values for substances and materials, this does not necessarily provide safety in relation to the pregnant woman's working environment. Generally, limit values are based on health considerations, which are based on the current knowledge of the effects of the substances. But the limit values can also be an expression of a balancing of the health aspect against the technical/economic aspects or technical possibilities for control. Certain limit values are primarily aimed at preventing chronic effects, others at preventing acute effects such as irritation of mucous membranes.

Limit values are not a guarantee for the pregnant woman because they are not always updated. For example, when a long-term harmful effect such as a carcinogenic effect of a substance with a limit value has subsequently been documented. Furthermore, it is not enough for the company to comply with limit values if there is still unnecessary exposure that can be avoided.

Excerpt from guideline A.1.8-7 from the Danish Working Environment Authority: *Working environment for pregnant and breastfeeding mothers*, <https://at.dk/regler/at-vejledninger/gravidessammendes-arbejdsmiljoe-a-1-8/> and [https://ec.europa.eu/taxation\\_customs/dds2/SAMANCTA/EN/Safety/HP\\_EN.htm](https://ec.europa.eu/taxation_customs/dds2/SAMANCTA/EN/Safety/HP_EN.htm):

*"The employer must make an assessment of the risk for the pregnant woman and the unborn child when pregnant women work with or are exposed to substances and materials with the following hazard phrases on the label:*

- *H310 Fatal in contact with skin*
- *H311 Toxic in contact with skin*
- *H312 Harmful in contact with skin*
- *H340 May cause genetic defects*
- *H341 Suspected of causing genetic defects*
- *H350 May cause cancer*
- *H350i May cause cancer by inhalation*
- *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 to breast-fed children*
- *H370 Causes damage to organs*
- *H371 May cause damage to organs*
- *H372 Causes damage to organs*

- *H373 May cause damage to organs through prolonged or repeated exposure*

*Substances and materials labeled with other hazard phrases may also have effects to which fetal cells may be sensitive. Therefore, the employer must also make an assessment when pregnant and breastfeeding women work with or are exposed to the following substances and materials:*

- *Cancer-causing substances and processes*
- *Hormone disrupting drugs*
- *Volatile substances and organic solvents*
- *Pesticides*
- *Heavy metals*
- *Anesthetic gases*
- *Suffocating gases*
- *Chemical substances that are absorbed through the skin.*

*It must be noted that medicines are not labelled according to the CLP regulation but are classified according to the legislation in the field of medicines. It appears from the drug catalogue whether the individual medicinal substances are harmful to fetuses.*

*The assessment is often difficult and will generally require considerable chemical knowledge and knowledge of the importance of chemical substances for the development of the pregnancy. The individual employer will therefore often benefit from including a working environment consultancy firm in the assessment. If there are still doubts after this, the pregnant woman can be referred to an occupational medicine clinic by her own doctor.”*

Also pay extra attention to avoid dust and particles in the working environment.

Be aware, for example, that some organic solvents are harmful to fetuses at low concentrations. This applies, for example, to methyl glycol and ethyl glycol.

It will not normally be necessary to provide special protection for pregnant women who are exposed to the solvent ethanol in the air, if the work is otherwise carried out in a fully sound manner in terms of safety and health.

As a general rule, the risk to the unborn child is considered negligible if the air concentration of volatile solvents is lower than 1/10 of the limit value and if absorption through the skin does not occur.

One can find an overview of substances that must be avoided during pregnancy and breastfeeding in the Danish Working Environment Authority's guidance A.1.8-7 on the working environment of pregnant and breastfeeding women, sections 1.3 and 2 (<https://at.dk/regler/at-vejledninger/gravides-ammendes-arbejdsmiljoe-a-1-8/>).

In addition, always see the information in the relevant safety data sheet(s) and the risk assessment.

## 11. Biological Exposure

The applicable rules for laboratory classification must always be followed, and a thorough instruction must be given by the person responsible for instruction (supervisor/daily manager) before the work begins.

### 11.1 Avoid Working with Experimental Animals

Experimental animals can, among other things, carry a protozoan, *Toxoplasma gondii*, which can cause toxoplasmosis in humans. It is recommended that you have your doctor take a blood test to

determine antibodies against toxoplasmosis. The animals can also be tested. In the presence of antibody in the pregnant woman, work can continue as before; if the antibody is not found, the pregnant woman must be transferred to other tasks.

### 11.2 Avoid Working with Poultry/Birds

Work with poultry and birds should be avoided due to the risk of ornithosis (parrot fever).

Both toxoplasmosis and ornithosis can cause birth defects.

### 11.3 Avoid Working with Biological Agents of Particular Danger to Pregnant Women

E.g., Listeria can cause meningitis.

If you want to know more about the subject, you can, e.g., read the "Declaration on biological agents and the working environment" from the Danish Working Environment Authority (<https://at.dk/regler/bekendtgoerelser/biologiske-agenser-arbejdsmiljoe-1652/>).

## 15. References

TEK's template for APV/Risk Assessment for Pregnant and Breastfeeding Women:

<https://sdunet.dk/en/enheder/fakulteter/teknik/arbejdsmiljoe-og-personaleforhold/safety/graviditetspolitik-apv>

SDU's chemical database ([www.kemibrug.dk](http://www.kemibrug.dk))

The Danish Working Environment Authority (<https://at.dk/>)

Guideline for pregnant and breastfeeding women from the Danish Working Environment Authority (<https://at.dk/regler/at-vejledninger/gravidessammendes-arbejdsmiljoe-a-1-8/>).

The Danish Working Environment Authority's order no. 1234 of 29 October 2018 on the execution of the work: "*§8 pcs. 2. Special sensitive risk groups, including pregnant and breastfeeding employees, must be protected against dangers that are particularly serious for them.*" (<https://at.dk/regler/bekendtgoerelser/arbejdets-udfoerelse-1234-sam/>)

Decree on ionizing radiation and radiation protection (<https://www.retsinformation.dk/eli/lta/2019/669>)

Limit values for substances and materials (<https://at.dk/regler/at-vejledninger/graensevaerdier-stoffer-materialer-c-0-1/>)

Decree on biological agents and the working environment (<https://at.dk/regler/bekendtgoerelser/biologiske-agenser-arbejdsmiljoe-1652/>)

Gravid med job (<http://www.gravidmedjob.dk/>)

Industriens Branchearbejds miljøråd (<https://www.bfa-i.dk/>)