

Risk Assessment (RA)

Link to template

The RISK ASSESSMENT looks on three main things:

- The job
- The tree
- The surroundings

We can minimize hazards if an accident occur by:

- Identifying the possible risk
- Evaluate them
- Take action to prevent the seriously risky things

Before you start a job, you need to make a Risk Assessment: A description where you really have thought through the risk of the job and the surroundings and thought through how to minimize the risk. When you have done this, you are better prepared to handle risky situations in the job.

HOW OFTEN: Make a Risk Assessment to every job as a preparation, just as you ensure to bring correct gear to the job and enough fuel. Put the RA at the same place every time so that everybody in the team know where it is - maybe in the windscreen of your van.

WHY: The Risk Assessment make the work more safe by prevent accidents or by being better prepared when an emergency happened. The work must be safe both for the arborist and for the surroundings. (Directive 89/391 Framework Directive on the working environment).

Risk assessment – prof. Tree Climbing 28.08.2018
Responsible for the risk assessment: Date: _____ name: _____

| The work | |
|---|--|
| Date | |
| Address | |
| Responsible for the assessment | |
| General description | |
| The customer - address and phone number | |
| General procedures in case of accidents | |
| Alarm signal - Rescue | |
| Doctor on call/emergency ward | |
| Nearest hospital/doctor on call/emergency room | Map and driving instructions attached: Yes ___ No ___ |
| Meeting point for rescue team - internal administrative address | |
| Emergency case of an accident | |
| Workplace Assembly Point | |
| Number and names of workers on the site | |
| General precautions in case of accidents | |
| First aid kit/first aid kit | Must be worn by all |
| First aid kit, Risk assessment and Car key | in the windshield of the car |
| Location of Rescue kit | |
| Signature, Contact, phone number and name | |
| Relevant and known legal matters | <ul style="list-style-type: none"> • Branchenævnet om arbejdsmiljø og erhvervsområde træfældning 2017 • Arbejdsmiljøloven § 2.3. Træarbejde og sikkerhedsregler • Arbejdsmiljøloven § 5.1.3. Arbejde med motorværktøjer • Arbejdsmiljøloven § 5.1.4. Arbejde med redningsudrustning • Arbejdsmiljøloven § 5.2.1.3. Arbejdstøj i højden. Tryk og |

Risk with the work assessment and precautions

| Detailed description of the work assignment | Precautions |
|--|--|
| The tree | <ul style="list-style-type: none"> • Ground assessment around the tree • Working in close proximity with another tree • WORKING ABOVE A TREE • Fragile and/or rotten branches • Sudden rain • Work with heavy work, horizontal work which may cause imbalance • Work with tools, falling parts • Low visibility • Wind/strong/wind gusts • Motor vehicle engine failure • Dry or too dry |
| Wind and rain conditions | |
| Traffic and pedestrians | |
| Buildings, power lines, underground cables | |
| Ground conditions / nearby installations in the ground / existing plants | |
| STORMMØD - most important conditions | |
| Working methods | Guidelines in IM |
| Personal protection equipment (PPE) | |
| Signage and direction: conduction, signs and signals | |
| Special precautions | |

Risk assessment – read and accepted. Date: _____
Name: _____

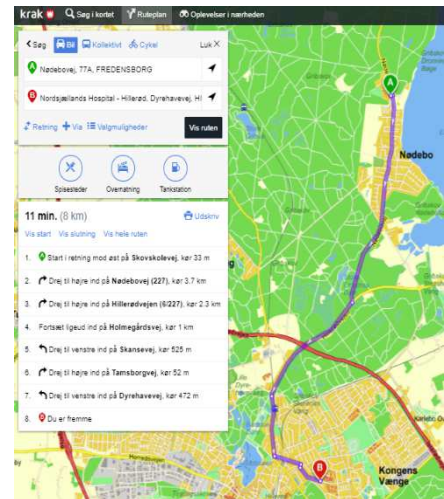


Fig 1. Example of a Risk Assessment – with four sub-elements and map to nearest hospital

There is no standard Risk Assessment.

In fig. 1. you can see an example with helpful information in case of an accident.

It is a good idea to make it as a template and preprint it.

! The simple Risk Assessment is a piece of paper with your: Working address, number of workers and map and directions to nearest hospital.

How to make the Risk Assessment:

Fill in general data first and data for exactly this job in the end of the template

– Here an example:

Under “The work”, fill in general data about the work:

- Date for the job,
- location of the working place,
- person responsible for the job,
- person responsible for the assignment and
- Name of the costumer.

| The work | |
|---|--|
| Date | |
| Address | |
| Responsible for the assignment | |
| General description | |
| The customer – address and phone number | |

Under “General procedure”, fill in the information you need to get help at this location;

- Emergency number,
- Number to nearest hospital
- Meeting point for rescue team in case of accident and Address for nearest hospital.
- Numbers of workers on the site etc.

| General procedures in case of accidents | |
|---|--|
| Emergency number – Rescue | |
| Doctor on call/emergency ward | |
| Nearest hospital/doctor on call/emergency room | Map and driving instruction attached; Yes _____ No _____ |
| Meeting point for rescue team – nearest permanent address | |
| Driver(s) in case of an accident | |
| Workplace Assembly Point | |
| Number and names of workers on the site | |

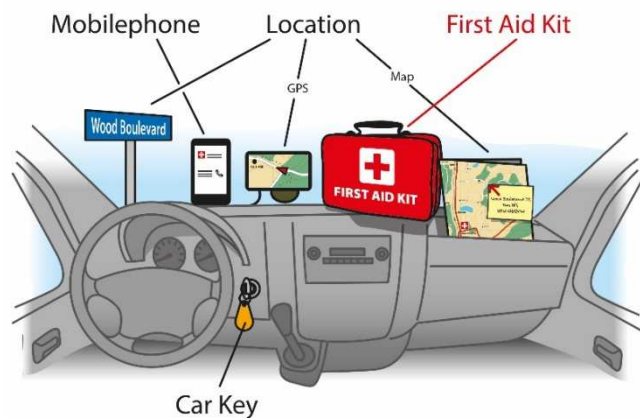


Fig. 2 Example of “General data and precautions”

Under “General precautions”, describe how you have prepared to help on the site:

- Location of rescue kit
- location of first aid kit, location of car key
- Names of drivers if an accident happen

| General precautions in case of accidents | |
|---|---|
| First Aid Compress Bandage | Must be worn by all |
| First aid kit, Risk Assessment and car key's | In the windshield of the car |
| Location of Rescue kit | |
| Company Contact, phone number and name | |
| Relevant and known legal matters according to country | <ul style="list-style-type: none"> • Branchevejledning om arbejdsmiljø ved erhvervsmæssig træklatrning 2017 • At-vejledning D.2.8; Fælde- og skovningsarbejde • At-vejl. B.5.1.1. arbejde med motorsave • At-vejl. D.3.1 Løft, træk og skub • At-vejl. 4.2.3 -1 Arbejde i højden fra reb |

Under

Risk with the work assessment and precautions

Se Fig. 3,

You find Risks relevant to THIS job and this tree. Here you note which precautions you will take.

Go through the three zones for risks; surroundings, job and tree.

- You need to find, evaluate and decide how to prevent risks.

Finally - FILL IN: After you have gone through the Risk Assessment, tree and surroundings, fill in how to prevent the serious risks.

Here are some examples how to go through the procedure

First Risk Zone - The surroundings:

Look on the surroundings now and evaluate if there are problems now. Try to look back in years – what have happen and could it have affect the tree? Did it happen, before or after the tree was planted?

Look after changes in terrain, color in pavement, asphalt and grass

Prevent. If you find serious things in the surroundings, you must find ways to remove the risk. Alternatively, make it so small that it is not serious – reduce the risk.

- Buildings and installations
- Terrain
- Ground conditions
- Traffic and audience
- Installations under ground
- Power line over and under ground
- Remaining plants

Second Risk Zone - The job

Depending on the kind of job, there are different risks.
The main task is pruning or section felling.

Find: When you are pruning the risk can be cutting you with the handsaw, when you are making a safety pruning with removing of dead branches they could break before you expect.

Assess: It is a potential serious risk cutting your left hand if you hold close to the saw track. The risk of getting a little fall if a branch break is always there.

Prevent: If you keep your left hand 15cm from the saw track you minimize the risk of cutting the hand. To prevent a fall, you always need to click your lanyard on.

| Risk with the work assessment and precautions | | |
|---|--|-------------|
| Detailed description of the work assignment | | |
| | | Precautions |
| The Tree | • Ground elevation/cracks around the root | |
| | • Missing or visible root outlet with wounds/ dead bark | |
| | • Inclined trunk / double trunk | |
| | • Fungi Fruit body/wood degradable fungi | |
| | • Double trunk | |
| | • Trunk with former wounds, loose/dead bark, cracks, holes, lowering/elevation in the bark | |
| | • Bees, wasps, bats, climbing plants | |
| | • Tree species | |
| | • Dead/hanging/loose branches | |
| | • Sharp branch angels/ingrown bark, | |
| | • Dry in the top | |
| • Other | | |
| Wind and rain conditions | | |
| Traffic and audience | | |
| Buildings, power lines, greenhouses etc. | | |
| Ground conditons / terrain/ installations in the ground/ remaining plants | | |
| SUMMARY – most important precautions | | |
| Working methods | Climbing or lift | |
| Personal protection equipment (PPE3) | | |
| Security- and dropzone; cordoning, signs and signals | | |
| Special precautions | | |
| Risk Assessment – read and accepted. Date _____ | | |
| Name(s); _____ | | |

Fig 3. Risk Assessment template – risk and precautions

Third Risk Zone - The tree:

Here you need to go through the whole tree as in Fig. 3: from the area around the tree, the tree base, trunk crown up to the end of all small limbs.

Prevent. If you find things near or in the tree, which you mean are seriously, you must find ways to remove the risk. Alternatively, make it so small that it is not serious.

Examples of problems in a tree:

Trunk

- Double trunk
- Bark over a former wounds
- Cracks, holes and cavities
- Lowering or elevation in the bark
- Fungi
- Loose bark, dead bark or without bark
- Insects or holes after insects
- Bees and wasps
- Birds' nests
- Bats
- Plants climbing on the trunk – can hide decay, cracks etc.

Crown

- Tree species
- Dead and/or loose branches or on the top of the branch
- Branches with unnatural breaking paths
- Holes from old dead branches, logging or collision damage, pruning, lightning,
- Horizontal broken branches
- Pointy angles between the stem and a branch or between 2 branches
- Ingrown bark

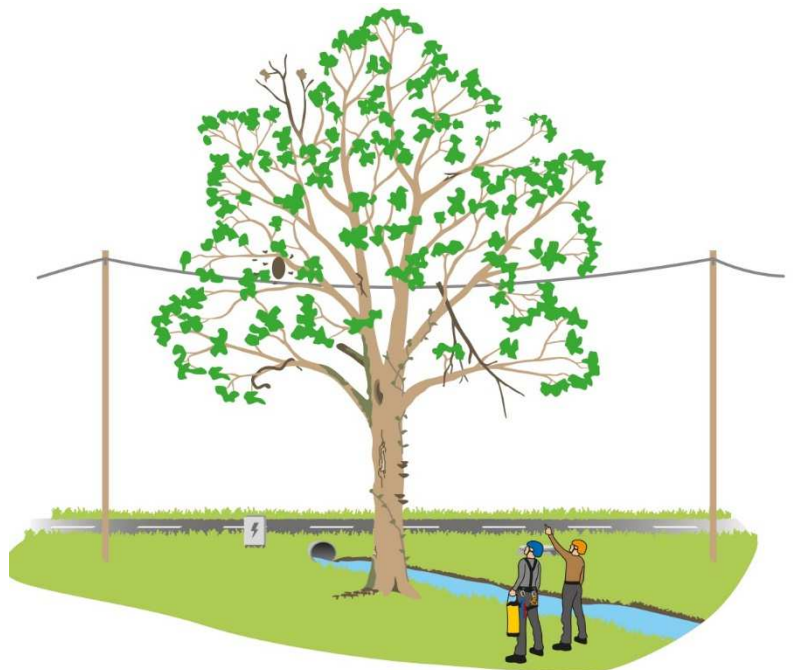


Fig 3. Inspection of tree with damages

Root

- Elevated level around the root crown or cracks in the ground
- Root outlet over the ground - with wound, cracks, dead bark or without bark
- Missing rootlets
- Fungi on the ground or on the roots
- Inclined tree

Under surroundings, you also have to decide if it is necessary to cordoning off traffic and audience. This zone is the security zone. Fig. 4.

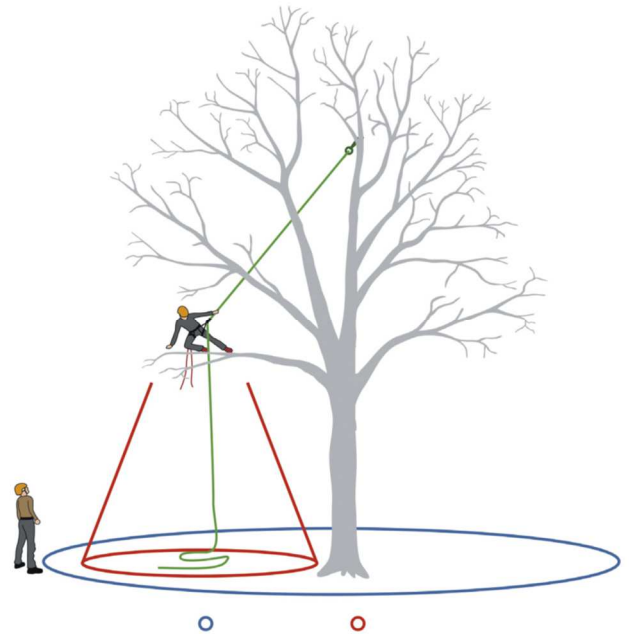




Fig. 4. Security and drop zone.

-  Security zone
-  Drop zone

The area where pieces from the tree can fall down is called the drop zone. Especially for the grounds persons safety you have to define that zone and have special precautions and rules when you move in to this zone - only persons from the work team, are allowed to be there.

Finally - FILL IN: After you have gone through the Risk Assessment, tree and surroundings you must fill in how to prevent the seriously risk. *Link to template*

In Fig 5. You have an example of a problem, and how you can minimize the risk.

Risk with the work assessment and precautions

| Detailed description of the work assignment | | |
|---|--|---|
| | | Precautions |
| The Tree | • Ground elevation/cracks around the root | (The tree can fall) |
| | • Missing or visible root outlet with wounds/ dead bark (the tree can fall | (The tree can fall) |
| | • Inclined trunk / double trunk | (The tree can fall) |
| | • Fungi Fruit body/wood degradable fungi | The tree can fall) |
| | • Ground elevation/cracks around the root | ./. |
| | • Missing or visible root outlet with wounds/ dead bark | ./. |
| | • Inclined trunk / double trunk | There is a very small crack where the trunk divides. We put a truck strap around the double trunk if you are going to climb it |

Fig. 5: Example of something on the tree that poses a risk and how to minimize the risk

If there are things, you are insecure of – ask anyone who is more experienced.

!! Sometimes you'll have to decide, if the tree is so bad that you can't climb in it. You must then find an alternative.

Summary

In your daily work, it must be easy and quick to make the Risk Assessment – use a preprinted template and remember to print a map and direction of the route to the nearest hospital – in the case you lose power on your GPS or phone.

By making the Risk Assessment, all the information you need in an emergency is collected, and Rescue is not dependent on the presence of any person special.

When you have made a Risk Assessment, you are better prepared to handle the situations if the work is not going as planned.