Investigation of near incidents

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| **Paradigm (template) for near incidents for the Danish Road Directorate’s building, construction and maintenance works** | | |
| **Guidance for recording and investigating near incidents:** The Danish Road Directorate wishes to identify near incidents which happen in relation to DRD’s projects. The expectation is to obtain more knowledge and gain greater insight into industrial near incidents. Generally, the present paradigm for investigation and registration is expected to contribute to a better learning of near incidents as well as an efficient prevention both in the short and in the long run.  This paradigm is to be used, if the incident did ***not*** cause personal injury. In case of personal injury you are referred to “Paradigm for investigation of accidents for the Danish Road Directorate’s building, construction, operation and maintenance works”.  On the last page you’ll find the Danish Road Directorate’s definitions of “industrial accident” and “near incident”, respectively.  The form is to be completed by ticking the boxes and providing comments. For incidents involving injuries of a psychological nature, the immediate supervisor will assess the level of detail of the investigation.  The form is divided into the following sections and is to be filled in as stated:  **1.** General information: Fill in the fields and tick the boxes, where you can answer *YES* to the information  **2.** Course of events: Give an account, as accurately as possible, of the course of events  **3.** In which way did the near incident happen: Tick the category which is the most suitable category or elaborate under “Other”. A distinction is made between near incidents happening on the actual construction site and near incidents happening when moving between the traffic area and the work area.  **4.-18.** Causes and contributing factors: Tick where you can answer *YES* to the information and possibly elaborate more in detail under “Comment.”  **19.** Preventive measures: The fields are to be filled in with the actions and the agreements that have been concluded regarding preventive measures.  **20.** Tick whether the company’s own H&S Organisation (AMO) has been involved in the investigation of the near incident.  **21**. Images: IMPORTANT! Insert images from the scene of the near incident, e.g. machines, surroundings, special conditions etc. See also section 21.  **22**. Reserved for DRD’s Emergency Contact (AMK)/H&S person. Additional information, conclusion, notes etc. as well as quality assurance of the investigation of the near incident. | | |
| 1. **General information:** | | |
| Project No.: | | Contract No.: |
| Contract Name: | | |
| Name of the employer involved in the near incident: | | |
| Danish company | Foreign company | Nationality of the company: |
| Place of incident: | | |
| Date and time: | | |
| Investigation carried out by: | | |
| 1. **Course of events:** | | |
| ***Describe what happened*** | | |
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| 1. **In which way did the near incident happen:** | | |
| *Under which type of damage can the near incident be recorded? (If it had gone wrong)* | | |
| 1. Fall at the same level  2. Fall to a lower level  3. Physical overload  4. Hit by or bumped into object/ person in motion (e.g. impact)  5. Mental stress | | 6. Pointed/sharp object, contact with  7. Jammed or crushed in machine parts or similar  8. Drowned/buried/ suffocated etc.  9. Other – Elaborate 10. Vehicular impact when moving between the traffic area and the work area. The near incident has been caused by external traffic not taking place within the actual construction site. |
| **Causes and contributing factors** *– The questions below do not form an exhaustive list – please add further information under comments.* | | |
| 1. **Layout of the construction site – physical factors:** | | |
| Was there a lack of space or light? | | Comment: |
| Did the employee, or others, have insufficient view? | | Comment: |
| Was there a lack of bracing, screening or closing off? | | Comment: |
| Was there a lack of effective alarms or escape opportunities? | | Comment: |
| Other? | | Comment: |
| 1. **Traffic and transport – physical factors:** | | |
| Was it unclear where the road traffic was to take place? | | Comment: |
| Was the terrain/surface/road/floor uneven? | | Comment: |
| Was the terrain/surface/road/floor in an unsafe condition? | | Comment: |
| Was there a lack of division of walking and vehicular traffic? | | Comment: |
| Did the employee have limited view? | | Comment: |
| Was the marking plan followed? | | Comment: |
| Was the right level of protection established? | | Comment: |
| Was there a difference between the planned and the actual level of protection? | | Comment: |
| Was any speed limit observed? | | Comment: |
| Was there a lack of signage? | | Comment: |
| Was there clutter and disorder on access and traffic roads? | | Comment: |
| Other? | | Comment: |
| 1. **Humans – physical factors:** | | |
| Did violent or threatening persons cause the near incident? | | Comment: |
| Were people making sudden movements a contributing factor? | | Comment: |
| Were people who were physically or mentally weakened a contributing factor? | | Comment: |
| Other? | | Comment: |
| 1. **Handling of topics – physical factors:** | | |
| Did lifting, pushing or carrying cause the near incident? | | Comment: |
| Did the design or weight of the item matter? | | Comment: |
| Was the item handled in a poor working position? | | Comment: |
| Was the item inappropriately placed? (How?) | | Comment: |
| Was there a lack of technical aids? (Which?) | | Comment: |
| Is there a technical aid for the task? | | Comment: |
| Was it impossible to use technical aids? | | Comment: |
| Other? | | Comment: |
| 1. **Chemical or biological factors:** | | |
| Was the near incident caused by skin contact/eye contact/inhalation or ingestion of chemical or biological substances and materials? | | Comment: |
| Was the near incident caused by inappropriate storage and placement? | | Comment: |
| Was the substance or the material inappropriately handled? | | Comment: |
| Was insufficient/no personal protective equipment used? | | Comment: |
| Was personal protective equipment unavailable? | | Comment: |
| Was it possible to substitute? | | Comment: |
| Was it possible to remove/prevent the impact at the source? | | Comment: |
| Other? | | Comment: |
| 1. **Mess and disorder – physical factors:** | | |
| Was the near incident caused by falling and tripping over an object? | | Comment: |
| Was the surface slippery/uneven? | | Comment: |
| Did the employee have anything in his/her hands? (lack of visibility) | | Comment: |
| Was space inadequate? | | Comment: |
| Was it impossible to use technical aids? | | Comment: |
| Other? | | Comment: |
| 1. **Insufficient maintenance of auxiliary means and machines – physical factors:** | | |
| Were the auxiliary means/machines damaged or reduced? | | Comment: |
| Was the near incident caused by insufficient cleaning or maintenance of aids/machines? | | Comment: |
| Did the near incident occur while the aid/machine was being repaired, maintained or cleaned? | | Comment: |
| Other? | | Comment: |
| 1. **Auxiliary means or machines – physical factors:** | | |
| Was the aid/machine unsuitable for the task? | | Comment: |
| Was the aid/machine insufficiently designed? | | Comment: |
| Was the aid/machine operated incorrectly? | | Comment: |
| 1. **Other concerns than safety – planning and personal factors:** | | |
| Were there any conflicts with other legislation, time, quality, deadlines, ethics, etc.? | | Comment: |
| Was the employee disturbed/distracted by other events/tasks performed at the same time? | | Comment: |
| Did the injured party/colleagues show any special risky behaviour? | | Comment: |
| Other? | | Comment: |
| 1. **Conditions in the surroundings:** | | |
| Did noise drown any warning signals? | | Comment: |
| Was glaring light a contributing factor? | | Comment: |
| Was strong wind or cold/the weather a contributing factor? | | Comment: |
| Other? | | Comment: |
| 1. **Insufficient planning of the work:** | | |
| Did lack of knowledge about the work mean that it was not planned safely? | | Comment: |
| Were there any challenges/changes in weather conditions or predictable malfunctions that were not taken into account? | | Comment: |
| Were the wrong aids/protective aids chosen? | | Comment: |
| Was there a lack of time, resources, support/help to get the job done? | | Comment: |
| Was the sequence or timing an aggravating factor? | | Comment: |
| Other? | | Comment: |
| 1. **Insufficient professional skills:** | | |
| Did the employee lack knowledge of the task? | | Comment: |
| Did the employee lack relevant vocational training? | | Comment: |
| Did the employee lack experience with similar tasks? | | Comment: |
| Was there a lack of instructions for the task? | | Comment: |
| Other? | | Comment: |
| 1. **Insufficient knowledge about safety:** | | |
| Was lack of knowledge about safety a factor? | | Comment: |
| Had a risk assessment been made of the task? How? | | Comment: |
| Other? | | Comment: |
| 1. **Human conditions:** | | |
| Did the employee misjudge the situation? | | Comment: |
| Were other people's unexpected actions a factor? | | Comment: |
| Was there a failure in communication with others? | | Comment: |
| Was the employee tired, inattentive or weakened? | | Comment: |
| Was the emergency response plan followed? | | Comment: |
| Other? | | Comment: |
| 1. **Insufficient safety equipment:** | | |
| Did the employee use the wrong equipment? | | Comment: |
| Was the employee's incorrect use of the equipment a factor? | | Comment: |
| Did the employee use the correct safety equipment? | | Comment: |
| Was the correct safety equipment available and within reach? | | Comment: |
| Were instructions given in the safety equipment? | | Comment: |
| Were there any malfunctions of the safety equipment? | | Comment: |
| Other? | | Comment: |
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| 1. **Preventive measures:** | | |
| **In the short term (What is being done here and now to ensure that the near incident is not repeated):** | | |
| **Contractor/Supplier:** |  | |
| Action: |  | |
| Responsible for initiating: |  | |
| Deadline: |  | |
| **Consultant/Designer:** |  | |
| Action: |  | |
| Responsible for initiating: |  | |
| Deadline: |  | |
| **Client:** |  | |
| Action |  | |
| Responsible for initiating: |  | |
| Deadline: |  | |
| **In the long term (What will be done in the future to ensure that the near incident is not repeated):** | | |
| **Contractor/Supplier:** |  | |
| Action: |  | |
| Responsible for initiating: |  | |
| Deadline: |  | |
| **Consultant/Designer:** |  | |
| Action: |  | |
| Responsible for initiating: |  | |
| Deadline: |  | |
| **Client:** |  | |
| Action: |  | |
| Responsible for initiating: |  | |
| Deadline: | | |
| 1. **The company's internal processing:** | | |
| Has the company involved its own (internal) H&S organisation in the near incident and preventive measures:  Yes  No | | |
| 1. **Images:** *Insert images from the near incident scene - Alternatively, try to "recreate" the situation WITHOUT any danger and document this with images or attach images of machines, surroundings, technical aids, special conditions, etc. from the incident situation* | | |
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| 1. **The DRD's own notes/any conclusion - Reserved for the DRD's Health and Safety Coordinator/Health and Safety Contact Person** | | |
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# Definitions

*Excerpts of the Danish Road Directorate’s memo “Accident statistics – definitions and description”:*

Industrial accident**:** “An accident is a physical or psychic injury – which may be lasting or temporary – and which occurs in the wake of an incident or impact. The incident or impact must be sudden or last for five days at the most” (Cf. Labour Market Insurance (Arbejdsmarkedets Erhvervssikring) 17/11-2020)

If the industrial accident prevents the person from continuing their normal work for 1 day or more beyond the day of injury, the Danish Working Environment Authority (Arbejdstilsynet) must be notified of the industrial accident (Cf. Arbejdstilsynet 17/11-2020). In DRD’s accident statistics a distinction is made between accidents with absence and accidents without absence.

*Definition of accidents in DRD management:* An accident is an incident which, independent of absence, has caused personal injury.

Definition of absence in connection with accidents: The accident has caused absence beyond the day of injury.

All accidents are included in DRD’s accident statistics.

Near incident:  
*Definition of near incidents in DRD management:* We use the designation near incidents for a variety of different situations, actions, conditions etc. Common to all of them is that these contain one or more hazards or risks.

The hazard may be in the gap between a *potential condition* and something *about to happen*. This is why we do not select on the time perspective related to near incidents. The near incidents are of great significance since they can have a big preventive effect. The number and the severity of these give us an image of the probability with which they reoccur as well as which consequence/type of accident this might entail.

# Document Management

This form is to be deleted when using the paradigm:

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| Approved by | Unit/Network | Topics in the QMS | Next revision | Access | File no. | Author |
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