VISION ZERO.

In reality:

Over 20 years without Occupational Accidents in a High-Risk Industry

Peter Rödel / 16 March 2017
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VISION ZERO. Feasible or dream?

Some basic statements:

1. Vision Zero is not only a target but it is also part of the prevention strategy you need for a national OSH-program

2. Realize that accidents at work and occupational diseases do not occur by twists of fate

3. It is your moral obligation to prevent them
VISION ZERO: Feasible or dream?

Contents of my presentation:

• Some general aspects concerning Vision Zero
• Get aware about your starting situation
• Define your targets
• Make a plan how to reach the targets.
• Case study: Zero accidents in High-Risk Industry
• How to get there?
• Prevention culture - some theoretic aspects and Prevention culture in praxis
• Conclusion
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Some general aspects according to

Golden Rule No.1:
Take leadership commitment!

• Leadership at all levels of mine management is a general prerequisite
• No reliable commitment of the highest level of the management, no success!
• Safety is the most important responsibility of the managers, not of the staff or the experts.
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Identify Hazards and risks according to Golden Rule Nr. 2

Get aware of your starting position and make a realistic inventory of your situation.
Get aware of your starting situation (1)
Get aware of your starting situation (2)
Get aware of your starting situation (3)
Get aware of your starting situation (4)
Get aware of your starting situation (5)
Get aware of your starting situation (6)
Get aware of your starting situation (7)
Get aware of your starting situation (8)
Get aware of your starting situation (9)
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- After the inventory: Define your targets
- What is “Zero Accidents” in your reality?
- How to count? Define what is an accident! After one day of absence (e.g. Germany) or after 21 weeks (Asian country)?
- Who counts? State authorities, accident insurance companies, your company?
Feasible or dream?

When setting safety and health targets (Golden Rule Nr. 3) make clear,

1. ... how to count accidents according to what standard/criteria? From the ILO or individual states-standards/criteria?

2. ... how occupational diseases are defined.

3. ... who takes care of workers and their families?

4. ... how to define your targets on the basis of the results of your inventory and the available resources.
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Case study:
Over 20 years without occupational accidents in a German cement plant.
Vision Zero in Reality: Over 20 years without Occupational Accidents in High-Risk Industry

Peter Roedel Presentation 9th September 2016 at the 1ST VISION ZERO Conference in Bochum
Situation in the 1980's in a German cement plant:

- Technical equipment did not fulfill all requirements of laws and prescriptions.
- Employees were not so well trained as necessary with respect to the dangerous jobs they had to do.
- One fatal accident due to „typical“ behavior and errors in 1986.
- Accident and absence rates higher than average of German cement works.
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What does 0 accidents mean?

Until 2007 in Germany an accident was defined as „unable to work due to an accident more than three days“.

Since 2008 it is defined as „unable to work for more than one day“.

And the staff of the plant shown in the last picture is working for more than 20 years without occupational accidents according to the above mentioned criteria.
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How to get there? (1)

- Establish clear organizational structures according to Golden Rule Nr.4.
- Care for the safe conditions of all technical installations including tools of the craftsman (Golden Rule Nr.5).
- Training of all employees and convincing them of the advantages of safe working.
- Training of management, foremen and workers on the job.
- Training on special jobs like working in height, handling of explosives, working in high-voltage installations....
Training of working in height
VISION ZERO.

Feasible or dream?

How to get there? (2)

- Make sure of reasonable contents of the trainings.
- Make sure of realizing training in the scheduled way.
- Initiate open discussion on risky situations and near accidents.
- Take part in a network/networks where accidents, near accidents and fatal accidents are anonymously communicated and evaluated and use this information for your plant/installation/prevention purposes.
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How to get there? (3)

- Organize safety working groups in the company and in your (here: cement-) association.

- Make sure that all responsible persons live safe working as a consequent role model, also in their private area.

- Create a situation of confidence, allow to make mistakes, help workers to avoid mistakes.

- Do not punish someone who has failed, but be consequent.

- Create a public reward for very successful safe work, for ideas to improve safe work or zero accidents like

  - the annual safety award, initiated by Helmut Ehnes and supported by Mr. Meesmann
Vision Zero in Reality: Over 20 years without Occupational Accidents in High-Risk Industry
VISION ZERO.
Feasible or dream?
How to get there? (5)

- Convince your staff that safe work is also a demonstration of high quality work and no spleen of the management.
- Make clear that there is an important influence of safe work on quality of production, production costs and productivity.
- Good, helpful and realistic risk analysis need good preparation and planning of the work to be done.
- Conduct your risk analysis not only for the standard works but also for all repair and demolition situations.
VISION ZERO: Feasible or dream? How to get there? (6)

- Do not forget to care for healthy working conditions.
- In our reference plant, the actual rates of lost work time are at about 50% of the average of the European cement industry.
- Address to the people doubting about VISION ZERO: This fact pays out!
- PPE, light, climatisation, tools, seats, screens, regular service of occupational physician etc. must be kept in mind.
- Remember: OSH is like dust sweeping at home.
- You have to do it every day.
“Safety” is usually defined as a state in which the remaining risk is classified as “acceptable” on e.g. the basis of the number of accidents.

But this definition refers only to the history and implies a more or less personal opinion.

It strongly seems to be better to understand “safety” as a “process with human beings, technology and organizational structures to be optimized“.

This process is / should be part of your “safety culture“

The “safety culture“ and the “safety climate“ are very important factors incorporating usefulness and codes.
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Feasible or dream?  
Prevention culture, some theoretical aspects (2)

• The “situational awareness” is essential for the perception, the understanding and the anticipation of a situation.
• Why do mistakes occur?
• Fatal accidents are not caused by one isolated mistake of one person but they are a part of a series of failures.
• And these failures are part of the individual situation in your staff:
  o How to solve a problem, which is the most important one?
  o Invest in your staff, make them proud of their work, motivate them.
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Prevention culture, some theoretical aspects (3)

- We see that “VISION ZERO” is not only a question of laws and prescriptions, but has a lot to do with human beings and their coaction with technology.
- “VISION ZERO” is a dynamic process. The state of the art from 200 years ago will not be very convincing today, not only due to modified laws and prescriptions.
- Without taking your staff with you, you will never succeed with “VISION ZERO”
- But if you can convince your staff, “VISION ZERO” will become sustainable reality.
Many people argue that a contradiction exists between the goals of OSH and the goals of production.

If your approach to “VISION ZERO” is only superficial, they may be right in a certain way.

But if your approach is fundamental and honest, you will meet not only a moral obligation and fulfill laws and safety obligations, but you also reach a better efficiency, higher production rate at lower costs and better quality by better preparation of production procedures which you need for good risk analysis in any case.
Besides all laws and regulations we have to keep in mind:

The most important features of „VISION ZERO“ in daily life are the safety culture in your organization and the risk awareness in your workers mind.

And these are two extremely ambitious goals.
Accidents at work and occupational diseases can and must be prevented.
VISION ZERO helps to reach that goal and finally Zero Accidents.
The case study shows that it is possible to combine a high safety standard and zero accidents with high productivity of your work.
You probably need a great number of measures like clear organizational structures and responsibilities, training on all levels and …
... shared prevention knowledge with colleagues / other companies etc. to learn from each other.

Convince your staff that safe work is a huge advantage for everybody, for the image and the quality of your products.
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Conclusion (3)

Become aware of the fact that safety is a sophisticated process involving human beings, technology and organizational structures, to be optimized by establishing a safety culture in your organization and the risk awareness in your workers mind.
Thank you for your kind patience and attention!