CHANGES 15TH EDITION BASIC TRAINING

EMERGENCY RESPONSE OFFICER

In 2019 the 14th edition of 'Basic Training Emergency Response Officer' was published. Instructors, readers and students gave us important feedback that we have incorporated into the 15th edition. The most important changes are set out in this document. These changes have also been incorporated into the e-learning, the PowerPoint presentations and the exams.
References to page numbers in this document mean the page numbers of the 14th edition. The new images of smoke dispersion have been changed in the exams too.

Page 13

After the last line of paragraph 1, the following new text has been added:

The number of emergency response officers needed depends, among other factors, on the risks and incidents that may arise at your company, the type of building and people's self-reliance.

Are you wondering how to determine the right number of emergency response officers? Read the Emergency Response Team Manual and/or take the course for Coordinator/Head of Emergency Response. The Manual on ER will provide you with lots more information about legislation and regulations, how to organise emergency response and many more subjects. For more information, please visit nibhv.nl

Page 16

Following feedback from readers and in response to the Covid-19 pandemic, two new sections have been added:

9 The importance of regular practice and refresher courses

Even if you have taken the very best emergency response course, the benefits will be minimal if you don't keep your knowledge and skills sharp through regular practice.

NIBHV recommends that you schedule a refresher course at least once a year. This is because research shows that people quickly forget what they have learned if they don't make regular efforts to maintain their knowledge and skills. This is all the more so where the knowledge and skills involved, such as those of emergency response officers, are used only rarely. It is therefore necessary to practise so that emergency response officers remain prepared for interventions.

Besides refresher courses for individual EROs, the ER organisation and employees also need to hold drills. NIBHV, like the Inspectorate SZW, has good reason for recommending that evacuation drills be held regularly, at least once a year in fact. This ensures that people remember what they have learned, keeps their skills sharp and guarantees the quality of the ER organisation.

10 Emergency response during a pandemic

A pandemic such as COVID-19 has a major impact on society as a whole and on the functioning of ER teams. Consciously taking a safe approach to work is extremely important during a pandemic. ER team interventions, but also for example the way in which you provide first aid or perform CPR, may need to be adapted. This has implications for your course and for ER interventions at your company.

NIBHV is closely following current developments. We are advising and informing trainers and instructors about adaptations to courses. Our website nibhv.nl provides information for emergency response officers and companies about ER team interventions during a pandemic. In this respect we follow the guidelines laid down by the government and knowledge institutions such as the National Institute for Public Health and the Environment.

Page 20

In Figure 3, the words 'aftercare' and 'intervention' have been reversed to make them easier to read

has been changed to:

Page 28

For questions 4 and 5, the columns 'approach' and 'actions' have been reversed, because students must first look at the actions and then take the correct step mentioned in the 'approach' column.

4. During an ER intervention, you follow the 'look, think, act and check' approach.
   Match each of the four actions below (1-4) to the appropriate step of this approach (a-d):

Approach	Actions
a. look	1. asking a casualty whether or not a bandage has been applied too tightly
b. think	2. assessing a casualty's injurie
c. act	3. disinfecting a wound
d. check	4. asking yourself what the first step is in treating a wound

The table has been changed to:

Actions	Approach
1. asking a casualty whether or not a bandage has been applied too tightly	a. look
2. assessing a casualty's injuries	b. think
3. disinfecting a wound	c. act
4. asking yourself what the first step is in treating a wound	d. check

5. During an ER intervention, you follow the 'look, think, act and check' approach.
Match each of the four actions below (1-4) to the appropriate step of this approach (a-d):

Approach	Actions
a. look	1. rolling out the fire hose
b. think	2. keeping an eye on the amount of smoke
c. act	3. assessing the scene for more flames after extinguishing a fire
d. check	4. assessing whether it is possible to attempt to extinguish the fire

The table has been changed to:

Actions	Approach
1. rolling out the fire hose	a. look
2. keeping an eye on the amount of smoke	b. think
3. assessing the scene for more flames after extinguishing a fire	c. act
4. assessing whether it is possible to attempt to extinguish the fire	d. check

Page 35, 37, 38 en 42, 51, 53, 90

Instructors commented on the amount of smoke dispersion in the images, saying that the difference between Figures 2 and 3 was too small. The images have now been changed as follows.

has been changed to

2. The smoke collects in a thin layer near the ceiling, well above head height for an adult.

 has been changed to 

3. The smoke collects in a thicker layer near the ceiling, just above head height for an adult.

Page 37

Below image 7, the following text has been added to clarify that the flame size and smoke dispersion do not have to occur simultaneously:

Please note: the flames shown in Figure 7 do not occur at the same time as the smoke that is shown. Smoke and flames must be assessed separately.

Page 42

Question 3: the red stripe has been replaced with an orange stripe to bring this into line with technical drawings.

Page 46

The following changes have been made in section 3:

- The latest figures on fires at commercial properties have been included.
- The section title has been changed to: Causes of fires at commercial properties
- The text of the second paragraph has been replaced with the text below:
  According to the Commercial Property Risk Monitor (Risicomonitor Bedrijfsbranden) of the Dutch Association of Insurers (Verbond van Verzekeraars), the main causes of fires in 2019 were arson, short circuits and human conduct. Insurers received 3,972 claims in 2019, compared with 4,096 in 2018.
  Most fires in 2015-2019 started on weekdays, mainly on Mondays (daily average of 13) and Thursdays (daily average of 12.7).
  Most fires started in buildings with an industrial designation (31%), followed by offices (22%) and retail properties (20%).
  Fires don't just put people who work on the premises in danger due to smoke and flames; a burning building also poses a threat to its surroundings. For example due to chemical leakages, toxic vapours or asbestos. After a fire, a business may face major financial problems if it doesn't have coverage for this type of consequential loss. It is therefore crucial to prevent and limit any fires at commercial properties. A good ER team can detect and extinguish fires at an early stage, thus preventing a major fire and/or limiting the broader consequences, such as casualties, sickness absence, loss of production or even bankruptcy.

Page 47

Change due to an error in the table: In the 'meeting buildings' row, in column number 1, kitchen, cafeteria has been changed to plant rooms.

Page 52

Under 'Checking a door behind which a fire may be burning', text has been added to the first photo:

- Keep your extinguisher close at hand.

This text is now included in the first action about checking and opening doors, because the emergency response officer must already be carrying an extinguishing agent at this point.

Page 52

An addition has been made to the text in the first photo to emphasize to students that they must continue to observe the indicators:

Keep checking the indicators

- If the door is warm to the touch, leave the door closed, alert 112, inform your fellow EROs and start the evacuation (indicator 1).

Page 55 en 56

An addition has been made to the text in the third photo to emphasize to students that they must continue to observe the indicators:

Keep checking the indicators

- If the heat in the room is too threatening, leave the room and close the door. Alert 112 if this hasn't been done yet. Inform your fellow EROs and start the evacuation (indicator 4).
- In case of limited visibility, you must retreat and close the door behind you. Alert 112 if this hasn't been done yet, inform your fellow EROs and start the evacuation (indicator 5).

Page 57

In paragraph 2 on General firefighting rules, the text of the 2nd bullet point has been changed to:

In the case of CO_2 fire extinguishers, the safe distance is approximately 1 metre.

Page 58

Following feedback from readers and inquiries made to manufacturers, the length of the hose of a fire hose reel has been changed to: 20 to 30 meters (was 25 to 30 meters).

Page 59

Text has been added to photo 2 in response to feedback from readers:

- Keep the nozzle pointing downwards.

Page 60

In photo 2, the text has been changed because the spray range of the hose was not indicated correctly:

- Start approaching the fire from a safe distance from the fire.
- Make use of the fire hose's spray range, approximately 5 meter, to put out the fire safely.
- Stay down low and aim the stream of water at the base of the flames.

Page 60, 64, 65, 68, 69, 71 en 73

The words follow-up inspection have been changed to check, to avoid any confusion with the follow-up inspection carried out by the fire brigade.

Page 66

Text on the discharge time of fire extinguishers has been added, as this applies to all extinguishers:

Be aware that portable fire extinguishers have a very short discharge time.

Page 68

The penultimate line has been changed to: When the fire has gone out, check if possible whether the sub-floor is burning.
Explanation: check if possible has been added because this is not possible with every fire source or sub-floor.

Page 69, 71 en 73

In photo 4 the text as a result of the heat of the container holding the liquid has been changed to: as a result of hot particles.

Note: the phrase 'container holding the liquid' has been omitted because this is meant to refer to hot particles in the seat of the fire and not specifically to a hot container.

Page 71

The text If you are outdoors, direct your efforts downwind. has been deleted from photo 2. This instruction applies to all fire extinguishers that are used outdoors and was already mentioned in section 2 General firefighting rules.

Page 77

The text on the use of lifts and escalators has been amended and clarified in consultation with the IFV.

> Generally speaking, lifts and escalators should not be used during a fire because there is a risk that they will cease to operate if the power goes out. In addition, a lift shaft can function like a chimney if there's a fire. It is best to restrict all evacuation efforts to the stairs. This applies to everyone who is self-reliant and able to leave the building themselves via the stairs.
>
> However, investigations of incidents have shown that lifts and escalators have also saved lives during fires. For people who are physically unable or barely able to leave the building via the stairs, the lifts or escalators may in fact be the only way to escape safely in the case of fire. The lifts and escalator must be free of any potential threat from fire and smoke. Lifts and escalators must comply with specific requirements to guarantee that they are safe to use. For example, the power supply must remain active during the evacuation. In practice this also means that if there is no fire in the direct vicinity of the lift, it can be assumed that the electricity supply will continue to function. After all, lifts are usually connected to a separate group. If for example a lift and its power supply are located in the same fire and smoke-resistant part of a building as a stairwell, it can be used safely.
> Are there people in your building who are not self-reliant or whose self-reliance is limited? Find out about the rules on use of the lift for people in their category.

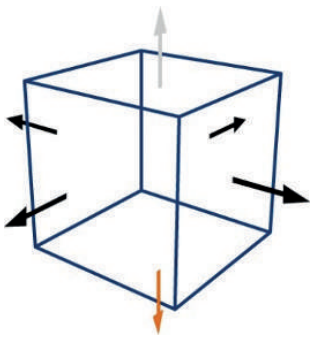
Page 77

At the bottom of the page the research sources have been added:

> Sources: The Basis for Fire Safety Substantiating fire protection in buildings, Fire Safety Professorship, The Instituut Fysieke Veiligheid (IFV, Institute for Safety), 2017.
> Gebruik van liften bij brand (Use of lifts in case of fire), Antea Group, commissioned by the Ministry of the Interior and Kingdom Relations, 2018

Page 81

The image of the cube has been clarified. The dotted arrow is now orange.



Page 86

The caption for image 12 has been changed to match the image in the photo. Emergency lighting has been changed to: Escape route signage with lighting.

Page 87

The text about the fire service lift has been adapted and clarified in consultation with the IFV:

> Although fire service lifts are primarily intended for equipment and firefighters, they can also be used by EROs as an 'evacuation lift' for people who are physically unable or barely able to leave the building themselves via the stairs. This is permitted only in the early stages of an evacuation, when the fire brigade is yet to arrive, provided that the lift is not threatened by smoke and flames.
>
> Does your company have staff who are not self-reliant or whose self-reliance is limited? Find out what rules apply to the use of the fire service lift and whether any rules have been agreed with the fire brigade.

Page 89

Question 2 about lifts has been replaced with the following question:

Which of the following statements is correct?
a. most people are aware of the dangers of fire
b. people usually flee via the route they know
c. people start to leave the building as soon as they hear the firealarm

Note: no questions are asked in the exams about the use of lifts because the possibility of using lifts will depend on the exact situation. However, it is desirable to pay attention to this subject in the course because, when used correctly, lifts can save the lives of people who are not self-reliant.

Page 95

The caption for image 9 has been changed to match the image in the photo. Assistance at the assembly point has been changed to: Gathering at the assembly point.

Page 121

Question 2, line 2 has been changed to bring the phrasing of the question into line with the text about the correct approach:

Question 2, line 2 has been adjusted so that the question is more in line with the tekst about the correct approach: You have a look and can clearly see the particle has been changed to:

> You gently pull apart the eyelids with your thumb and index finger. You can see the particle on the white of the eye.

Page 123

The text of the 2nd bullet point has been changed because people may also wear jewellery on their ankles:

- Ask the casualty to remove any jewellery from their hand, arm and/or ankle.

Page 123

The text of the 5th bullet point was mistakenly inconsistent with the first aid guidelines and has been adapted as follows:

- Cool the injured body part for at least 10 but no more than 20 minutes in the event of pain.
- Stop if the pain increases.
- Use a covered cold pack or use ice. Wrap the ice in a tea towel, wash glove or triangular piece of cloth.

Page 123

The text of the last bullet point was mistakenly inconsistent with the first aid guidelines and has been adapted as follows:

- If prompted by the casualty, apply a support bandage.Remove this support dressing if the pain increases or if the fingers or toes turn blue or pale. You can wrap up a cold pack in the bandages, but for no more than 20 minutes.
- You may advise the casualty to take paracetamol for a couple of days if necessary, always in accordance with the package leaflet.

Page 133

The texts about burns have been adapted in consultation with specialists from the Burns Foundation (Brandwondenstichting).

Section 1 Causes and characteristics of burns

- Hot gases and vapours, including smoke and steam. If a casualty inhales hot gases and vapours during a fire, this can burn their respiratory tract. ~~This is the primary cause of death in fires.~~
- Fire. The casualty comes into direct contact with fire and the clothing may catch fire, causing the body to be exposed to burning for longer.
- Radiation. Burns can be caused by ~~radiant heat emitted~~ ultraviolet radiation by sources such as the sun.
- Chemicals. Some substances cause ~~burns due to a chemical reaction~~. chemical injuries when they come into contact with the skin. Others have a corrosive effect on tissue, such as sulphuric acid, hydrochloric acid or drain unblocker.
- Electricity. Electrical burns can be caused by flames or by ~~sparks~~ a flame arc. Another type of burn is caused by electricity passing through the body potentially causing extensive internal injuries. . Besides burns at the point of entry and exit, electricity can also cause extensive internal injuries. Electricity can also cause cardiac arrest.

Page 134

In the 1st line, the underlined text is new:

~~Another key risk is fluid loss, as burns release moisture~~ Extensive burns cause oedema (a build-up of fluid) in and around the injured skin. This fluid comes from the blood vessels, which may result in a shortage of fluid in the blood vessels and cause the casualty to go into shock. As the skin is no longer capable of maintaining the right body temperature, the body may lose heat, putting the casualty at risk of hypothermia.

Page 135

In paragraph 3.1, 1st line, the underlined text has been added:

- Call 112 immediately in the event of large second- and third-degree burns.

Page 135

In section 3.1, 2nd paragraph, 2nd line, the crossed-out text has been changed:

In the event of first-degree burns, contact a GP or out-of-hours GP service ~~immediately~~ if:

Page 135

In 3.1 General treatment of burns, where the core concept of removing clothing is mentioned, the underlined text has been added:

Clothing and nappies should be removed immediately, because they retain heat for a long time and may conceal burns.

Page 135

Where the core concept of cool for 10 minutes is mentioned, the underlined text has been added:

- Cool with lukewarm tap water for 10 minutes

Page 136

At photo 1, the underlined text has been added:

- Cool the burn with a gentle stream of lukewarm tap water for 10 minutes.

Page 136

In section 3.1, the following text has been inserted after the last line:

- Cool for no more than 20 minutes.