

Міністерство освіти і науки України

**НАЦІОНАЛЬНИЙ УНІВЕРСИТЕТ
«ОДЕСЬКА ПОЛІТЕХНІКА»**

Кафедра іноземних мов

**МЕТОДИЧНІ ВКАЗІВКИ ДО ПРАКТИЧНИХ ЗАНЯТЬ
З НАВЧАЛЬНОЇ ДИСЦИПЛІНИ «ІНОЗЕМНА МОВА» ДЛЯ
ЗДОБУВАЧІВ ДРУГОГО (МАГІСТЕРСЬКОГО) РІВНЯ ВИЩОЇ
ОСВІТИ ДЕННОЇ ТА ЗАОЧНОЇ ФОРМИ НАВЧАННЯ, ЗА
СПЕЦІАЛЬНІСТЮ
К10 ЦИВІЛЬНА БЕЗПЕКА.**

Одеса
Одеська політехніка
2025

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Затверджено
на засіданні кафедри
іноземних мов
Протокол № __
від __ _____ 2025

Одеса
Одеська політехніка
2025

Методичні вказівки до практичних занять з навчальної дисципліни «Іноземна мова» для здобувачів другого (магістерського) рівня вищої освіти денної та заочної форми навчання, за спеціальністю К10 ЦИВІЛЬНА БЕЗПЕКА. / Укл.: *О.Я.Прісяжнюк, О.В.Гвоздь, О.В.Лебедєва* – О. Одеська політехніка :, 2025.- 60 с.

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ЗМІСТ

Передмова	5
LESSON 1	5
LESSON 2	9
LESSON 3	13
LESSON 4	17
LESSON 5	21
LESSON 6	25
LESSON 7	28
LESSON 8	31
LESSON 9	34
LESSON 10	37
LESSON 11	
LESSON 12	
LESSON 13	
LESSON 14	
LESSON 15	

ПЕРЕДМОВА

Методичні вказівки до практичних занять з навчальної дисципліни «Іноземна мова» для здобувачів другого (магістерського) рівня вищої освіти денної та заочної форми навчання, за спеціальністю К10 ЦИВІЛЬНА БЕЗПЕКА, призначені для здобувачів II рівня вищої освіти . спеціальності

Метою методичних вказівок є взаємозв'язане формування у здобувачів вмінь та навичок в різних видах мовної комунікації (читання, письма та говоріння англійською мовою) відповідно до Програми за тематикою включених напрямків.

За рахунок тренування в читанні текстів і виконання завдань комунікативного характеру здобувачі підвищують рівень практичного володіння англійською мовою за напрямком з рівня B1 до рівня B2 (за критеріями Документа Ради Європи «Загальноєвропейські компетенції володіння іноземною мовою: Вивчення, викладання, оцінка» - CEFR), що дає можливість: вільно читати оригінальну літературу іноземною мовою у відповідній галузі знань; оформляти витягнуту з іноземних джерел інформацію у вигляді перекладу або резюме; робити повідомлення і доповіді іноземною мовою на теми, пов'язані з науковою роботою майбутнього фахівця; вести бесіду за напрямком.

Методичні вказівки містять 15 основних цикли (Lessons), об'єднаних за тематикою вказаних напрямків і є ідентичними у структурному відношенні. Цикли складаються з 15 автентичних текстів та комплексу мовних вправ, які розраховані на удосконалення навичок активізації словарного і граматичного мінімуму професійного спрямування.

Автори.

Lesson 1

Мета заняття: Сформувати у студентів розуміння важливості особистої безпеки як складової цивільної безпеки та навчити їх застосовувати превентивні заходи, правила поведінки та комунікаційні стратегії у повсякденному житті й потенційно небезпечних ситуаціях.

Personal Safety and Everyday Life

Protecting your personal safety revolves around preventative thinking, taking sensible precautions and being aware of your surroundings. There are simple ways to improve your personal safety on a daily basis: most of which only require common sense or following good safety practices.

Communication is essential for personal safety. Someone should always know where you're supposed to be and your planned movements. Setting up a 'buddy' system with a friend, colleague or family member will help to improve your personal safety because they can raise an alarm if you fail to check in with them. In addition, having a reliable method of communication available at all times will mean that you can get in touch with someone in the event of an emergency.

There are certain things that you can remember to do regardless of the circumstances to protect your personal safety. These are all best practice tips to follow for everyday life.

Stay alert – constantly be aware of your surroundings to prevent being caught off guard.

Awareness is your best defense.

Trust your instincts – if something doesn't feel right to you, trust your gut and take action by removing yourself from the situation (e.g. cross the road or don't go in to the property). It's always better to be safe than sorry.

Don't be afraid to say no – if a stranger is asking for help with something and you feel as if something isn't right, politely tell them you can't help right now and keep moving.

Store emergency contacts on your phone, save a list of trusted contacts in case of emergency and services need to reach after an incident.

Keep your valuables hidden – make yourself less of a target by not advertising anything valuable from desirable technology to expensive-looking jewellery. Ensure that if you're carrying a bag that it's closed.

Spread out your valuables – it's a good idea not to keep all your valuables in the same place. Use different spaces for your phone, keys and money.

Carry cash – although majority of transactions are made via card or phone, having a small amount of cash is always sensible.

Let someone know where you are going – when travelling alone, at least one person should be aware of where you are, where you're going and how long you expect it to take.

Don't fight for your valuables – if you're unfortunate enough to be targeted by thieves, let your valuables go. They can be replaced, you can't.

Scream for help – if someone attempts to grab you and they don't have a weapon, scream at the top of your lungs for help. Read our safety advice on what to do if you're attacked.

Carry a personal safety alarm – either a dedicated device or app which can raise an alarm and summon an emergency response when you're in trouble.

Exercise 1. Read, translate and memorize using a dictionary:

Be aware of, emergency contacts, stay alert, target, gut feeling, dedicated device, weapon, attempt, an alarm, be in trouble

Exercise 2. Decide if the statements are True (T) or False (F):

1. Personal safety only depends on technology.
2. A buddy system means that someone can raise the alarm for you.
3. It is better to fight for your valuables than give them up.
4. Awareness of your surroundings is your best defense.
5. Carrying a small amount of cash can be useful.

Exercise 3. Fill in the gaps with the missing words:

1. For personal safety, it is important to always be ____ of your surroundings.
2. If something feels wrong, you should trust your ____.
3. To reduce the risk of being targeted, avoid showing your ____.
4. In case of an unarmed attack, you should loudly ____.
5. Always keep emergency ____ stored in your phone.

Exercise 4. Summarize the main idea of the text in 4-5 sentences.

Exercise 5. Compose a story on one of the topics. Prepare a presentation. Be ready to discuss this issue with your group mates.

- 📖 Which personal safety measures are most relevant in your city or country?
- 📖 Should children and teenagers learn self-defense techniques, or are basic safety rules enough?
- 📖 What kind of technologies (apps, devices, alarms) could significantly improve personal safety in the future?

Test questions:

1. What is the foundation of personal safety?
2. Why is it important that someone always knows about your movements?
3. How does a "buddy system" improve personal safety?
4. What are the advantages of having a reliable method of communication?

5. Why is it important to trust your instincts?
6. What should you do if a stranger asks for help but you feel unsafe?
7. Why is it recommended to spread out your valuables?
8. Why shouldn't you fight for your belongings if attacked?

Lesson 2

Мета заняття: Розвинути в студентів уміння читати, розуміти та аналізувати автентичні тексти англійською мовою з професійної тематики «Цивільна безпека», зокрема щодо значення та ролі знаків безпеки; удосконалити навички професійної комунікації англійською мовою, розширити термінологічний словник і сформувати здатність застосовувати англійську мову у фаховому середовищі.

The Importance of Safety Signs

Safety signs are standardized symbols or messages intended to warn or inform individuals about hazards or requirements in a particular location or situation. They play a critical role in ensuring safety by guiding behaviours, conveying rules, and providing essential information to prevent accidents and injuries.

Using universally recognizable symbols and clear text, safety signs offer immediate insight into potential dangers and the necessary precautions. Their usage spans various settings, including workplaces, public spaces, and transportation systems. These signs' design, colour, and shape are often regulated by national or international standards to ensure consistent understanding and recognition.

Safety symbols play a crucial role in hazard communication, and here's why their use is essential:

Immediate Recognition: Visual symbols transcend language barriers. No matter what language someone speaks or reads, a universally recognized symbol will convey the same message, ensuring instantaneous understanding.

Clarity in Communication: A well-designed symbol can convey a message succinctly without the need for verbose explanations. This ensures that the intended safety message is not lost or misinterpreted.

Efficiency: Especially in emergencies, time is of the essence. Safety symbols allow for quick action by providing immediate awareness of hazards or indicating escape routes without the delay of reading and processing textual information.

Consistency: Safety symbols, when standardized, provide a consistent message. Whether you're in a factory, lab, or public space, the same symbol will indicate the same hazard or instruction, reducing confusion.

Space-saving: Symbols can convey complex messages in a small space, making them ideal for environments where physical space might be limited, such as on machinery, equipment, or narrow corridors.

Reinforcing Training: Even if workers or the public have been trained or informed verbally, safety symbols serve as constant reminders of the protocols and hazards, reinforcing the importance of safe practices.

Legal and Regulatory Compliance: Many industries and regions have regulations mandating specific safety symbols to maintain a standardized safety protocol. Using these symbols can ensure businesses and organizations remain compliant with these regulations.

Reducing Accidents: By making potential hazards and safety protocols clear, safety symbols play a direct role in reducing accidents, injuries, and property damage.

Instilling a Safety Culture: The consistent use of safety symbols emphasizes the importance of safety in a particular environment, promoting a culture where safety is prioritized and valued.

In essence, safety symbols act as silent guardians, consistently communicating crucial safety information to all, ensuring that environments, be they work or public spaces, remain as safe as possible.

Exercise 1. Read, translate and memorize using a dictionary:

Safety signs, to warn, convey rules, ensure, crucial role, escape routes, convey a message, hazards, to maintain a standardized safety protocol, emphasize, silent guardian.

Exercise 2. Decide if the following statements are True (T) or False (F):

1. Safety signs are only useful in workplaces.
2. A well-designed safety symbol can communicate without words.
3. Safety symbols may vary widely in design across different countries with no standardization.
4. Using safety signs can reduce accidents and injuries.
5. Safety signs play a role in legal compliance for organizations.

Exercise 3. Fill in the blanks with appropriate words:

1. Safety signs use ___ symbols and clear text to convey messages.
2. In emergencies, safety signs allow for quick ___ by providing immediate awareness.
3. Standardization of safety signs ensures ___ across different environments.
4. Safety signs help reinforce safety ___ even after verbal training.
5. Consistent use of safety signs promotes a ___ culture.

Exercise 4. Summarize the main idea of the text in 4-5 sentences.

Exercise 5. Compose a story on one of the topics. Prepare a presentation. Be ready to discuss this issue with your group mates.

1. How effective do you think safety signs are in preventing accidents compared to training or supervision?
2. Can you think of situations where a safety symbol might not be understood correctly? How could this be avoided?

3. Should safety signs evolve with modern technology (e.g., digital or interactive safety signs), or are traditional signs sufficient?

Test questions:

1. What is the primary purpose of safety signs?
2. Why is it important that safety signs use universally recognizable symbols?
3. How do safety signs help during emergencies?
4. What role does standardization play in the effectiveness of safety symbols?
5. Why are safety symbols considered space-saving?
6. How do safety symbols reinforce training?
7. In what ways can safety symbols ensure legal and regulatory compliance?
8. How do safety signs contribute to building a safety culture?

Lesson 3

Мета заняття: Сприяти формуванню у студентів уміння читати, розуміти та аналізувати професійні тексти англійською мовою на тему «Види знаків безпеки»; розширити їх термінологічний словник у сфері цивільної безпеки, ознайомити студентів із класифікацією знаків безпеки англійською мовою. Розвинути навички роботи з професійною лексикою (prohibition, warning, mandatory, emergency signs тощо).

Types of safety signs (Part I).

Prohibition signs are universal symbols designed to denote actions or behaviors that are not allowed in a given area. The circular design is instantly recognizable, usually with a red border and a diagonal line slashing through it. It ensures quick comprehension even if the viewer doesn't take the time to read the accompanying text. For instance, a depiction of a smoking cigarette with a red slash would make it clear that smoking is not permitted.

Warning signs serve as precautionary alerts, informing individuals of potential dangers or risks. Characterized by their yellow or amber triangular shape with a bold exclamation mark in the center, they may be accompanied by specific images or text indicating the hazard's nature. For instance, a warning sign outside a construction zone might include an image of a falling brick to caution passersby of potential falling objects.

These **mandatory signs** convey certain actions or behaviors that are compulsory in a designated area. Their blue and white combination stands out, ensuring they capture attention. For example, in a laboratory setting, a mandatory sign might show an icon of a lab coat, indicating that all personnel in the vicinity must adorn protective clothing before entering.

In situations where immediate action is required, **emergency signs** guide the way. Green in color with clear pictograms, they often depict an exit door or a human figure running towards an exit. They aim to direct individuals toward escape routes, safe zones, or equipment that could be critical in crisis situations.

Signifying the presence of materials that can easily ignite, **flammable signs** often incorporate the image of flames. They're crucial in areas where combustible materials are stored or used,

ensuring that individuals are aware of the risk and thus can take necessary precautions—like not using open flames or spark-producing tools nearby.

Explosive signs are stark warnings about materials that have the potential to detonate. Generally depicting an explosion or a bursting graphic, these signs are vital in places like mines, construction sites with blasting operations, or storage areas for explosive materials, ensuring heightened caution.

Fire Extinguisher Signs. Knowledge of the location of firefighting equipment is crucial during emergencies. Signs displaying the image of a fire extinguisher provide clear guidance on where these tools are located, enabling faster response times should a fire break out.

Biohazard signs represent threats at a microscopic level and feature a distinct trefoil design on a contrasting yellow background. They denote the presence of biological agents—like bacteria, viruses, or other pathogens—hazardous to human health. Laboratories, medical facilities, or places storing bio-waste typically use these signs.

High voltage signs are warnings that come in various designs, often with jagged lines symbolizing electricity, highlighting the dangers of electrical energy. They caution individuals about live electrical components, equipment, or wires that carry a strong electric charge, which can lead to electrocution if mishandled.

Radiation, while invisible, can have harmful effects on human health. Radioactive signs, with their trefoil symbol, communicate the presence of radioactive materials or areas with high radiation levels. These signs are prevalent in nuclear facilities, certain medical rooms with radiological equipment, or research labs.

Exercise 1. Read, translate and memorize using a dictionary:

Circular design, mandatory sign, compulsory, construction zone, vicinity, depict, escape route, precaution, crucial, jagged line, nuclear facility

Exercise 2. Match the sign with its description

Match each sign type with the correct description:

a) Prohibition signs b) Warning signs c) Mandatory signs d) Emergency signs e) Flammable signs f) Explosive signs g) Fire extinguisher signs h) Biohazard signs i) High voltage signs j) Radioactive signs	1. Show where firefighting equipment can be found. 2. Inform about compulsory behaviors such as wearing protective clothing. 3. Indicate actions that are not allowed. 4. Mark areas with biological risks like viruses or bacteria. 5. Highlight potential electrical dangers. 6. Warn of potential explosion risks. 7. Indicate flammable materials or substances. 8. Provide directions to safe zones or exits.
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	9. Alert about possible dangers, often using triangular yellow designs. 10. Communicate the presence of radiation or radioactive materials.
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Exercise 3. Summarize the main idea of the text in 4-5 sentences.

Exercise 4. Fill in the blanks with the necessary words:

1. Prohibition signs usually feature a red ____ with a diagonal slash.
2. Warning signs are typically ____ in color and triangular in shape.
3. Mandatory signs use ____ and white colors to indicate required actions.
4. Emergency signs are usually ____ and guide people toward escape routes.
5. Biohazard signs display a ____ symbol on a yellow background.
6. High voltage signs warn of strong electric ____.
7. Fire extinguisher signs help locate firefighting ____.
8. Radioactive signs use the ____ symbol to indicate danger.

Exercise 5. Compose a story on one of the topics. Prepare a presentation. Be ready to discuss this issue with your group mates.

1. Which of the safety signs described do you think is most critical in everyday public life, and why?
2. How might cultural or regional differences affect people's recognition of safety signs, even when they are standardized?
3. Do you think new digital or smart safety signs (with lights, sensors, or alarms) should replace traditional static ones?

Test questions:

1. What is the typical design of prohibition signs, and what do they indicate?
2. How are warning signs usually shaped and colored, and what purpose do they serve?
3. What is the role of mandatory signs, and where might they be commonly found?
4. How do emergency signs help individuals during crises?
5. Why are flammable signs important in certain areas?
6. In what environments are explosive signs most commonly used?
7. What is the purpose of fire extinguisher signs, and how do they support safety?
8. What do biohazard, high voltage, and radioactive signs warn people about?

Lesson 4

Мета заняття: Ознайомити студентів з англomовною класифікацією та функціями знаків безпеки. Систематизувати професійну лексику (toxic/poison, eye protection, emergency exit, first aid, forklift operating area тощо). Розвивати навички читання з розумінням, виділення головної та другорядної інформації. Тренувати усне мовлення в професійному контексті (опис знаків, пояснення правил їх застосування, дискусії про значення безпеки).

Types of safety signs (Part II).

Toxic/Poison Signs. Represented by the universally feared skull and crossbones symbol, these signs are dire warnings. They indicate the presence of lethal or harmful substances if consumed, inhaled, or even, in some cases, touched. They are common in chemical storage areas, laboratories, and industrial sites.

Wear Eye Protection Signs. Our eyes are vulnerable to many hazards, from chemical splashes to flying debris. Signs with a pictogram of safety goggles remind us that protective eyewear is necessary. Workshops, labs, or construction sites, where there's potential for eye injury, typically display these signs to ensure worker safety.

Wear a Hard Hat Signs. In areas with potential hazards from above, such as construction sites or industrial zones, there is often the danger of falling objects or moving equipment. The "Wear Hard Hat" sign is a clear directive to anyone nearby to protect their head by wearing a helmet. This simple precaution can prevent serious injuries from unexpected impacts.

Wear Ear Protection Signs. Prolonged exposure to loud noises can lead to hearing impairment. The sign showing an ear symbol is a direct reminder to use protective measures, such as earplugs or earmuffs, in areas with elevated noise levels. This could be in factories, construction sites, or even concert venues where machinery or sound systems produce loud decibels.

Emergency Exit Signs. Knowing where the exits are can be lifesaving in situations that require a swift evacuation, like fires or other emergencies. The green "Emergency Exit" sign, depicting a person moving towards a door, serves as a guide, showing the most direct escape route out of a facility. These signs are typically illuminated to be easily visible, even in power outages or low-light conditions.

First Aid Signs. Quick access to medical supplies can make a significant difference in treating injuries or health issues. The sign bearing a white cross, typically on a green background, points individuals toward first aid kits or rooms. These are places where they can find essential medical tools and supplies, from bandages to defibrillators.

No Smoking Signs. Not only is smoking a health concern, but in certain areas, it can also be a fire risk. The “No Smoking” sign, showcasing a cigarette with a red diagonal line through it, is a prohibition sign indicating that lighting up is not permitted. This is particularly crucial in areas where flammable materials are stored or where there’s a heightened risk of fire.

Forklift Operating Area Signs. Forklifts, while essential in many warehouses and industrial settings, can pose risks to unwary pedestrians. The sign denoting forklift operations warns individuals that they are entering zones where these heavy machines are active. Being aware can prevent accidents between forklifts and pedestrians.

Understanding safety signs and symbols cannot be overstated in a world brimming with potential hazards. These 25 signs, each with its unique message, act as a compass guiding us through various scenarios, ensuring our well-being and safety. By recognizing and respecting these signs, we protect ourselves and create safer environments for everyone around us.

Exercise 1. Read, translate and memorize using a dictionary:

Lethal, substance, vulnerable, safety goggles, swift evacuation, significant, first aid kit, flammable material, permit, environment

Exercise 2. Decide if the following statements are True (T) or False (F):

1. Toxic/poison signs are usually represented by a flame symbol.
2. “Wear Eye Protection” signs are displayed in places where there’s a risk of debris or chemical splashes.
3. Hard hat signs help reduce the risk of injuries from falling objects.
4. First aid signs are usually red with a cross symbol.
5. Forklift operating area signs warn pedestrians about moving machinery.

Exercise 3. Fill in the blanks:

1. Toxic or poison signs use the symbol of a ____ and crossbones.
2. To protect against noise hazards, signs remind people to wear ____.
3. Emergency exit signs are usually ____ in color and guide people toward safety.
4. The white ____ on a green background is the typical design of first aid signs.
5. The “No Smoking” sign shows a cigarette with a ____ line across it.

Exercise 4. Summarize the main idea of the text in 4-5 sentences.

Exercise 5. Compose a story on one of the topics. Prepare a presentation. Be ready to discuss this issue with your group mates.

1. Which of the safety signs mentioned do you think is most important in your daily life, and why?

2. How might ignoring safety signs in workplaces or public areas lead to accidents or serious consequences?
3. Should safety education in schools include training on recognizing and understanding safety signs?

Test questions:

1. What symbol is used for toxic/poison signs, and what do they indicate?
2. Why are “Wear Eye Protection” signs important in certain workplaces?
3. In what areas are “Wear a Hard Hat” signs commonly found, and what risk do they address?
4. How do “Wear Ear Protection” signs help prevent long-term health issues?
5. What does the “Emergency Exit” sign usually depict, and why is it often illuminated?
6. What is the function of first aid signs, and what do they usually look like?
7. Why is the “No Smoking” sign especially crucial in certain environments?
8. What danger do forklift operating area signs warn against?

Lesson 5

Мета заняття: Сформувати у студентів уміння працювати з англomовними науковими текстами за професійною тематикою «Забруднення та здоров'я людини»; розширити термінологічний словник у сфері цивільної та екологічної безпеки; розвинути навички критичного читання, аналізу та дискусії англійською мовою; підвищити усвідомлення глобальних екологічних загроз і їхнього впливу на здоров'я населення та сталий розвиток.

Pollution and Human Health

Pollution— i.e., unwanted waste of human origin released to air, land, water, and the ocean without regard for cost or consequence—is an existential threat to human health and planetary health, and jeopardises the sustainability of modern societies. Pollution includes contamination of air by fine particulate matter; ozone; oxides of sulphur and nitrogen; freshwater pollution; contamination of the ocean by mercury, nitrogen, phosphorus, plastic, and petroleum waste; and poisoning of the land by lead, mercury, pesticides, industrial chemicals, electronic waste, and radioactive waste.

The 2017 Lancet Commission on pollution and health, which used data from the Global Burden of Diseases, Injuries, and Risk Factors Study 2015, found that pollution was responsible for an estimated 9 million deaths (16% of all deaths globally) and for economic losses totalling US\$ 4.6 trillion (6.2% of global economic output) in 2015.¹ The Commission noted pollution's deep inequity: 92% of pollution-related deaths, and the greatest burden of pollution's economic losses, occur in low-income and middle-income countries.

This report presents an updated estimate of the effects of pollution on health, made on the basis of the GBD 2019 data, and also makes an assessment of trends since 2000. These data show that the situation has not improved, and that pollution remains a major global threat to health and prosperity. Since 2000, the steady decline in the number of deaths from the ancient scourges of household air pollution, unsafe drinking water, and inadequate sanitation are offset by increasing deaths attributable to the more modern forms of pollution. These modern forms of

pollution—e.g., ambient air pollution, lead pollution, and chemical pollution—require major increases in mitigation and prevention. These are key messages:

- Over the past two decades, deaths caused by the modern forms of pollution (e.g., ambient air pollution and toxic chemical pollution) have increased by 66%, driven by industrialisation, uncontrolled urbanisation, population growth, fossil fuel combustion, and an absence of adequate national or international chemical policy.
- Despite declines in deaths from household air and water pollution, pollution still causes more than 9 million deaths each year globally. This number has not changed since 2015.
- More than 90% of pollution-related deaths occur in low-income and middle-income countries.
- Key areas in which focus is needed include air pollution, lead poisoning, and chemical pollution. Air pollution causes over 6·5 million deaths each year globally, and this number is increasing. Lead and other chemicals are responsible for 1·8 million deaths each year globally, which is probably an undercounted figure.
- Most countries have done little to deal with this enormous public health problem. Although high-income countries have controlled their worst forms of pollution and linked pollution control to climate change mitigation, only a few low-income and middle-income countries have been able to make pollution a priority, devoted resources to pollution control, or made progress.
- The triad of pollution, climate change, and biodiversity loss are the key global environmental issues of our time. These issues are intricately linked and solutions to each will benefit the others.
- We cannot continue to ignore pollution. We are going backwards.

Write 8 questions on the text; prepare two exercises and three topics for discussion connected with this text:

Exercise 1. Read, translate and memorize using a dictionary:

Waste, existential threat, contamination, economic losses, occur, to deal with, mitigation, benefit, a priority, household air and water pollution.

Exercise 2. Decide if the following statements are True (T) or False (F):

1. Pollution is responsible for about 16% of all global deaths.
2. The number of pollution-related deaths has decreased since 2015.
3. Air pollution alone causes over 6.5 million deaths annually.
4. Most high-income countries have failed to control their worst forms of pollution.
5. The issues of pollution, climate change, and biodiversity loss are closely interconnected.

Exercise 3. Fill in the blanks:

1. In 2015, pollution caused an estimated ____ million deaths worldwide.
2. More than ____% of pollution-related deaths occur in low- and middle-income countries.

3. Deaths caused by modern forms of pollution have increased by ____% over the past two decades.
4. Lead and chemical pollution are responsible for about ____ million deaths each year.
5. The triad of ____, ____, and ____ are described as the key global environmental challenges of our time.

Exercise 4. Summarize the main idea of the text in 4-5 sentences.

Exercise 5. Compose a story on one of the topics. Prepare a presentation. Be ready to discuss this issue with your group mates.

1. Why do low- and middle-income countries bear the greatest burden of pollution-related deaths?
2. What global measures could help reduce modern forms of pollution such as chemical waste and ambient air pollution?
3. How can tackling pollution simultaneously benefit climate change mitigation and biodiversity protection?

Test questions:

1. How is pollution defined in the text?
2. What are some examples of pollutants in air, water, and land mentioned in the passage?
3. According to the 2017 Lancet Commission, how many deaths were caused by pollution in 2015?
4. What percentage of pollution-related deaths occur in low- and middle-income countries?
5. What trend in pollution-related deaths has been observed since 2000?
6. Which modern forms of pollution are identified as the most concerning today?
7. How many deaths globally are caused each year by air pollution, and how many by lead and other chemicals?
8. What three global environmental issues are described as being intricately linked?

Lesson 6

Мета заняття: Сформувати у студентів здатність розуміти, аналізувати й використовувати англomовну інформацію з теми «Floods» для професійних і навчальних цілей; розширити англomовний термінологічний запас у сфері цивільної безпеки; розвинути навички комунікації англійською мовою в умовах надзвичайних ситуацій; виховати усвідомлення ролі превентивних заходів, готовності та дій населення під час повеней для захисту життя і здоров'я.

Floods

First of all let's study the difference between a flood watch and a flood warning?

A flood/flash flood **WATCH** means a flood or flash flood is possible.

A flood/flash flood **WARNING** means flooding or flash flooding is already occurring or will occur soon. **TAKE IMMEDIATE PRECAUTIONS!**

When faced with severe flooding, it's crucial to follow safety advice to protect yourself and your family. Floods can lead to serious health risks, including waterborne diseases, food contamination, injuries, and hazardous conditions.

- Preparing for a Flood

Follow the News: Remain alert and monitor the situation through local news, radio and mobile messages for the latest news and updates on the weather and flood warnings.

Know Evacuation Routes: Be informed on the location of designated shelters and safe zones on higher grounds that are nearby.

Emergency Contacts: Update contacts of family, friends and local emergency services. Ensure mobile phones and other communication devices are fully charged to stay connected during emergencies.

Prepare an Emergency Kit: Pack essential items, including food, water, medicines, identification, a flashlight, and hygiene supplies in a waterproof bag. Be prepared to leave as soon as evacuation orders are given.

- What to Do During a Flood

Listen to Local Authorities: Stay informed through local news or radio for weather updates and evacuation advice. If evacuation orders are given, leave immediately and take your emergency kit and ID papers.

Secure Your Home: If it's safe, unplug appliances and turn off electricity, gas, and water before evacuating.

Move to Higher Ground: Avoid standing or moving water. Never try to walk, swim, or drive through floodwaters. If trapped in a vehicle or building, move to the highest level.

Protect Children: Keep children far away from floodwaters, as these can carry debris and contaminants.

- What to Do After a Flood

Wait for the All-Clear: Return home only when authorities declare it safe.

Protect Your Family's Health: Floodwaters can carry diseases like cholera and typhoid. Ensure children avoid floodwaters and wash hands regularly. If exposed, bathe them as soon as possible.

Keep Food and Water Safe: Boil all water for at least three minutes before drinking or cooking, and discard food that's been in contact with floodwater.

Clean Up Safely: Dry affected areas within 24-48 hours and throw away items contaminated by floodwaters.

- Health Advisory

Flooding can increase the risk of diseases like dengue, malaria, cholera, and typhoid. Follow these key tips:

Keep hygiene practices: Wash hands frequently with soap and clean water.

Avoid floodwaters: They may be contaminated.

Boil water before drinking: Ensure all drinking water is boiled for at least three minutes.

- Emotional Support for Children

Floods can be distressing, especially for children. Create a space where they feel safe to talk about their feelings. Offer reassurance, maintain routines where possible, and watch for signs of emotional distress.

Stay safe, follow official advice, and prioritize the health of your family. Share this information with those in affected areas to help keep everyone safe.

Exercise 1. Read, translate and memorize using a dictionary:

Warning, occur, health risks, designated shelter, stay connected, emergency services, a flashlight, ID papers, authorities, distress, maintain routine, affected area.

Exercise 2. Read the statements and decide if they are True (T) or False (F):

1. A flood watch means flooding is already happening.
2. You should boil water for at least three minutes before drinking after a flood.
3. Children should be kept away from floodwaters because they may carry contaminants.
4. Floodwaters are always safe once the rain has stopped.
5. Emotional support for children after a flood is as important as physical safety.

Exercise 3. Complete the sentences with the suitable words:

1. A flood warning means flooding is already ____ or will occur soon.
2. Emergency kits should be packed in a ____ bag.
3. If evacuation orders are given, you should leave ____ and take your emergency kit.
4. Floods can spread diseases such as ____, ____, and ____.
5. To protect water safety, always ____ it for at least three minutes before drinking.

Exercise 4. Summarize the main idea of the text in 4-5 sentences.

Exercise 5. Compose a story on one of the topics. Prepare a presentation. Be ready to discuss this issue with your group mates.

1. Why do people sometimes ignore flood warnings, and how can awareness campaigns change this behavior?

2. In your opinion, what role should governments and communities play in preparing for floods?
3. How can schools and families better prepare children emotionally and physically for natural disasters like floods?

Test questions:

1. What is the difference between a flood/flash flood watch and a flood/flash flood warning?
2. Why is it important to follow the news and weather updates during a flood?
3. What items should be included in an emergency kit for a flood?
4. What are the main safety rules to follow during a flood?
5. Why should you avoid walking, swimming, or driving through floodwaters?
6. What health risks can floods cause, and how can families protect themselves?
7. What steps should be taken to ensure food and water safety after a flood?
8. How can parents provide emotional support to children affected by floods?

Lesson 7

Мета заняття: Ознайомити студентів із ключовою англомовною лексикою з теми землетрусів (drop, cover, and hold on; aftershocks; emergency kit; evacuation routes тощо). Розвивати навички читання з розумінням та критичного аналізу інструктивних текстів англійською. Формувати вміння відтворювати алгоритми дій у різних ситуаціях (indoors, outdoors, driving) англійською мовою.

Earthquakes

It is impossible to predict when and where an earthquake will strike. Nonetheless, you can take steps before, during, and after a quake to help yourself stay safe and recover quickly.

- Before an earthquake

Make sure you and your household are earthquake-ready:

Secure heavy furniture and appliances – More than half of the injuries associated with the 1994 Northridge earthquake were caused by toppling objects. One way to protect yourself is to look around your home or workplace and make sure heavy furniture, such as bookcases and beds, as well as appliances, such as water heaters and televisions, are safely secured to the wall using straps, closed hooks, or wall studs. Large, heavy, or unstable items should be placed on low shelves, close to the floor, and away from doors and escape routes.

Identify safe spots – Know where you can take cover in every room, for example under a sturdy table or desk. Conduct regular drills on how to drop, cover, and hold on.

Have a plan – Make sure everyone in your household knows how to access disaster supplies, and whom to call and where to meet if an earthquake strikes when you are apart.

Gather supplies – Have ample water and an emergency kit ready in your home, as well as smaller go-bags in your car, workplace, and any other places you might be when an earthquake hits. Your emergency supplies should be tailored for your specific needs, but common items include water, a first-aid kit, sturdy shoes, a portable radio, snacks, and emergency cash. FEMA and The Earthquake Country Alliance provide detailed checklists of items to include in an emergency kit.

- During an earthquake

The safest steps to take in the middle of an earthquake depend on where you are:

Indoors – Get under a desk or table, cover your head and neck with one arm or hand, and use your other arm or hand to hang on (drop, cover, and hold on). If no shelter is available, move into a hallway or against an inside wall. If you use a wheelchair or walker with a seat, make sure your wheels are locked and remain seated until the shaking subsides. Stay away from windows, fireplaces, and heavy furniture or appliances, and do not use elevators. If you are in bed when an earthquake starts, do not get out of bed. Instead, lie face down to protect vital organs, and cover your head and neck with a pillow.

Outdoors – Quickly find an open space away from buildings, power lines, and anything else that can topple on you. If you are driving, safely pull over and stop, and stay in your car until the shaking stops. Do not stop under bridges, overpasses, trees, or anything else that can strike your vehicle. If you are in a mountainous area, watch out for falling rocks and landslides, and if you are near the ocean during a severe earthquake, be mindful of tsunamis.

- After an earthquake

After the shaking subsides, assess your wellbeing and that of those around you. Stay alert to new or continuing hazards.

Conduct a safety check – Once you are in a safe place, check yourself and others for injuries, and call for help if needed. Look around to make sure you are not in danger from other hazards caused by the quake, such as gas leaks or fire. Wear boots or sturdy shoes to protect your feet from broken glass and debris.

Get help, if needed – If you are trapped, cover your mouth, nose, and eyes against dust. Send a text and make noise to alert rescuers to your location.

Be prepared for aftershocks – Aftershocks can be as strong as the original quake.

Stay connected – If you have access to a battery-operated radio (perhaps in your car) or television, update yourself on the latest emergency information. Let friends and family know you are safe, but, if possible, minimize calls to help protect internet and telephone connectivity. You can also register on the American Red Cross website to let people know you are safe.

- What not to do

Avoid running to other rooms while the ground is still shaking.

Do not seek shelter in doorways. They offer no protection against falling or flying objects.

After a quake, do not use matches or lighters near stoves or barbecues until you are sure there are no gas leaks. If the gas is turned off, do not turn it back on by yourself; let the gas company do it.

Exercise 1. Read, translate and memorize using a dictionary:

Predict, recover, drop, cover, have access to, assess one's wellbeing, hold on; aftershocks; emergency kit; evacuation routes

Exercise 2. Decide if the following statements are True (T) or False (F):

1. During an earthquake, it is best to run to another room for safety.
2. If you are in bed when an earthquake begins, you should stay in bed and cover your head and neck.
3. Aftershocks can sometimes be as strong as the main earthquake.
4. A doorway is considered one of the safest places during an earthquake.
5. If you smell gas after a quake, you should avoid using open flames.

Exercise 3. Fill in the blanks:

1. More than half of the injuries during the 1994 Northridge earthquake were caused by ____ objects.
2. Earthquake drills teach people how to ____, ____, and ____ on.
3. If outdoors, you should move to an ____ space away from buildings and power lines.
4. After a quake, always wear ____ shoes to avoid injury from debris.
5. To alert rescuers if trapped, you should send a ____ or make ____.

Exercise 4. Summarize the main idea of the text in 4-5 sentences.

Exercise 5. Compose a story on one of the topics. Prepare a presentation. Be ready to discuss this issue with your group mates.

📖 Why do you think many people still run to doorways during earthquakes despite safety advice against it?

📖 How can schools, workplaces, and communities prepare more effectively for earthquakes?

📖 What lessons can be learned from past earthquakes to improve disaster readiness in the future?

Test questions:

1. Why is it important to secure heavy furniture and appliances before an earthquake?
2. What are examples of "safe spots" indoors during an earthquake?

3. What items should be included in an earthquake emergency kit?
4. What is the “drop, cover, and hold on” method, and when should it be used?
5. What safety measures should someone in a wheelchair take during an earthquake?
6. How should drivers react if an earthquake begins while they are on the road?
7. What are the first steps to take after the shaking stops?
8. What actions should you avoid during and after an earthquake?

Lesson 8

Мета заняття: Формувати вміння відтворювати й пояснювати алгоритм дій до, під час та після урагану англійською мовою. Тренувати усне мовлення у форматі дискусій і рольових ситуацій (інструктаж для населення, моделювання дій у кризовій ситуації). Розвивати письмові навички (складання короткої пам'ятки чи emergency plan англійською мовою).

Storms and Hurricanes

Hurricanes are among nature's most powerful and destructive weather events. While they predominantly form over warm ocean waters, their impact can be felt hundreds of miles inland, bringing heavy rainfall, strong winds, storm surges, flooding, and even tornadoes. Whether you live in a coastal area or far from the shoreline, understanding how to prepare for, respond to, and recover from a hurricane can significantly reduce risks to both life and property.

Preparing for a hurricane is crucial to ensure the safety of you and your loved ones. Here are key steps to take **before the storm**:

1. Stay Informed

Monitor the forecast: Keep track of updates from the National Hurricane Center (NHC) or your local weather station.

Sign up for alerts: Enable text or email notifications from local emergency management agencies.

2. Create an Evacuation Plan

Know your zone: Check if you live in a hurricane evacuation area. Some coastal regions and low-lying areas are more susceptible to storm surge.

Plan multiple routes: Identify at least two evacuation routes in case roads are blocked.

Discuss with family: Designate a safe meeting place if you get separated, and decide how you'll communicate during an emergency.

3. Build an Emergency Kit

An emergency kit should sustain you and your family for at least 72 hours. Include:

Non-perishable food and bottled water (1 gallon per person per day)

Flashlights, batteries, and a battery-powered or hand-crank radio

First-aid supplies, prescription medications, and personal hygiene items

Chargers and extra power banks for cell phones

Important documents in a waterproof pouch (IDs, insurance policies, and medical records)

Cash in small bills (ATMs may be down)

During the Storm:

Ensuring safety during a hurricane requires specific actions both indoors and outdoors. Here's how to protect yourself and your loved ones:

1. Follow Official Instructions

Local authorities issue evacuation orders or shelter-in-place advisories based on real-time assessments of the storm's impact, predicted path, and the specific risks to different neighborhoods. They have access to meteorological data and emergency services information that helps them make informed decisions.

How it keeps you safe:

Immediate Evacuation: Leaving an area at high risk of flooding, storm surge, or extreme winds greatly reduces the chance of being trapped or injured.

Sheltering in Place: If authorities advise staying indoors, it may be because it's more dangerous to be on the roads than inside. Wind-blown debris, flooded streets, or collapsed bridges can pose serious threats.

2. Shelter in a Safe Area

Hurricanes can produce violent winds and flying debris that can break windows or collapse external walls. Being in a sturdy, interior space adds extra layers of protection between you and potential hazards.

How it keeps you safe:

Interior Room: By selecting a room on the lowest floor without windows—like a hallway, bathroom, or closet—you minimize exposure to glass shards and wind-blown objects.

Battery-Powered Radio: When power and internet fail, a portable radio keeps you updated with emergency broadcasts, ensuring you don't miss crucial announcements or weather changes.

After the Storm:

Recovering from a hurricane requires careful planning and adherence to safety measures to protect yourself and your community. Here are essential steps to consider during the recovery and clean-up process:

1. Listen for Updates

Even if conditions seem calm, hidden dangers such as floodwaters and falling debris may still exist. Local authorities have the most up-to-date information on road closures, downed power lines, and potential gas leaks. They will inform you when going out or returning home is safe.

How it keeps you safe:

Waiting for the “all-clear” reduces your risk of injury from post-storm hazards.

Official announcements inform you whether the water supply is safe to drink and whether your neighborhood is secure from issues like structural collapses or electrical hazards.

2. Assess Damage Carefully

After a hurricane, damaged infrastructure such as power and gas lines can pose life-threatening risks. Checking for hazards before entering or moving around your property helps prevent injuries and further complications.

Access to community resources: Local shelters can provide temporary housing, and organizations like the American Red Cross offer essentials like food, water, and medical supplies. This network is designed to help you and your family get back on your feet faster.

By following these guidelines—waiting for official updates, scrutinizing your property, cleaning up safely, and seeking insurance and community support—you can minimize the risks of post-hurricane hazards and set yourself on a more secure path to recovery.

Exercise 1. Read, translate and memorize using a dictionary:

destructive weather event, sustain, flashlight, a battery-powered, hand-crank radio, adherence, safety measures, gas leak, announcement, guideline

Exercise 2. Decide if the following statements are True (T) or False (F):

1. Hurricanes only affect people who live directly on the coast.
2. An emergency kit should provide enough supplies for at least 72 hours.
3. It is always safer to evacuate than to shelter in place during a hurricane.
4. Local authorities have the latest information and issue orders based on real-time data.
5. You should wait for the official “all-clear” before returning home after a hurricane.

Exercise 3. Fill in the blanks:

1. Hurricanes bring strong winds, heavy rainfall, ____ surges, and sometimes ____.
2. Families should decide on a safe ____ place if they get separated.
3. Important documents should be stored in a ____ pouch.
4. A safe shelter is usually an ____ room on the ____ floor with no windows.
5. After a storm, damaged ____ and ____ lines can pose life-threatening risks.

Exercise 4. Summarize the main idea of the text in 4-5 sentences.

Exercise 5. Compose a story on one of the topics. Prepare a presentation. Be ready to discuss this issue with your group mates.

1. In your opinion, what is the biggest challenge for families when preparing for hurricanes?
2. How can communities better support vulnerable populations (elderly, disabled, children) during hurricanes?
3. Should governments invest more in prevention (infrastructure, planning) or in recovery (aid, rebuilding) after hurricanes? Why?

Test questions:

1. Where do hurricanes predominantly form, and how far inland can their impact be felt?
2. Why is it important to sign up for alerts from local emergency management agencies?
3. What are some key items that should be included in a hurricane emergency kit?
4. Why should families plan multiple evacuation routes before a hurricane?
5. What types of spaces are recommended as safe shelters during a hurricane?
6. How does a battery-powered or hand-crank radio help during a storm?
7. Why is it dangerous to return outside immediately after a hurricane?
8. What kinds of community support are available to people recovering from hurricanes?

Lesson 9

Мета заняття: Ознайомити студентів із ключовою англomовною лексикою з теми лісових пожеж (wildfire smoke, evacuation status, N95 mask, combustible material, Go-Kit, Five Ps of Evacuation тощо). Розвивати навички читання з розумінням та виділення головного в інструктивних текстах. Формувати вміння описувати алгоритм дій до, під час та після пожежі англійською мовою.

Wildfires

Wildfires can start suddenly and grow rapidly under drought and high wind conditions. Be aware of the wildfires in your area so you can have the most time possible to prepare before wildfire threatens your neighborhood. You can also develop emergency plans before natural disasters, review and practice evacuation routes, and harden your home against fire with landscaping and building choices.

Prepare Before the Wildfire

Prepare ahead of time for wildfire events, including defending your home and property from wildfire. The steps to take to be ready before a wildfire include:

Gather emergency supplies. Focus on important, irreplaceable documents and items that will help you evacuate the fire and stay comfortable in the aftermath. The American Red Cross advises having a 'Go-Kit' of 3 days of supplies that you can carry with you, and a 'Stay-at-Home Kit' that has 2 weeks of supplies if you must stay home and the stores and pharmacies are closed.

Stay connected with a communication plan. You may become separated or lose cell service during a natural disaster. When a wildfire is threatening your area, determine a location outside

of the hazard zone for your loved ones to meet. You should also designate a point of contact. This out-of-area friend or relative will be the source of communication among all family members in case you are separated.

Prepare your property for evacuation. Shut off the gas and air conditioning, make sure doors and windows are closed, bring outdoor items inside, turn all lights on, move furniture away from walls, and ensure your home is accessible to firefighters. Clear combustible material from the immediate area within 30 feet of your home. You can also water down your walls and the area within 10 feet of your house.

Dress for evacuation. Cover as much skin and hair as possible to protect yourself from getting burned. Wear clothes made of natural materials (e.g., wool, cotton, leather), which are less flammable than synthetic fibers.

Stay Safe During the Wildfire

When the wildfire is close, it is time to GO! Evacuate early and ensure your family and home are prepared to survive the wildfire. Some of the steps to take once you evacuate include:

Remain aware of the latest news about wildfire danger. Make sure your devices are charged and that you are signed up for emergency reports.

Protect yourself from smoke. Close windows and doors, use a portable air cleaner, avoid cooking or vacuuming (which can create more fine particulates in the air), and avoid strenuous activity while wildfire smoke is affecting air quality. An N95 mask will help guard against smoke inhalation. You may wear a respirator if you have one, though note that these items are not made to fit children.

Evacuate if needed. There are three levels of evacuation status based on how imminent the fire danger is. Be ready to go before there is immediate, extreme danger in your area and you need to evacuate straight away.

Remember **the Five Ps of Evacuation**:

People and pets (including livestock)

Prescriptions (including medication, medical equipment and its batteries and charging devices, eyeglasses, hearing aids, etc.)

Papers (e.g., hard copy documents and/or electronic backups saved to a portable flash drive or external hard drive)

Personal needs (including food and water, a first aid kit, money, important electronics and chargers, and comforting items)

Priceless items (e.g., pictures, mementos, valuables)

After the Wildfire

The aftermath of a fire is a difficult time. Take the following steps to keep yourself and your family safe after a fire, ensure your home and property are safe to return to, and document damages for insurance.

Only return once it is safe. The local or state fire department or the forestry service will let you know when the fire danger has passed. They will also note additional risks, such as flood or debris flow risks, and if the air quality in your area is safe.

Wear protective clothing. Protecting your eyes, nose, throat, and lungs is the priority, as there may be ash or other particles in the air. It is also important to protect your skin from any material that may still be smoldering. Wear thick gloves if you are handling any objects or debris.

Exercise 1. Read, translate and memorize using a dictionary:

Drought, landscape, natural disaster, designate, additional, firefighter, combustible material, inhalation, priority, smoldering.

Exercise 2.

Choose the correct answer:

1. Which of the following is *not* part of the Five Ps of Evacuation?
 - a) People and pets
 - b) Personal needs
 - c) Plants and flowers
 - d) Priceless items
2. What should you do with outdoor items before evacuation?
 - a) Leave them outside for firefighters
 - b) Bring them inside the house
 - c) Burn them to reduce fuel for fire
 - d) Cover them with blankets
3. Why should you avoid cooking or vacuuming when wildfire smoke is heavy?
 - a) It wastes electricity
 - b) It spreads fine particulates in the air
 - c) It attracts firefighters
 - d) It prevents communication signals

Exercise 3. Fill in the blanks:

1. A ___ mask can help guard against smoke inhalation.
2. To prepare your home, clear combustible material within ___ feet of the house.
3. During evacuation, cover as much ___ and ___ as possible.
4. After a fire, protect yourself by wearing ___ gloves when handling debris.
5. Local fire departments will announce when it is ___ to return home.

Exercise 4. Summarize the main idea of the text in 4-5 sentences.

Exercise 5. Compose a story on one of the topics. Prepare a presentation. Be ready to discuss this issue with your group mates.

1. How can communities reduce the risk of wildfires through urban planning and landscaping?

2. Which is more important during wildfires: preparing your home or preparing your family for evacuation? Why?
3. What role should schools and workplaces play in wildfire preparedness and safety education?

Test questions:

1. Under what conditions can wildfires start and spread rapidly?
2. What is the difference between a "Go-Kit" and a "Stay-at-Home Kit"?
3. Why is it important to have a family communication plan during wildfires?
4. What are some steps to prepare your property before evacuation?
5. Why should you wear clothing made of natural materials during evacuation?
6. What measures can you take to protect yourself from wildfire smoke?
7. What are the "Five Ps of Evacuation"?
8. What precautions should you take when returning home after a wildfire?

Lesson 10

Мета заняття: Сформувати у студентів знання базових принципів надання першої допомоги та вміння описувати їх англійською мовою; розвинути навички аналізу та використання англомовних інструктивних текстів у сфері цивільної безпеки; виховати відповідальність та готовність до дій у надзвичайних ситуаціях.

First Aid Basics

Basic first aid is the immediate care given to a sick or injured person. In some cases, it may be the only care a person needs. In other cases, first aid is a way to prevent a person's condition from worsening and keep them alive until paramedics arrive or they are taken to the hospital.

The best way to prepare for these events is to get official first-aid training. In the meantime, there are some basic life-saving steps you can learn.

Assess the Situation

The first thing to do in any medical emergency is to assess the situation. Questions to ask and steps to take include:

Is the scene safe? Assess what is going on around the injured individual. Consider whether they are safe where they are and whether you can safely approach them. Check if you have personal protective equipment (e.g., gloves) in case of blood or other bodily fluids. If they are conscious, you can ask for consent.

Is the person responsive or unresponsive? The American Red Cross recommends the shout-tap-shout method to assess whether a person is conscious. Check if the person is responsive, if you see any life-threatening bleeding, if they are breathing, and if you notice any other significant injuries or conditions.

Do you need emergency medical responders (EMS)? If the individual does not respond, responds but is unable to remain fully awake, is not breathing or is gasping, or has significant bleeding, call 911 and begin CPR if there is a potential for cardiac arrest. Obtain an automated external defibrillator (AED) if possible. Do the same if you have concerns about any life-threatening medical condition,

Is the person okay without emergency medical help? The individual may be OK after a minute or brief care. If the person is conscious and talking, you can offer continued assistance. Consider asking if any underlying medical conditions may require further care. If a possible head, neck, or spinal injury occurred, ask the person to remain still until emergency medical personnel arrive. Continue to provide emergency medical care based on your level of training and comfort with the situation. Call 911 if needed and if not already done. If EMS is called, remain with the individual until help arrives.

ABCDEs of First Aid

If someone is unconscious or unresponsive, the basic principles of first aid are the ABCs: airway, breathing, and circulation.

Airway: If someone is not breathing, you first need to open their airway, if possible.

Breathing: If you have cleared a person's airway but they are still not breathing, consider providing rescue breathing if you feel comfortable doing so.

Circulation: As you perform rescue breathing, continue with chest compressions to maintain the person's blood circulation. If the person is not responsive, check their pulse. If you do not feel a pulse, begin chest compressions.

Disability: In the acronym, disability refers to conditions that affect the level of consciousness. Consider if the person has an altered mental state, is experiencing a seizure, may have overdosed, is experiencing hypoglycemia, or has another condition that affects their ability to remain fully conscious.

Exposure: If the person has experienced exposure to something harming them, remove the exposure if possible. For example, provide warm, dry clothing if there is a risk of hypothermia and their clothes are wet. Make a note if they've been exposed to a snake bite or other poisonous animal. Another example is removing constrictive items if necessary (e.g., jewelry or watches).

Exercise 1. Read, translate and memorize using a dictionary:

injured person, approach, conscious, life-threatening bleeding, significant, perform rescue breathing, airway, blood circulation, exposure, poisonous

Exercise 2. Decide if the following statements are True (T) or False (F):

1. First aid is only necessary until paramedics arrive.
2. If someone is talking, they definitely don't need further care.
3. Gloves or protective equipment should be used when possible.
4. You should always move an injured person to a safer place immediately.
5. The "ABCDE" principle extends beyond just airway, breathing, and circulation.

Exercise 3. Match the first aid step with its description:

1. Airway	a) Checking for pulse, performing chest compressions
2. Breathing	b) Removing harmful items or protecting from environmental danger
3. Circulation	c) Clearing the throat to allow airflow
4. Disability	d) Considering mental state, seizures, or overdoses
5. Exposure	e) Giving rescue breaths if necessary

Exercise 4. Summarize the main idea of the text in 4-5 sentences.

Exercise 5. Compose a story on one of the topics. Prepare a presentation. Be ready to discuss this issue with your group mates.

1. Why should basic first aid training be mandatory in schools and workplaces?
2. Do you think most people are prepared to act in a medical emergency? Why or why not?
3. How can technology (apps, online training, AED devices) improve public readiness for emergencies?

Test questions:

1. What is the main purpose of first aid?
2. Why is it important to assess the situation before providing help?
3. What does the “shout-tap-shout” method check for?
4. In what cases should emergency medical services (EMS) be called immediately?
5. What should you do if someone is unresponsive and not breathing?
6. What does the “A” in the ABCDEs of first aid stand for?
7. How does “disability” in the ABCDE framework differ from “exposure”?
8. Why is official first aid training recommended?

Lesson 11

Мета заняття: Сформувати вміння пояснювати закономірності травм і заходи їх профілактики англійською мовою. Практикувати усне мовлення через рольові ігри (наприклад, інструктаж для населення або поради потерпілим під час НС). Розвивати письмові навички (складання короткої пам'ятки з профілактики травм англійською).

Injuries

Disasters create injury patterns that repeat with almost mathematical precision. Earthquakes cause crush injuries and lacerations from falling debris. Floods lead to contaminated wounds and drownings. Hurricanes generate trauma from flying objects. Each type of disaster has its signature injuries, and understanding these patterns can save your life. The hard truth is that when disasters strike, you often become your own first responder. Emergency services get overwhelmed, hospitals flood with patients, and ambulances can't navigate damaged roads. The difference between a minor injury and a life-threatening emergency often depends on what you know and what supplies you have ready before disaster strikes.

The Reality of Earthquake Injuries

The most common earthquake injuries:

Fractures (48% of all earthquake injuries): Broken bones from falling furniture, appliances, or building materials

Lacerations and cuts: Primarily from shattered glass and sharp debris

Head and neck trauma: From falling objects or people being thrown around

Crush injuries: When people get trapped under heavy furniture or building materials

Cut feet: Surprisingly common when people flee barefoot through debris fields

During and After Earthquake Response

Stay protected: Don't run outside during shaking—most injuries happen when people try to move during ground motion. Drop to hands and knees, cover your head and neck, and hold on until shaking stops.

Immediate post-quake caution: Expect aftershocks that can bring down already-weakened structures. Move carefully and assume everything is unstable until proven otherwise.

Foot protection priority: Before doing anything else, put on sturdy shoes. I can't emphasize this enough—cut feet are among the most common and easily preventable earthquake injuries.

Floodwater Injury Mechanisms

Floodwater conceals deadly hazards. What looks like a harmless puddle might hide broken glass, sharp metal, nails from destroyed structures, or sudden drop-offs. People wading through flood zones commonly suffer lacerations and puncture wounds from submerged debris.

Primary flood injury risks:

Drowning: The leading cause of flood fatalities

Lacerations and puncture wounds: From hidden debris in murky water

Contaminated wound infections: Floodwater contains sewage, chemicals, and bacteria

Electrocution: From downed power lines or electrical equipment in water

Vehicle-related trauma: From driving into flooded roads

Falls and strains: During post-flood cleanup activities

Every flood wound becomes a potential serious infection. Floodwater typically contains sewage, agricultural runoff, industrial chemicals, and decomposing organic matter. Even minor cuts can develop into life-threatening infections if not properly cleaned and treated. During Hurricane Katrina, hospitals saw numerous cases of necrotizing fasciitis (flesh-eating disease) from seemingly minor wounds exposed to contaminated floodwater. This isn't rare—it's predictable when dirty water meets open wounds.

Flood Injury Prevention

Evacuation is injury prevention: The best flood medicine is not being in the flood. Heed evacuation orders promptly. Many flood deaths occur when people underestimate water power or try to drive through flooded roads.

Six inches of moving water can knock an adult off their feet. Two feet of water can carry away most vehicles. These aren't theoretical numbers—they're the difference between survival and becoming a statistic.

If you must enter floodwater:

Use a stick to probe for submerged hazards and depth changes

Wear sturdy rubber boots and waterproof gloves

Never enter water that might contain electrical hazards

Travel in groups and maintain communication with others

Post-flood wound care: Treat every cut, scrape, or puncture as potentially serious. Clean immediately with soap and clean water, apply antibiotic ointment, and monitor closely for signs of infection—redness, warmth, swelling, or red streaking.

Wildfires: When Fire Meets Panic

Wildfire injuries follow a different pattern than other disasters. Direct burn injuries, while serious, are actually less common than smoke inhalation injuries and trauma from evacuation activities.

The Real Wildfire Dangers

Smoke inhalation kills more people than burns. Wildfire smoke contains superheated gases, fine particles, and toxic chemicals that can quickly overwhelm lungs and cause respiratory failure. Most fire deaths result from smoke inhalation, not direct burning.

Evacuation injuries: The 2018 Camp Fire in California demonstrated how evacuation chaos creates injuries. Multiple vehicle accidents occurred during mass evacuations, and people suffered falls and trauma while fleeing through smoky, dark conditions.

Wildfire Preparation and Response

Early evacuation saves lives: Never wait until fire is visible to evacuate. When authorities issue evacuation warnings, leave immediately. Traffic becomes impossible once everyone tries to leave simultaneously.

Smoke protection: Keep N95 masks or respirators for each family member during fire season. These filter out some smoke particles when evacuation routes pass through smoky areas.

Vehicle readiness: Keep vehicles fueled during fire season. Gas stations may be closed or inaccessible during evacuations. Have emergency supplies in vehicles—water, flashlights, first aid supplies, and fire blankets.

Protective clothing: During evacuation, wear long sleeves, long pants, and sturdy shoes. This protects against embers, hot ash, and sharp debris. Many evacuees suffer burns and cuts because they fled in shorts and sandals.

Write 8 questions on the text; prepare two exercises and three topics for discussion connected with this text:

Exercise 1. Read, translate and memorize using a dictionary:

injury pattern, laceration, sewage, hidden debris, life-threatening infections, aftershocks, issue evacuation warning, simultaneously, fire blanket, smoke inhalation, submerged hazards.

Exercise 2. Match the type of injury to the disaster where it is most common:

1. Smoke inhalation →
2. Lacerations from submerged debris →
3. Crush injuries →
4. Vehicle accidents during evacuation →

- a) Earthquakes
- b) Floods
- c) Wildfires
- d) Wildfire evacuations

Exercise 3. Complete the sentences with the correct words:

1. The most common earthquake injuries are _____, lacerations, head trauma, crush injuries, and _____.
2. Six inches of moving water can _____, while two feet of water can _____.
3. Wildfire smoke contains toxic chemicals and fine _____ that can overwhelm the _____.
4. During evacuation from a wildfire, people should wear _____ to protect themselves from embers and sharp debris.

Exercise 4. Summarize the main idea of the text in 4-5 sentences.

Exercise 5. Compose a story on one of the topics. Prepare a presentation. Be ready to discuss this issue with your group mates.

1. Which disaster (earthquake, flood, or wildfire) do you think people are least prepared for, and why?
2. How can communities reduce the risk of predictable disaster injuries (e.g., cut feet in earthquakes, smoke inhalation in wildfires)?
3. Should governments provide every household with basic protective equipment (e.g., N95 masks, sturdy shoes, emergency kits) in disaster-prone areas?

Test questions:

1. What are the most common types of earthquake injuries?
2. Why are cut feet considered a frequent earthquake injury, and how can they be prevented?
3. What should people do during earthquake shaking to avoid injuries?
4. What are the main causes of injuries during floods?
5. Why are floodwater wounds particularly dangerous?
6. How much moving water is enough to knock an adult off their feet?
7. What is the leading cause of death during wildfires?
8. Why is early evacuation so important during wildfires?

Lesson 12

Мета заняття: Ознайомити студентів з ключовою англомовною термінологією (CPR, chest compressions, airway, rescue breathing, AED, unconscious, C-A-B). Розвивати навички читання з розумінням і виділення послідовності дій в інструктивних текстах. Практикувати усне мовлення через рольові вправи (симуляція надання CPR у команді чи одному з учасників).

CPR

Cardiopulmonary resuscitation (CPR) is an emergency treatment that's done when someone's breathing or heartbeat has stopped. For example, when someone has a heart attack or nearly drowns. CPR can help save a life. The American Heart Association recommends starting CPR by pushing hard and fast on the chest. The pushes are called compressions. This hands-only CPR recommendation is for both people without training and first responders.

Here's CPR advice from the American Heart Association:

Not trained. If you're not trained in CPR or don't want to put your mouth on the person's mouth or nose, then do hands-only CPR. Push hard and fast in the center of the chest 100 to 120 times a minute. Do this until medical help arrives. Details are described below. You don't need to place your mouth on the person's mouth or nose to give rescue breaths.

Trained and ready to go. If you're well trained and confident in your CPR ability, check to see if there is a pulse and breathing. If there is no pulse or breathing within 10 seconds, begin chest

compressions. Start CPR with 30 chest compressions. Then give two rescue breaths. Continue this pattern of chest compressions and rescue breaths until medical help arrives.

Trained but out of practice. If you've previously received CPR training but you're not confident in your abilities, then just do 100 to 120 chest compressions a minute. Details are described below. The above advice applies to situations in which adults, children and infants need CPR, but not newborns. Newborns are babies up to 4 weeks old.

CPR can keep oxygen-rich blood flowing to the brain and other organs until emergency medical treatment can get the heart beating again. When the heart stops, the body no longer gets oxygen-rich blood. The lack of oxygen-rich blood can cause brain damage in only a few minutes.

If you're afraid to do CPR or unsure how to do CPR correctly, know that it's always better to try than to do nothing at all. The difference between doing something and doing nothing could be someone's life.

Before starting CPR, check:

Is the environment safe for the person?

Is the person conscious or not conscious?

If the person appears to be not conscious, tap or shake their shoulder and ask loudly, "Are you OK?"

If the person doesn't respond and you're with someone else who can help, have one person call 911 or the local emergency number and get an AED if one is available. Have the other person begin CPR.

If you are alone and have immediate access to a phone, call 911 or your local emergency number before starting CPR. Get an AED if one is available.

As soon as an AED is available, deliver one shock if instructed by the device. Then start CPR.

The American Heart Association uses the letters **C-A-B** to help people remember the order to perform the steps of CPR.

C: compressions.

A: airway.

B: breathing.

Compression means you use your hands to push down hard and fast in a specific way on the person's chest. Compressions are the most important step in CPR. Follow these steps for performing CPR compressions.

Put the person on their back on a firm surface.

Place the lower palm of your hand over the center of the person's chest, between the nipples.

Place your other hand on top of your first hand. Keep your elbows straight. Place your shoulders directly above your hands

Push straight down on the chest at least 2 inches (5 centimeters) but no more than 2.4 inches (6 centimeters). Use your entire body weight, not just your arms, when doing compressions.

Push hard and fast in the center of the chest. You want to do 100 to 120 compressions a minute. The American Heart Association suggests doing compressions to the beat of the song "Stay in"

Alive" or another song that has 100 to 120 beats a minute. Allow the chest to spring back after each push.

If you haven't been trained in CPR, continue chest compressions until there are signs of movement or until emergency medical help takes over. If you have been trained in CPR, go on to rescue breathing.

Airway:

If you're trained in CPR and you've done 30 chest compressions, follow these steps to open the person's airway. This is called the head-tilt, chin-lift maneuver.

Put your palm on the person's forehead.

Gently tilt the head back.

With the other hand, gently lift the chin forward to open the airway.

Breathing:

Rescue breathing can be mouth-to-mouth breathing or mouth-to-nose breathing if the mouth is seriously injured or can't be opened. Current recommendations suggest doing rescue breathing using a bag-mask device with a high-efficiency particulate air (HEPA) filter.

Follow these steps after opening the airway using the head-tilt, chin-lift maneuver.

Pinch the nostrils shut for mouth-to-mouth breathing and cover the person's mouth with yours, making a seal. Prepare to give two rescue breaths. Give the first rescue breath — lasting one second — and watch to see if the chest rises. If the chest rises, give a second breath. If the chest doesn't rise, repeat the head-tilt, chin-lift maneuver. Then give a second breath. Thirty chest compressions followed by two rescue breaths is considered one cycle. Be careful not to provide too many breaths or to breathe with too much force.

Continue chest compressions to restore blood flow.

As soon as an automated external defibrillator (AED) is available, follow the device's directions. Give one shock, then continue chest compressions for two more minutes before giving a second shock. If you're not trained to use an AED, a 911 operator or another emergency medical operator may be able to tell you how to use the device. If an AED isn't available, go to step 7 below.

Continue CPR until there are signs of movement or emergency medical help takes over.

Exercise 1. Read, translate and memorize using a dictionary:

Cardiopulmonary resuscitation, to rescue, rescue breathing, palm, forehead, head-tilt, chin-lift maneuver, defibrillator, available, signs of movement.

Exercise 2. Decide if the following statements are True (T) or False (F):

1. CPR should only be attempted by trained medical personnel.
2. Hands-only CPR involves only chest compressions.
3. Rescue breathing is always required in every CPR situation.
4. An AED should be used as soon as it becomes available.

5. The song "Stayin' Alive" can help maintain the correct compression rhythm.

Exercise 3. Put the sentences in the correct order:

- Give 2 rescue breaths.
- Call 911 and get an AED if possible.
- Perform 30 chest compressions.
- Open the airway with the head-tilt, chin-lift maneuver.
- Continue CPR cycles until help arrives.

Exercise 4. Summarize the main idea of the text in 4-5 sentences.

Exercise 5. Compose a story on one of the topics. Prepare a presentation. Be ready to discuss this issue with your group mates.

1. Why is it important for ordinary people (not only medical staff) to learn CPR?
2. Do you think CPR training should be mandatory in schools or workplaces?
3. What psychological barriers might prevent someone from performing CPR, and how can they be overcome?

Test questions:

1. What is CPR and when is it performed?
2. What does the American Heart Association recommend as the first step in CPR?
3. What should you do if you are not trained in CPR?
4. What is the correct rate of chest compressions per minute?
5. What do the letters **C-A-B** stand for in CPR?
6. How deep should chest compressions be performed on an adult?
7. What is the head-tilt, chin-lift maneuver used for?
8. When should you use an AED during CPR?

Lesson 13

Мета заняття: Ознайомити студентів із ключовою англomовною термінологією: industrialaccident, major/minoraccident, internal/externalinjury, unsafeconditions, unsafeacts, technicalcauses, personalprotectiveequipment (PPE).Розвивати навички читання з

розумінням та виділення головного у фахових англомовних текстах. Формувати вміння аналізувати та класифікувати причини промислових аварій англійською мовою.

Industrial Accidents

The ever increasing mechanisation, electrification, chemicalisation and sophistication have made industrial jobs more and more complex and intricate. This has led to increased dangers to human life in industries through accidents and injuries. In fact, the same underlines the need for and importance of industrial safety. Let us first understand what industrial accident actually means.

An accident (industrial) is a sudden and unexpected occurrence in the industry which interrupts the orderly progress of the work. According to the Factories Act, 1948: "It is an occurrence in an industrial establishment causing bodily injury to a person who makes him unfit to resume his duties in the next 48 hours".

In other words, accident is an unexpected event in the course of employment which is neither anticipated nor designed to occur. Thus, an accident is an unplanned and uncontrolled event in which an action or reaction of an object, a substance, a person, or a radiation results in personal injury. It is important to note that self-inflicted injuries cannot be regarded as accidents.

Types of Accidents:

Accidents may be of different types depending upon the severity, durability and degree of the injury. An accident causing death or permanent or prolonged disability to the injured employee is called 'major accident'. A cut that does not render the employee disabled is termed as 'minor' accident. When an employee gets injury with external signs of it, it is external injury.

Injury without showing external signs such as a fractured bone is called an internal one. When an injury renders an injured employee disabled for a short period, say, a day or a week, it is a temporary accident. On the contrary, making injured employee disabled for ever is called permanent accident. Disability caused by accident may be partial or total, fatal or non-fatal.

Causes of Accidents:

The industrial safety experts have classified the various causes of accidents into three broad categories:

1. Unsafe Conditions
2. Unsafe Acts
3. Other Causes?

1. Unsafe Conditions (work-related):

Unsafe working conditions are the biggest cause of accidents. These are associated with defective plants, tools, equipment's, machines, and materials. Such causes are known as 'technical causes'. They arise when there are improper guarded equipment's, defective equipment's, faulty layout and location of plant, inadequate lighting arrangements and ventilation, unsafe storage, inadequate safety devices, etc.

Besides, the psychological reasons such as working over time, monotony, fatigue, tiredness, frustration and anxiety are also some other causes that cause accidents. Safety experts identify

that there are some high danger zones in an industry. These are, for example, hand lift trucks, wheel-barrows, gears and pulleys, saws and hand rails, chisels and screw drivers, electric drop lights, etc., where about one-third of industrial accidents occur.

2. Unsafe Acts:

Industrial accidents occur due to certain acts on the part of workers. These acts may be the result of lack of knowledge or skill on the part of the worker, certain bodily defects and wrong attitude.

Examples of these acts are:

- (a) Operating without authority.
- (b) Failure to use safe attire or personal protective equipment's,
- (c) Careless throwing of material at the work place.
- (d) Working at unsafe speed, i.e., too fast or too low.
- (e) Using unsafe equipment, or using equipment's unsafely.
- (f) Removing safety devices.
- (g) Taking unsafe position under suspended loads.
- (h) Distracting, teasing, abusing, quarrelling, day-dreaming, horseplay
- (i) One's own accident prone personality and behaviour.

3. Other Causes:

These causes arise out of unsafe situational and climatic conditions and variations. These may include excessive noise, very high temperature, humid conditions, bad working conditions, unhealthy environment, slippery floors, excessive glare, dust and fume, arrogant behaviour of domineering supervisors, etc.

Exercise 1. Read, translate and memorize using a dictionary:

Sophistication, industrial accident, occurrence, self-inflicted injury, prolonged disability, faulty layout, wheel-barrows, wrong attitude, abusing, excessive noise.

Exercise 2. Match the type of accident with its correct definition:

- 1. Major accident
- 2. Minor accident
- 3. Internal injury
- 4. Temporary accident
- 5. Permanent accident

- a) A cut that doesn't render the worker disabled
- b) Injury that causes permanent disability
- c) Injury without visible external signs (e.g., fracture)
- d) Injury causing short-term disability
- e) Death or prolonged disability

Exercise 3. Complete the sentences with the correct word from the text:

1. An accident is an _____ and _____ event in which an action or reaction results in injury.
2. The biggest cause of accidents is _____ working conditions.
3. Failure to use _____ _____ is an example of an unsafe act.
4. Slippery floors and excessive noise are examples of _____ causes of accidents.
5. Disability caused by an accident may be partial or _____, fatal or _____.

Exercise 4. Summarize the main idea of the text in 4-5 sentences.

Exercise 5. Compose a story on one of the topics. Prepare a presentation. Be ready to discuss this issue with your group mates.

1. What role does management play in preventing industrial accidents?
2. Do you think unsafe acts by workers or unsafe conditions in the workplace cause more accidents?
3. How can industries improve safety culture among employees?

Test questions:

1. How does increasing mechanisation and sophistication affect industrial jobs?
2. According to the Factories Act, 1948, how is an industrial accident defined?
3. Why are self-inflicted injuries not considered accidents?
4. What is the difference between a major and a minor accident?
5. How do external and internal injuries differ?
6. What are the three broad categories of accident causes identified by industrial safety experts?
7. Give three examples of unsafe acts that may lead to industrial accidents.
8. What situational and climatic conditions can contribute to accidents?

Мета заняття: Сформувати у студентів знання про типові аварії у транспортному секторі, фактори їх виникнення та способи запобігання; розвинути навички аналізу англomовних професійних текстів; навчити описувати і пояснювати заходи безпеки в логістиці та транспорті англійською мовою; виховати готовність до запобігання транспортним аваріям і оперативного реагування на них.

Transport Accidents

In the logistics and transportation industry, safety is paramount. The sector involves the movement of goods across vast distances, often under tight schedules and with complex operational requirements.

This creates a heightened risk of safety incidents, which can lead to significant financial losses, reputational damage, and, most importantly, harm to personnel and the general public. Identifying and understanding these incidents is essential for enhancing safety protocols and reducing risks. Here, we highlight 15 types of safety incidents commonly encountered in logistics and transportation.

Vehicle Collisions

Vehicle collisions are one of the most frequent and severe types of incidents in logistics. Whether they occur between trucks, with other vehicles, or with stationary objects, these collisions can have devastating consequences. The force of impact in such incidents often results in serious injuries or fatalities for drivers and passengers, as well as significant damage to vehicles and goods. Furthermore, collisions can lead to traffic delays, road closures, and costly repairs, all of which disrupt the entire supply chain. Companies should invest in training their drivers, employing advanced safety features in their vehicles, and using telematics to monitor driving behaviours to reduce the likelihood of these incidents.

Cargo Spills

Cargo spills occur when goods being transported leak or spill from their containers, potentially causing major safety hazards. Spills can be particularly dangerous in the transportation of hazardous materials, such as chemicals, oils, or gases, which may result in environmental damage, fires, or exposure to toxic substances. In non-hazardous cases, spills of goods like food or bulk materials can lead to accidents, contamination, and damage to the surrounding environment. The risk of spills can be minimised through proper loading practices, the use of secure containers, and compliance with all relevant safety regulations.

Driver Fatigue

Driver fatigue is a leading cause of accidents in logistics and transportation. Extended working hours, long-haul routes, and tight delivery schedules can place immense pressure on drivers, leading to physical and mental exhaustion. Fatigue impairs reaction times, judgment, and concentration, significantly increasing the likelihood of road incidents. Fatigued drivers are at a higher risk of making errors such as failing to signal, misjudging distances, or even falling asleep at the wheel. To combat this, it is crucial for logistics companies to implement strict rest protocols, encourage regular breaks, and use technologies like electronic logging devices (ELDs) to monitor driving hours and ensure drivers get the necessary rest.

Overloading

Overloading vehicles beyond their weight capacity is a critical safety concern in logistics. Vehicles that are loaded with too much weight, become more difficult to control, particularly during adverse weather conditions or while navigating through sharp turns. Overloaded trucks are also more prone to tyre blowouts, reduced braking efficiency, and increased strain on engine systems. Additionally, overloading can result in severe penalties from regulatory authorities, as it violates weight restrictions set by transport laws. Ensuring that cargo is distributed evenly and that vehicles adhere to weight limits is essential. This requires thorough load planning, proper training for staff responsible for loading, and regular vehicle inspections.

Forklift Accidents

Forklifts are widely used in logistics and warehouse operations to move heavy loads, but they can be a source of serious accidents if not operated properly. Forklift accidents can range from minor incidents, such as knocking over smaller objects, to major accidents, like collisions with pedestrians or the tipping of the vehicle. Employees operating forklifts may also suffer from injuries such as crushing or pinching, especially if safety procedures are not followed. To prevent forklift accidents, operators should receive extensive training, and safety protocols, such as speed limits and the use of warning signals, should be enforced. Furthermore, warehouses should be designed with wide aisles and clear visibility to improve safety.

Exercise 1. Read, translate and memorize using a dictionary:

Paramount, vehicle collision, driver fatigue, electronic logging device, forklift, adverse weather conditions, crucial, be enforced, extensive training

Exercise 2. Decide if the following statements are True (T) or False (F):

1. Vehicle collisions only cause financial losses, not injuries.
2. Cargo spills are dangerous only if hazardous materials are involved.
3. Driver fatigue slows reaction times and increases accident risk.
4. Overloading vehicles can lead to reduced braking efficiency.
5. Forklift accidents can be avoided if operators receive training and safety rules are enforced.

Exercise 3. Fill in the blanks with a suitable word:

1. Vehicle collisions can disrupt the entire _____ chain.
2. Cargo spills may cause _____ damage, fires, or toxic exposure.
3. Electronic logging devices (ELDs) are used to monitor driving _____.
4. Overloaded trucks are more prone to tyre _____.
5. Forklifts should be operated by trained _____ only.
- 6.

Exercise 4. Summarize the main idea of the text in 4-5 sentences.

Exercise 5. Compose a story on one of the topics. Prepare a presentation. Be ready to discuss this issue with your group mates.

1. Which of the five incidents described (collisions, spills, fatigue, overloading, forklift accidents) do you think is the most dangerous and why?
2. Should governments impose stricter regulations on driver working hours to reduce fatigue-related accidents?
3. How can technology (e.g., telematics, sensors, AI) improve safety in logistics and transportation?

Test questions:

1. Why is safety considered paramount in the logistics and transportation industry?
2. What are some of the consequences of vehicle collisions in logistics?
3. Why are cargo spills especially dangerous when transporting hazardous materials?
4. What non-hazardous cargo spills can also cause accidents or environmental damage?
5. How does driver fatigue affect road safety?
6. What measures can logistics companies take to reduce the risks of fatigue-related incidents?
7. Why is overloading vehicles dangerous, and what problems can it cause?
8. What are some ways to prevent forklift accidents in warehouses?

Lesson 15

Мета заняття: Ознайомити студентів із термінологією англійською мовою: firesafety, firealarm, fireextinguisher, escaperoute, fire-resistantmaterials, evacuationplan, Class A/B/C/D/K fire, emergencyresponse. Розвивати навички читання з розумінням та виділення основних причин пожеж і заходів безпеки. Навчити студентів описувати класи пожеж та відповідні способи гасіння. Практикувати усне мовлення: обговорення сценаріїв пожеж, планування евакуації, рекомендації щодо профілактики.

Fires in Building

Fire safety is a comprehensive set of protocols and procedures designed to prevent fires from occurring, detect them early if they do, and facilitate safe evacuation and containment when necessary. It encompasses everything from fire-resistant building materials and equipment to emergency response plans and evacuation procedures.

Causes of Fires in Buildings

1)Electrical faults 2)Arson 3)Unattended candles or cigarettes 4)Kitchen fires 5)Equipment malfunction

Classifications of Fires

Fires are classified into different categories based on the types of materials or substances involved and their behavior. Understanding these classifications is crucial for selecting the appropriate firefighting techniques and equipment for your building:

Class A: Fires involving ordinary combustible materials like wood, paper, and cloth.

Class B: Fires fueled by flammable liquids such as gasoline, oil, and grease.

Class C: Fires involving energized electrical equipment.

Class D: Fires fueled by combustible metals like magnesium and titanium.

Class K: Fires in commercial kitchens fueled by cooking oils and fats.

Fire Safety Precautions and Rules

To prevent fires, occupants and building owners should adhere to various precautions and rules, including:

Proper storage and disposal of flammable materials.

Regular inspection and maintenance of electrical systems.

Keeping exit routes clear and unobstructed.

Conducting regular fire drills to ensure that occupants know how to respond in an emergency.

Educating occupants about fire safety protocols and procedures.

Fire Safety Measures for Buildings

To ensure fire safety in buildings, the following measures should be implemented:

Fire Alarms and Detection Systems: Install fire alarms and detection systems that can detect smoke and heat.

Fire Extinguishers: Provide fire extinguishers on every floor and in easily accessible locations.

Fire Escape Routes: Designate fire escape routes and ensure they are clearly marked and accessible.

Fire-Resistant Materials: Use fire-resistant materials for building construction and furnishings.

Regular Maintenance: Regularly inspect and maintain electrical systems, equipment, and fire safety devices.

Protection of Lives

The foremost importance of fire safety in buildings is the protection of human lives. Proper fire safety measures such as smoke alarms, fire exits, and evacuation plans can help occupants evacuate safely in the event of a fire, reducing the risk of injuries and fatalities.

Preservation of Property:

Fire safety measures help minimize property damage by detecting fires early, containing their spread, and providing means for extinguishing them. This is crucial for protecting valuable assets, equipment, and belongings within buildings.

Compliance with Regulations:

Adhering to fire safety regulations and codes is essential for building owners and managers to ensure legal compliance. Compliance helps avoid fines, penalties, and legal liabilities while also enhancing the reputation and credibility of the building.

Business Continuity:

Fire incidents can disrupt business operations, leading to financial losses and reputational damage. Implementing fire safety measures ensures business continuity by minimizing the impact of fires and facilitating a swift recovery process.

Reduced Insurance Costs:

Buildings equipped with proper fire safety systems and measures may qualify for lower insurance premiums. Insurance companies often offer discounts to properties with adequate fire protection, reflecting reduced risk and potential losses.

Emergency Response Preparedness:

Fire safety measures such as fire drills, evacuation plans, and training ensure that occupants are prepared to respond effectively in the event of a fire. This preparedness reduces panic and confusion, enabling a coordinated and orderly evacuation.

Protection of the Environment:

Fires can have detrimental effects on the environment, releasing harmful pollutants and greenhouse gases into the atmosphere. By preventing fires or minimizing their impact, fire safety measures contribute to environmental preservation.

Community Safety:

Fire safety in buildings extends beyond individual properties to ensure the safety and well-being of the surrounding community. Properly maintained buildings with effective fire safety measures reduce the risk of fire incidents that could endanger neighboring properties and residents.

In conclusion, fire safety is a fundamental aspect of building design, construction, and maintenance, requiring proactive measures, adherence to regulations, and ongoing vigilance to minimize the risk of fires and ensure the safety of occupants and property. By understanding fire safety principles and implementing effective strategies, building owners and occupants can significantly reduce the impact of fires and mitigate potential hazards.

Exercise 1. Read, translate and memorize using a dictionary:

smoke alarms, fire exits, evacuation plan, safety protocol, reduced risk, impact, fire drill, endanger, maintenance, adherence, mitigate potential hazard.

1. Exercise 2. Fill in the gaps with suitable words:

2. Fire safety helps protect human _____ in case of emergencies.
3. Buildings with proper fire safety may receive reduced _____ premiums.
4. Conducting regular fire _____ ensures occupants know how to respond during emergencies.
5. Fire-resistant _____ can be used in construction to reduce fire risks.

6. Fires release harmful _____ into the environment, causing pollution.

Exercise 3. Match the fire classes with the correct type of fuel:

- Class A
 - Class B
 - Class C
 - Class D
 - Class K
- a) Fires in kitchens fueled by cooking oils and fats
b) Fires involving energized electrical equipment
c) Fires fueled by combustible metals such as magnesium
d) Fires fueled by liquids such as gasoline and oil
e) Fires involving ordinary combustible materials like wood

Exercise 4. Summarize the main idea of the text in 4-5 sentences.

Exercise 5. Compose a story on one of the topics. Prepare a presentation. Be ready to discuss this issue with your group mates.

1. Should fire drills be mandatory in all public and residential buildings? Why or why not?
2. Do you think modern buildings are safer from fire than older ones? Discuss the issue. Give examples.
3. How can technology (smart detectors, AI, IoT systems) improve fire safety in the future?

Test questions:

1. What does fire safety aim to achieve?
2. List at least three common causes of fires in buildings.
3. What type of materials are involved in Class A fires?
4. Why is it important to understand fire classifications?
5. What are some key fire safety precautions that occupants and building owners should follow?
6. How do fire safety measures protect human lives?
7. In what ways can proper fire safety measures benefit businesses financially?
8. How does fire safety contribute to community safety and environmental protection?

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