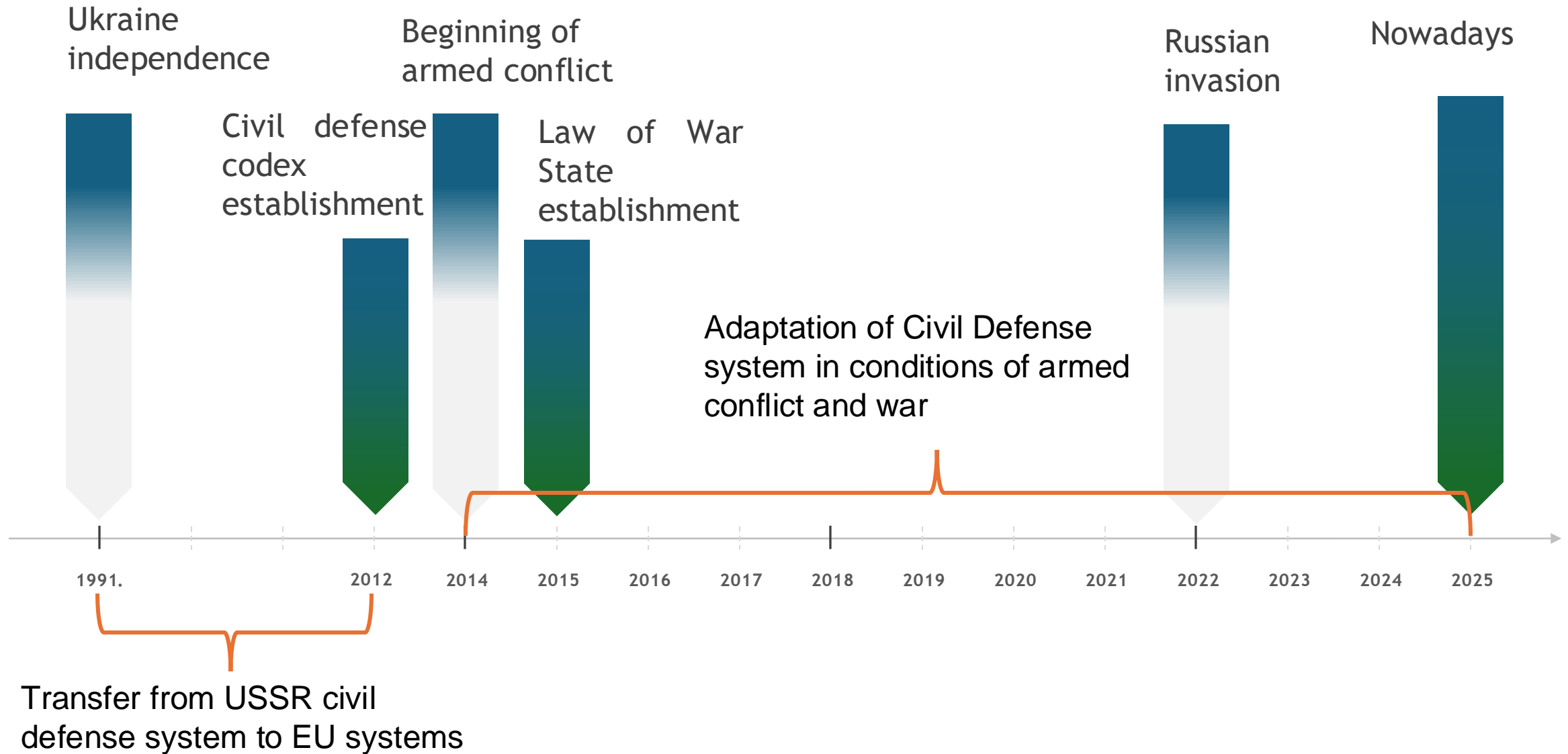


# Key changes in civil defense system

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RRADEW Consortium Workshop  
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# Main changes in civil defense system of Ukraine



# Main changes in civil defense system of Ukraine

## 1992–2004: Formation of the civil defense system

- 1991 – Ukraine inherited the Soviet civil defense system, which was focused on military threats.
- 1993 – The Cabinet of Ministers approved the Regulation on Civil Defense of Ukraine, which defined its tasks, structure and subordination.
- 1999 – The Law of Ukraine "On Protection of the Population and Territories from Emergencies of a Technogenic and Natural Nature" was adopted.
- 2003 – Management reform: the Ministry of Emergency Situations (MES) was created, which united the fire service, rescue units and the civil defense system.

## 2005–2013: Transition to European standards

- 2007 – Start of reforms in accordance with EU and NATO standards, emphasis on responding to man-made and natural disasters.
- 2010 – The merger of the Ministry of Emergencies with the Ministry of Defense was abolished, and the structure became independent again.

## 2014–2021: Response to war and hybrid threats

- 2014 – The beginning of Russian aggression, the annexation of Crimea and the war in Donbas prompted the strengthening of civil defense.
- 2015 – A territorial defense system was introduced, training the population on behavior during hostilities.

## 2022–2025: Large-scale war and new challenges

- 2022 – Full-scale Russian invasion. Development of volunteer civil defense units, activation of shelters, updating of the warning system.
- 2023–2024 – Strengthening the preparation of the population for emergencies, digitalization of the civil defense system, integration of Ukraine into the European civil defense system.

# Basic principles of action in case of radiation accidents

# Major steps of basic principles of action in case of radiation accidents changes

1991–2000: Transition from Soviet norms to national standards  The legacy of the USSR	1992: The law “On Civil Defense of Ukraine” was adopted, which included provisions on radiation safety.		
	1997: The law “On the Use of Nuclear Energy and Radiation Safety” was adopted, which enshrined the basic principles of action in case of radiation accidents.		
	Key actions for the population:	Staying in shelters during the accident.	
		Evacuation by decision of the authorities.	
2000–2010: Transition to international standards	Main changes in the protocol:	Taking potassium iodide to protect the thyroid gland.	
		Decontamination of clothing and skin.	
	2003: National Radiation Accident Response Plan adopted, adapted to IAEA recommendations		
	2005: Ukraine joins the international early warning system for radiation accidents		
	Main changes in the protocol:	Use of dosimetric monitoring to identify affected areas	
		Introduction of educational activities for the population	
		Introduction of a warning system through the media and mobile communications	

# Major steps of basic principles of action in case of radiation accidents changes

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2011–2021:  
Deepening  
of training  
and new  
threats

2012: Adoption of the Civil Defense Code of Ukraine, which detailed the procedure for radiation incidents

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2014: The war in Donbass created a risk of attacks on nuclear facilities, which forced the updating of security protocols

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2020: COVID-19 has made adjustments to evacuation measures, adding requirements for personal protection.

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New elements in the protocol:

Increased public education.

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Development of mobile applications for notification.

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Refined evacuation and population placement system.

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2022–2025:  
Response to  
military  
threats and  
digitalization

2022: Russia's full-scale war against Ukraine. Shelling of the Zaporizhzhia NPP and other facilities prompted emergency updates to the protocols.

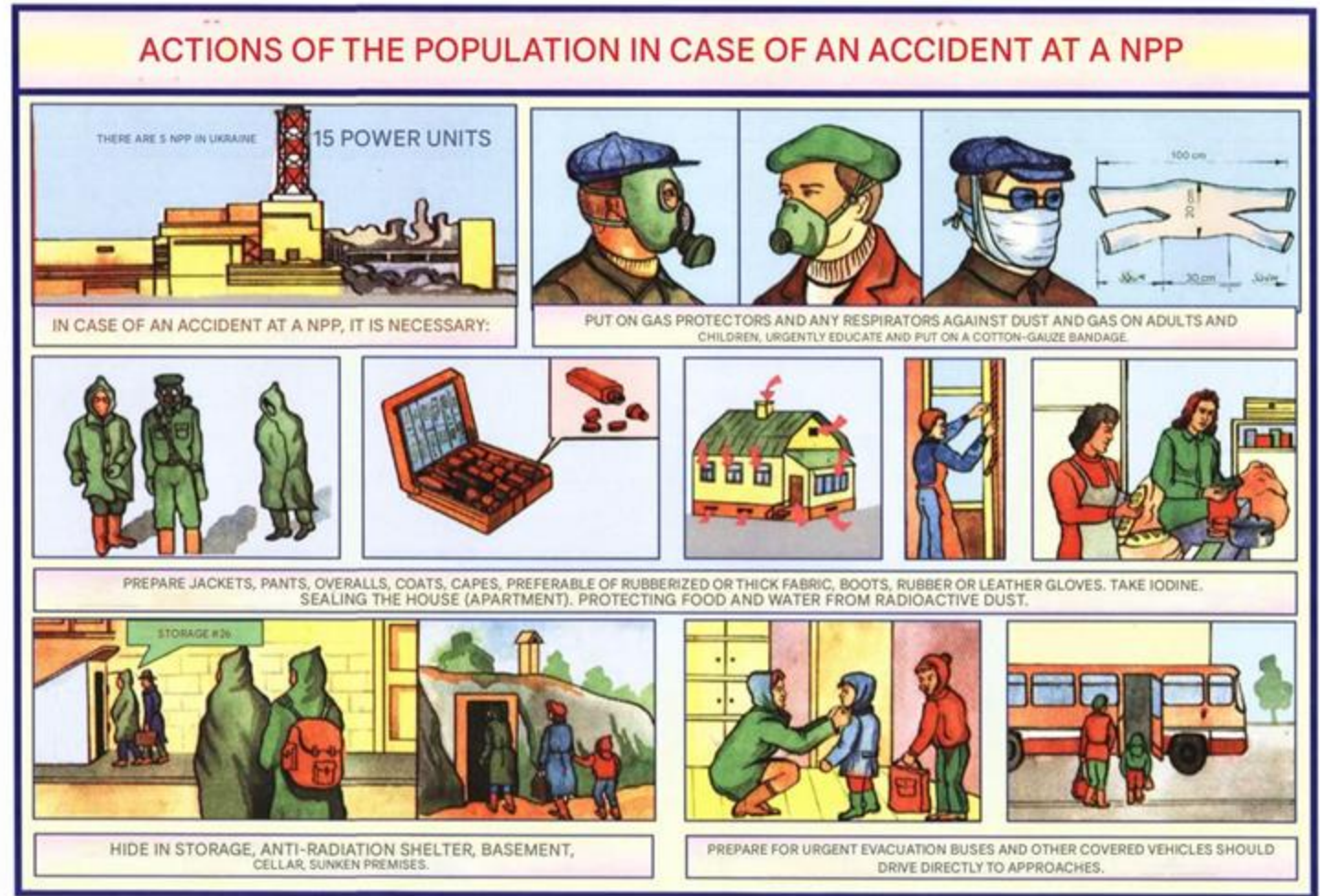
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2023: Active implementation of digital platforms to notify the public about radiation threats.

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## Old sequence of actions incase of an accident at NPP (poster)

- Due to centralization all decisions and steps was made by the authorities
- Potassium Iodine prophylaxis could be maintained at all times during a radiation accident





## New sequence of actions incase of an accident at NPP (poster)

- Decentralized bodies and the state emergency service are responsible for citizens
- Decentralized authorities starts increase public education
- Potassium Iodine prophylaxis made once and not for all
- Mobile and media notifications





## New sequence of actions incase of an accident at NPP (poster)

- In general sequence stays same but changed steps.

When to carry out iodine prophylaxis?

Importantly! Potassium iodide taken after meals and only after official notification of a radiation accident and the need for iodine prophylaxis.



Remember! Premature iodine prophylaxis is harmful to your health!

Yodna prevention is carried out once (!) by taking iodine-containing drugs.

Carrying out iodine prophylaxis

The regulation of iodine prevention in the event of a radiation accident establishes the following age groups and dosages of stable iodine (potassium iodide):



- children up to 1 month (infants and children who are breastfed) 16 mg,
- children from 1 month to 3 years 32 mg,
- children from 3 to 12 years old - 62.5 mg,
- adolescents from 13 to 18 years old, adults up to 40 years old, pregnant and breastfeeding mothers - 125 mg.

  
State Emergency Service of Ukraine  
GU DSES of Ukraine in Kyiv region NMC Central and BZD of Kyiv region

  
What do you need to know about radiation danger?

# Actions in case of nuclear bombing (poster)



description of the impacting factors in a nuclear explosion

Ядерна зброя — це пристрій, який спричиняє вибух за допомогою ядерної реакції.

Ядерна зброя охоплює різні види зброї від незначних за розміром портативних пристроїв до ядерних ракет.

Ядерному вибуху може передувати коротке попередження (за кілька хвилин), або може відбутися без жодного попередження.



ЯСКРАВИЙ СПЛАХ може спричинити тимчасове осліплення, яке триватиме менше хвилини.



ВИБУХОВА ХВИЛЯ може спричинити смерть, травми та ушкодження споруд на відстані 5-7 км від місця вибуху.



РАДІАЦІЯ може зашкодити кліткам тіла. Великі вибухи можуть викликати ерменеву хворобу.



ВОГОНЬ І ВИСОКІ TEMПЕРАТУРИ можуть спричинити смерть, опіки та ушкодження споруд на відстані 5-7 км від місця вибуху.



ЕЛЕКТРОМАГНІТНИЙ ІМПУЛЬС (ЕМІ) може пошкодити електропристрої на відстані 5-7 км від місця вибуху і спричинити перебої у їхньому функціонуванні навіть на великих відстанях.



РАДІОАКТИВНІ ОПАДИ — це радіоактивний бруд та уламки, які падають згори і можуть викликати променеву хворобу у тих, хто залишився наземі.

Actions in case of a nuclear explosion



**СХОВАЙТЕСЯ ВСЕРЕДИНІ**



Сховайтеся у найближчій будівлі для уникнення радіації. Найкраще для цього підійдуть бетонні чи цегляні будівлі.



Якщо ви ще були наземі після появи радіоактивних осадів, зніміть із себе заражений одяг та промийте або протріть вологими серветками чи рушником відкриті ділянки шкіри.



Сховайтеся у підвальному приміщенні або в центральній частині обраної будівлі. Уникайте зовнішніх стін і даху.



**ЗАЛИШАЙТЕСЯ ВСЕРЕДИНІ**



За відсутності інших розпоряджень від представників місцевої влади, залишайтеся всередині протягом наступних 24 годин.



Членам родин необхідно залишатися в тих укриттях, де вони опинилися після вибуху, щоб уникнути небезпечного радіаційного зараження. Ви матимете змогу побачити один одного пізніше.



Не випускайте своїх домашніх улюбленців наземі.



**СТЕЖТЕ ЗА НОВИНАМИ**



Стежте за будь-яким доступними джерелами інформації для отримання офіційних вказівок, наприклад, щодо того, коли буде безпечно залишити приміщення і яким буде ваш подальший план дій.



Радіопристрої на батарейках і ручні радіо працюватимуть навіть після ядерного вибуху.



Мобільний зв'язок, телебачення, та Інтернет-зв'язок можуть працювати нестабільно та з перебоями або ж не працювати взагалі.

# Basic principles of action in case of military operations

# Major steps in basic principles of action in case of military operations changes

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1991–2013: Passive Civil Defense System After gaining independence, Ukraine inherited the Soviet model of civil defense, which was not adapted to modern armed conflicts.

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Main problems of this period:

Lack of a system for training the civilian population for combat operations.

Limited number of suitable bomb shelters.

Lack of effective warning of danger.

Low level of public awareness of actions in case of war.

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2014–2021: Transition to an active model due to the war in Donbas

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Main changes:

Restoration of shelters in combat zones.

Start of training civilians in survival skills during war.

Introduction of partial mobile warning.

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# Major steps in basic principles of action in case of military operations changes

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## 2022–2025: Full-scale war and a new era of civil defense


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Public notification	2022 – Mobile notification was introduced through the "Air Alert" and "ePPO" applications.
	Use of sirens, television, radio, SMS for quick information about threats.
	Citizens have massively learned to distinguish between types of alarms (air, artillery, chemical, radiation).
Public preparation	Mass distribution of instructions on behavior during missile strikes and artillery shelling.
	Volunteer courses in first aid and survival.
	Introduction of mandatory training of the civilian population in the basics of security.
Digitalization of civil defense	Launch of applications with shelter maps.
	Introduction of chatbots for informing and communicating with rescuers.
	Use of artificial intelligence to predict missile strikes.

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# Samples of information posters for citizens

 STATE SERVICE OF UKRAINE FOR EMERGENCY SITUATIONS

## WHAT TO DO IF YOU HEAR AN AIR ALARM?

TURN ON THE RADIO OR TELEVISION TO LISTEN TO AN URGENT ANNOUNCEMENT OF A POSSIBLE EMERGENCY. CALL INFORMATION IS TRANSMITTED WITHIN FIVE MINUTES AFTER SOUND SIGNAL (SIREN)

LISTEN TO AN APPEAL TO THE POPULATION

FOLLOW THE RECOMMENDATIONS WHICH WILL BE PROVIDED DURING THE APPLICATION.

TRY TO NOTIFY YOUR RELATIVES, NEIGHBORS, FRIENDS ABOUT WHAT YOU HEAR. THEY SHOULD BE ASSISTED IF NECESSARY

THE AIR ALARM WILL BE ANNOUNCED AS MANY TIMES AS THE SITUATION DEMANDS!

IT IS DIFFICULT TO DETERMINE THE EXACT PLACE WHERE THE MISSILE MAY HIT OR WHICH POPULATION THE AIRCRAFT ATTACKS

AFTER SUCH SIGNALS, IMMEDIATELY MOVE TO SHELTER!

 STATE SERVICE OF UKRAINE FOR EMERGENCY SITUATIONS

## WHAT TO DO IF YOU CAN'T REACH SHELTER DURING THE FIRING

GO TO A ROOM WITHOUT WINDOWS IMMEDIATELY. OR USE THE RULE OF TWO WALLS. (THE FIRST WALL WILL TAKE ON IT THE FORCE OF THE EXPLOSION. THE NEXT - DESTRUCTION)

IF THERE IS A FIRE OR DAMAGE TO THE HOUSE, CALL 101. INDICATE YOUR EXACT ADDRESS, FLOOR, APARTMENT. LEAVE DANGEROUS PLACE!

IF THERE IS AN EXPLOSION IN THE BUILDING, LEAVE THE BUILDING ASAP. BUT KEEP THE DOOR OPEN! THEN RESCUERS WILL NOT HAVE TO CUT THEM WITH A GASOLINER FOR THE MANDATORY CHECK

If you LEAVE THE CITY or your APARTMENT

LEAVE THE KEYS WITH THE NEIGHBORS 

In the event of an emergency (ES) in your home, emergency responders will check each residence to make sure it is unoccupied. 

COMMUNICATE WITH YOUR NEIGHBORS, KEEP IN CONNECTION 

In the event of an emergency, the rescuers will know the exact number of people who stayed at home. Probably empty apartments will be checked later. 

VO | State Emergency Service of Ukraine  Ministry of Internal Affairs of Ukraine

## "WORRIED SUITCASE"

### PICK UP DOCUMENTS AND MONEY

Passport and copies of all necessary documents (birth certificate, military ID, education document, employment book or pension certificate, property documents); money (cash and bank cards). 

### 02 NECESSARY TECHNIQUE

Phone chargers, radio, flashlight, signaling devices, compass, watch, compact tool kit (multitool), knife, garbage bags, notebook, pencil, thread, needles, matches, lighters. 

### ABOUT CLOTHING AND HYGIENE TOOLS

Warm clothes (if possible, prepare a thermal blanket), underwear, reliable, comfortable shoes. Don't forget to collect the personal hygiene products you need. 

### About health

A first-aid kit, including the medical preparations you use every day, as well as prescriptions for medicines. 

### 5 TABLEWARE AND PRODUCTS FOOD

Dishes in which you can cook, heat and store food; water and food for 3 days, which are stored for a long time and do not require additional preparation. 

Pack things into a roomy, comfortable backpack and keep it ready. In case of an emergency, this will reduce the time for meetings. 

<https://dsns.gov.ua/abetka-bezpeki/diyi-naselennya-v-umovax-nadzvicainix-situacii-vojenного-xarakteru>

# Samples of information posters for citizens





# Samples of information posters for citizens

STATE SERVICE OF UKRAINE FOR EMERGENCY SITUATIONS

## ACTIONS IN THE EVENT OF THE DISAPPEARANCE OF UKRAINIAN BROADCAST:

UKRAINIAN TV CHANNELS ARE DECODED BY SATELLITE. TO WATCH TV, YOU NEED A SATELLITE RECEIVER AND A SATELLITE ANTENNA

MOST UKRAINIAN CHANNELS HAVE THEIR OWN CHANNELS ON YOUTUBE. IF YOUR INTERNET SPEED IS SLOW, CHOOSE A LOWER RESOLUTION IN THE VIDEO SETTINGS (360 PX OR 480 PX QUALITY)

ON PLATFORMS: YOUTUBE, SWEET TV, OMEGA TV, MEGOGO, KYIVSTAR TV, ALL TV ACCESS TO UKRAINIAN TELEVISION IS NOW ALSO FREE. FIND YOUR DESIRED CHANNEL IN THE APP OR ON THE WEBSITE OF YOUR FAVORITE PLATFORM

ALSO, LISTEN TO UKRAINIAN RADIO ON THE INTERNET RADIO:

WWW.RADIOPLAYER.UA

STATE SERVICE OF UKRAINE FOR EMERGENCY SITUATIONS

## how to act in case of shelling of residential buildings? RESCUE RULES:

ALARM NOTIFICATIONS OCCUR TWO TYPES: INTERMITTENT SIREN (WAIT FOR 5 MINUTES AFTER THE SIGNAL THE CHANNELS WILL NOTIFY WHAT TO DO NEXT), CONTINUOUS SIREN (GO TO SHELTER IMMEDIATELY)

AFTER NOTIFICATION OF AN AIR ALARM SHOULD BE TURNED OFF: LIGHT, GAS, WATER. If there is - DISCONNECT THE GAS CYLINDER, RELEASE the pressure and PUT IN A SAFE PLACE

THE MOST DANGEROUS PLACES IN THE HOUSE: FIRST, SECOND AND THIRD FLOORS (THREAT OF BULLETS WHEN FIRED), TOP FLOOR (DANGEROUS DURING AIR ALARM), BASEMENT (PROBABILITY OF BEING COVERED BY ROBBERIES)

IF STAYED IN AN APARTMENT, WHERE HIDE: THE BATHROOM IF IT DOESN'T HAVE A GAS BOILER OR THE SPACE BEHIND TWO DEAF WALLS

WHAT TO TAKE WITH YOU TO SHELTER:

WATER (IN LITERS PER PERSON)	✓	DRY FOOD FOR AT LEAST 2 DAYS	✓
PHONE WITH POWER BANK	✓	whistle for SIGNALING	✓
FLASHLIGHT	✓		

STATE SERVICE OF UKRAINE FOR EMERGENCY SITUATIONS

## HOW TO SURVIVE A CRISIS AND KEEP CALM

### AGGRESSION: how to help?

1. Minimize the number of people around (if possible).
2. Give the person the opportunity to release emotions.
3. Give work associated with high physical load.
4. Show kindness.
5. Try to defuse the situation with funny comments or actions.

### PANIC ATTACK: how to help?

1. Ask the person to sit, head down, and feet on the floor.
2. Ask to focus on breathing and breathe slowly.
3. Shift your focus. Ask the person to describe what they see and hear.

# Conclusions

- Over the past 30 years, Ukraine's civil defense, respond to radiation accidents and military defense has evolved from a Soviet model to a modern system adapted to real threats and challenges.
  - Centralized systems changed to decentralized and increased public education.
  - Application of a warning system through the media and mobile communications
- The civil defense system continues to improve in line with the challenges of the time.
- The biggest changes occurred after 2014 and especially in 2022, when the civilian population became a key element of the country's defense.

THANK YOU FOR  
ATTENTION!