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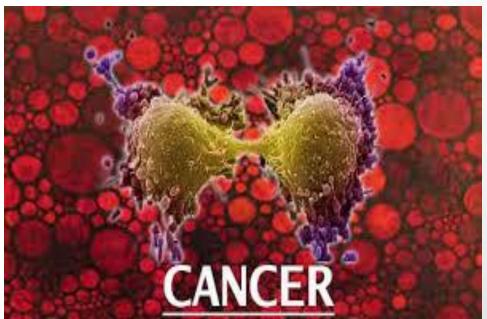
## Introduction

• Everyday life is closely related to environmental conditions. Many features of living organisms are inherent to human organisms. Tumor, nutrition, growth and development of the person are in the natural environment. Therefore, human beings are part of life.

Environmental conditions affect human health. Breathable air, using everyday food, clean drinking water is of particular importance to people. Particularly, this situation is especially noticeable in Kazakhstan. For example, Aral Sea attractiveness, nuclear tests, smog, glowing rain, greenhouse effect and etc.

### Harmful environmental factors

Loncirogens (cancer from Latin cancer, genesis - origin) cause malignant neoplasms. At present, about 500 such substances are known. The strongest of them are benzo (a) pyrene and other polycyclic aromatic carbohydrates, ultraviolet rays, and etc;



2. mutagenic (mutation - translating from Latin) - changes in the number and structure of chromosomes. These include: X-rays, gamma rays, neutrons, colchicine, some viruses;







• 3. teratogenic (terrace, teralos - monstroses) - substances that lead to defects in personal development, which lead to disadvantages. Many mutagenes are mutagenic, as well as pesticides, ferrous fluids, noise and pollutants.

## Examples of teratogenic drugs



"Priaral zone" is the territory of an ecological pre-crisis state characterized by growing processes of desertification, soil degradation, increased radionuclide content in all objects of the natural environment, from soil. The South Kazakhstan region of the Aral Sea includes four regions, including the cities of Turkestan and Arys

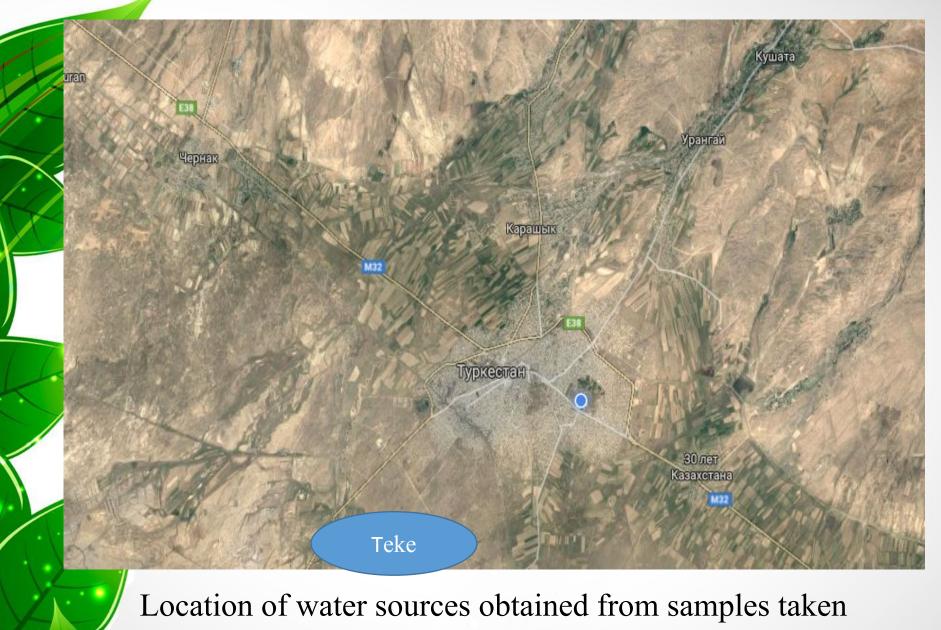
Every third inhabitant of the South-Kazakhstan region drinks water from open sources or imported, - which the water-carriers recruit, in general, from the same "open sources". All the rivers of the South Kazakhstan Region are contaminated with sulphates, nitrites, and remains of oil products that are tens of times higher than the permissible norm.

According to the statement of the SKR(South Kazakhstan region) oncologists, almost every second inhabitant of fertile (childbearing) age from 16 to 30 years old has an anemia. The number of congenital anomalies in children is constantly increasing from year to year. Of every thousand newborns in the SKR - 250 are born with congenital diseases. For three years in the South Kazakhstan region the number of children suffering from mental and physical disabilities increased by 10 thousand. If in 1999 they were registered 25,5 thousand, this year already 35,5 thousand

In the first place among the diseases southerners are gastrointestinal diseases (ulcers, gastritis), on the second - anemia (diseases of the hemopoiesis organs), and on the third - respiratory diseases (bronchitis, pneumonia, tuberculosis). In the opinion of physicians, in the first place is social unconfiguration, and on the second - the unfavorable ecological situation in the region.



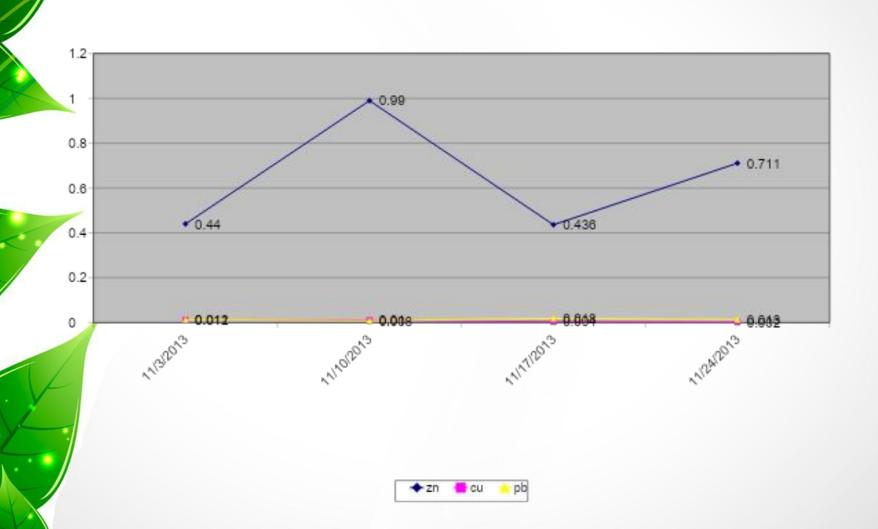
• In order to identify and assess the quality of drinking water in the city of Turkestan, water samples were taken several forms. They are: Central market in Turkestan, Mayshay Abenov street, water sources located on the territory of Telman, Samal district, Bazar, Railway station.



from Turkestan for drinking water quality control

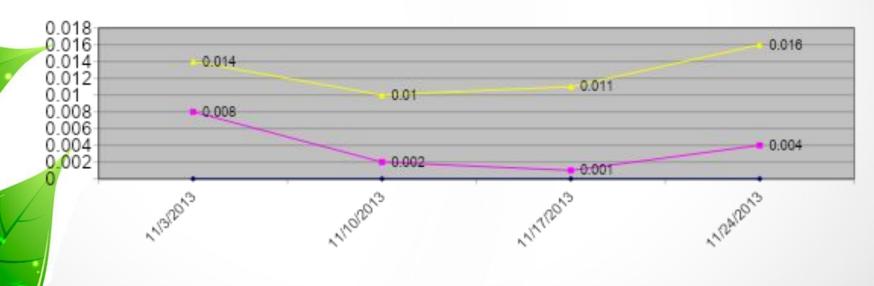
At the first stage, a water sample test was conducted at the Central Market(Ortalyk bazar) in Turkestan. Registered peak of zinc, copper and lead elements of the solution depends on the mass concentration of the element in Voltamperogramm. This dependence on the analysis of samples revealed no damage from 0,43-0,99 mg / 1 of zinc, not reach the level of high concentration (1.0 mg / 1). Similarly, lead, copper concentrations showed values up to the maximum level  $(0.01 \text{ mg} \setminus 1)$ .

# Ortalyk Bazar

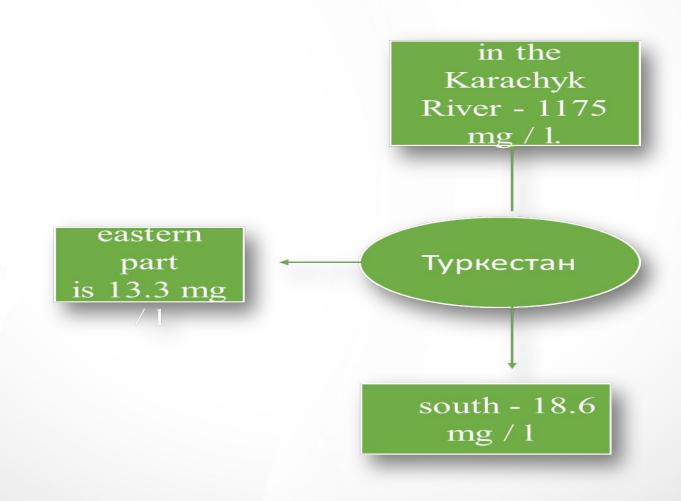


Zinc was not found at the water source in Mayshay Abenova street, and copper and lead were similar to the preceding sample

#### Maisha Abenova

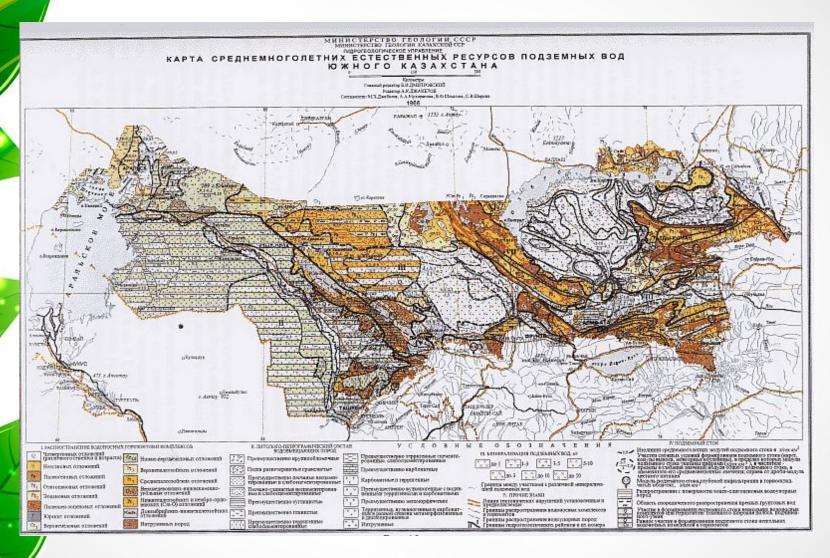


• Turkestan drinking-water sources in the region, mainly in terms of quality and does not meet the requirements for low values.



# City and human health.

The ecological environment of modern people is a city. It is an extreme environment that is different from the largest and most natural environment. There are several natural water reserves in South Kazakhstan region such as Teke. These waters have high healing properties



Map of natural water resources in South Kazakhstan region

## Conclusion

In summary, many harmful environmental factors affect the human body. The low quality of potable water in Turkestan is also reflected by search. In my opinion, if the underground water in Tekke is attracted to the most populous city of Turkestan

- 1. Pancreas, gastritis, anemia, pneumonia, tuberculosis
- 2. hair loss, drying of skin
- 3. children with mental retinue and physical disabilities

Problems such as will be low, and amount of water content by sulfate, nitride, and petroleum products could be used by the public. One of the drawbacks of this idea is that it is a lot of money spent, but as our leader pointed out, 'Good health is above wealth', health should be put first.

