

The background features abstract, overlapping geometric shapes in various shades of pink and purple, creating a modern, layered effect. The shapes are primarily triangles and polygons, some semi-transparent, set against a white background.

DISEASES IN THE MIDDLE AGES IN THE CURRENT TERRITORY OF LATVIA

An important cause of spread of diseases

- ❑ With the movement of people, the expansion of trade in the territory of Latvia, unknown diseases brought a lot of people's lives.
- ❑ In the past, diseases spread mainly through trade routes, port cities and troop movements. Infection threats were caused not only by sick people, but also by animals (for example, rats).
- ❑ An important cause of spread of diseases and epidemics in 13-18th centuries were dramatic climate changes. From the 13th and 14th centuries to the 19th century temperatures began to fall in the all northern hemisphere of the Earth. Winters were more severe in this period than it is today, the springs were late, but in summers there were various anomalies (drought, long rain, early frost). The unfavorable climatic conditions caused long-lasting bad harvest and famine, after which inflamed diseases. Some researchers believe that the thick clothing worn in cold weather worsened personal hygiene, which promoted flea proliferation and for this reason - spread of the Black Death.

Epidemiological problems

- ❑ In times of crisis (famine, warfare), the city had to take up a lot of inhabitants in addition to its citizens. Consequently, a limited urban area with high population density was one of the main preconditions for the spread of diseases and epidemics, as the sanitary hygiene conditions of the population, waste formation on the streets of cities deteriorated.
- ❑ One of the biggest epidemiological problems in the lives of Riga citizens was drinking water. In Riga, like in most cities in the middle Ages, water for the inhabitants and crafts was collected from the canals, which were built for protection purposes and were laid behind the protective walls. The water in the canals was dirty because of urban waste and it was rubbishy for drinking and household purposes.
- ❑ Health care was carried out in the middle Ages by bartenders, sailors and doctors, but folk medicine existed and was well-developed. In the Middle Ages and in modern times, Latvia was affected by several major epidemics, like plague (Black Death), dysentery and black pox.
In different population groups, even within a single city, the same illness could have caused a different degree of severity, as this was largely influenced by socio-economic conditions. The most significant of these are availability of livelihoods and medical aid.

Black Death

- ❑ The information on epidemics in the territory of Latvia is written in the chronicle of Latvian Indriķis, describing the events of the summer of 1211: "And there was a great plague throughout Livonia; people became ill and die, pagan dead bodies stayed not buried from Turaida to Metsepole and further to Idumeja to Leti and Cēsis; and the pagan chieftains Dabrelis, Ninnus, and many others died.
- ❑ Occasionally in literature, mentioning these 1211 year events, the disease is identified as a Black Death, but there is no proof. The most serious plague consequences were in 1347 - 1350, and the plague entered in history as a "Black Death"
- ❑ Sailors and merchants accidentally brought diseases, which were spread in Asia, to Europe. First of all, the plague spread to the Black Sea ports, and then to the whole Europe. It was transmitted by infected rats and fleas. Two less powerful epidemic waves followed in the 60s and 70s of the 14th century, as well as in the second half of the 15th century. Europe's population fell by one third, but in some populated areas even half.

Spread of Black Death



Place of origin of the Black Death



The place of origin of the Black Death is not well known, but it is believed to have started in Asia, where it was transmitted by black rats and fleas. Later, the Silk Road continued to spread to Italy and from Italy Black Death spread to the northwest until June 1348, first in France, Spain, Portugal, and England, and followed to spread to eastern Germany and Scandinavia. In Russia, where the disease appeared in 1351, Black Death probably came directly from Asia, not from Europe. In Livonia (now part of the territory of Latvia) the disease spread in 1352-1353 and the Estonian inhabited area was most affected. In spite of the rapid and widespread occurrence, Black Death did not hard affect Poland, part of Germany, Belgium, the Netherlands, Spain and France.

Rules on combating the disease

- ❑ **The first symptoms** of the Black Death were blood vomiting and blue-black abscesses on the skin, after which the patient survived only 3-5 days.
- ❑ Outbreaks of disease in Europe continued until the 18th century. To slow down the spread of diseases in many cities there were published the rules on combating the disease: vodka and camphor must be given to sick soldiers, community gathering must not be allowed, worship should be held not in the church but in the open air; poor patients must be given free medicine, sick people must be isolated, and their houses must be marked with a white cross and the dead must be buried without unnecessary ceremonies.
- ❑ **The number of victims** was huge. In Riga, Salaspils, Ikšķile, Ādaži, etc. the population fell by 85-94%. The western part of Kurzeme was severely damaged - there were no inhabitants in Ēdole, Alsunga, Embūte, Dignāja, Skrunda and Saldus. In Kurzeme, tens of thousands of people were died because of the epidemic (most affected region by the epidemic). The eastern part of Vidzeme was less affected.

Black Death doctor's outfit

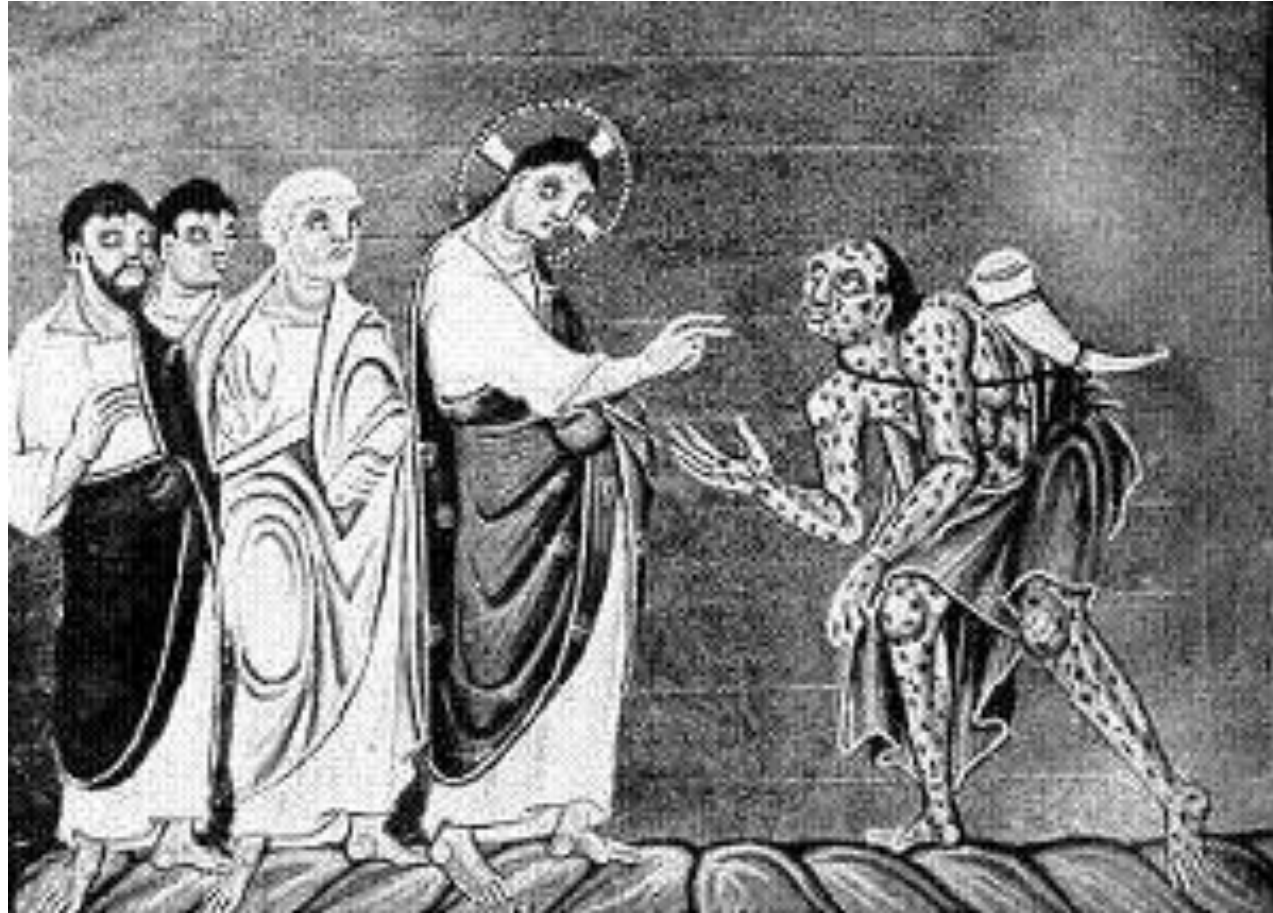


Leprosy

- ❑ The common illness in the middle Ages was leprosy, which was unable to cure. Because of that the leprosy patients (lepers) were usually proscribed out of society. This disease has already been recognized in the ancient Christian world.
- ❑ The lepers had to live outside the city; they had to wear a long, bright coloured suit, and they had to alert about coming with the sound of a ring, a whip or a horn, or with a loud cry: "Unchaste, unclean!"
- ❑ Caring for lepers was officially entrusted to the church, but in fact the lepers lived from gifts of mercy. The person who was suspected of being ill was distinguished from the rest of the community in the symbolic burial ritual.

Leprosy in Rīga

- ❑ The number of leprosy patients in Europe had risen sharply between 12 and 13th century. Leprosy were established or leprosy patients to isolate them. In Riga, Bishop Albert set up a hospital in 1220, originally located outside the first walls of the city, but there is no indication that it would have been leprosy. It can be assumed that in Riga, as in other Western European cities, according to the canons of the Catholic Church of Lateran III, 1179, lepers had to have separate hospital, church, pastor and cemetery. In Riga, the lepers could be lived in the Holy Spirit Juris Hospital, which was located outside the Riga walls, from the end of the 14th century. Here, besides the hospital, there were also farm buildings, a church and a graveyard. However, there is no reliable evidence of the number of leprosy patients in the medieval city of Riga.
- ❑ It should also be taken into account that, according to church requirements, leprosy patients could be buried in special (leprosarium) cemeteries. It is believed that leprosy was not so widespread that it could lead to increased mortality, and, as previously mentioned, leprosy patients could live for decades.



Symptoms of leprosy

- ❑ **Leprosy**, also known as **Hansen's disease (HD)**, is a long-term infection by the bacterium *Mycobacterium leprae* or *Mycobacterium lepromatosis*. Initially, infections are without symptoms and typically remain this way for 5 to 20 years. Symptoms that develop include granulomas of the nerves, respiratory tract, skin, and eyes. This may result in a lack of ability to feel pain, thus loss of parts of extremities due to repeated injuries or infection due to unnoticed wounds. Weakness and poor eyesight may also be present.
- ❑ Leprosy is spread between people. This is thought to occur through a cough or contact with fluid from the nose of an infected person. Leprosy occurs more commonly among those living in poverty.



Known today as Hansen's disease, in its extreme form it could cause loss of fingers and toes, gangrene, blindness, collapse of the nose, ulcerations, lesions and weakening of the skeletal frame.

Leprosy in retreat

- Attitudes began to change in the 14th century, particularly after the horrors of the Black Death (1347-1350). Fear of contagion led to greater restriction and isolation, while abusive and corrupt practices increased.

The medieval practice

- ▶ In its later stages, the body of a medieval leper bore the appalling signs of decay and putrefaction: a misshapen face, numb and deteriorating limbs, festering sores on the skin, rancid breath and a raspy, fading voice. Believed to be highly contagious, this distressing image was the source of vast panic in medieval Europe. The progressing fear of leprosy in part justifies the existence of surprisingly extreme proposed treatments and cures during that time.
- ▶ Medieval physicians explained leprosy's unsightly symptoms by humoralism, a well-established medical model that divided bodily composition into four fluids, or humors: blood, yellow bile, black bile, and phlegm. Many asserted that an excess of black bile contaminating the blood resulted in the leprous condition. This conjecture resulted in a variety of treatments that aimed to purify the blood and the body as a way to realign the humors.
- ▶ For example, an alchemist would give a leprous individual a concoction containing gold, a metal that symbolized richness and purity. Lepers willingly drank the solution expecting that the gold would cleanse and restore humoral equality, correcting the infirmity.

- ▶ Lepers were also submitted to the evacuation of excess humoral fluid through regular bloodletting. Typically, a surgeon would cut a vein near the location of the accumulated corrupt blood. A regulated amount of fluid collected in a pan as it seeped out of a blood vessel, ideally eradicating large quantities of concentrated impurities.
- ▶ The medieval practice of spilling pure blood through sacrifice constitutes another, more fantastical proposed treatment. Soaking in a bath medicated with the blood of an infant or a virgin was considered a possible cure. A leper who sat in this blood bath expected to undergo what would now be considered like a transfusion: the corrupt blood moves out of the body while the untainted blood moves in to replace it.
- ▶ In today's Western culture, leprosy exists more commonly as a literary metaphor than as an actual threat to general welfare. However, the same cannot be said for the Medieval Ages, in which leprosy's extensive presence cultivated the development of treatments as extreme as the society's overwhelming fear of the disease.

Leprosy in territory of Latvia

- ▶ In the Middle ages in territory of Latvia as in other parts of Europe where a lot of trading routes lead a lot of different people from different countries to meet each other very hard and dangerous illnesses spread like black death, spots and leprosy.
- ▶ We have information that in the end of 19th century there were still a lot people ill with leprosy. In 1887 in Riga there were about 60 ill people. Riga decided to build its own leprosy hospital about 10km from Riga. In 1937 leprosy hospital was closed because of not many ill people. From 1891 to 1937 in Riga leprosarium there were treated 843 ill people.
- ▶ The last leprosarium was in Talsi city and it was open until 2007, and then started reorganization and they added leprosarium to Infectology centre. So the illness is still active in the world and if you get ill with leprosy you have to go to Infectology centre to be treated.

Mula and post-mortem masks



Smallpox (the “red plague”)

- ▶ A severe, highly contagious viral disease transmitted by inhalation.
- ▶ Symptoms: After 12 days incubation, high fever, chills, severe headache and backache, and general malaise. Hemorrhages may occur in lungs or other organs. After 4 more days a distinctive itchy rash of red lesions appears on face, arms, legs, and sometimes the trunk. The bumps become pus-filled blisters; if secondary infections do not occur, they break and begin to dry up in about 9 days.
- ▶ Results: Mortality 25-30% for the severe form; 1% for the mild form. Survivors have distinctive pitted scars and complete immunity to further infection.
- ▶ Notes: Varies in severity from a mild form with few skin lesions to a highly fatal hemorrhagic form. The majority of deaths occur in the second week of the disease.
- ▶ It was a horror in the 15th century; during the 1440s in France smallpox may have killed more people than plague. (It came to be known as “smallpox” later, to distinguish it from the “great pox,” syphilis.) It became primarily a childhood disease, since most adults had already been exposed.

Smallpox

- ▶ Smallpox was known as the Red Plague. It became most prevalent during the Crusades and had a 30% mortality rate. Smallpox causes a distinctive rash. A popular medieval belief was that smallpox was caused by the smallpox demon who was afraid of the color red, so to treat smallpox the patients room was decorated in red. Patients also wore red clothing. If the infected person survived, smallpox often left behind scarring.



Sources of information

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Thank you for your attention!