
ERASMUS+ project

“THINK GREEN FOR WORLD”



SZŠ a VOŠZ PLZEŇ
Czech Republic

MAY 2020



SZŠ a VOŠZ PLZEŇ

Secondary Medical School and the College of Higher Medical Education

It has a long tradition - it was founded in 1943.

It is the biggest medical school in the West Bohemian region.

It offers training to obtain professional qualification on various paramedical branches.

Secondary Medical School – Fields of education

- Nursing Assistant
- Medical Lyceum
- Laboratory Assistant
- Dental Technician Assistant
- Sports Masseur



College of Higher Medical Education - Fields of education

- Diploma General Nurse
- Diploma Paediatric Nurse
- Diploma Paramedic
- Diploma Nutritional Therapist
- Diploma Dental Hygienist
- Diploma Dental Technician
- Diploma Pharmacy Assistant
- Diploma Lab Technician
- Social Worker



WORKING PLAN



DECEMBER

Meeting with partners
Identifying environmental issues of partners
Designing LOGO

JANUARY

Partner's photographing environmental waste
Evaluation and determination of waste information by questionnaires

FEBRUARY

Partners' seminar organization on waste assessment
Sharing information on waste assessment difficulties which partners encountered
The Evaluation Meeting

MARCH

Research on the methods of waste recovery and recycling
Making a questionnaire related to process of the project
The Evaluation Meeting

APRIL

Organizing on-site activities about waste assessment
Exhibiting the activities in the panels
The Evaluation meeting

MAY

A technical trip to waste sorting plant
The Evaluation Meeting

JUNE

Organizing waste assessment activities in institutions
Conducting a survey for project outputs
The Final Evaluation Meeting

MEETING IN TURKEY – TARSUS



Initial transnational meeting in TARSUS - TURKEY

Organized by Turkish project management team, teachers of three partner countries (Turkey, Portugal, Czech Republic) met in Tarsus in December 2019.

The important issues to start the project were discussed, e.g. importance of using Facebook account, eTwinning platform and YouTube actively for the project, or need for recording all the activities related to the topic "Think green for world". Active participation in dissemination activities was emphasized, and quality commitment agreement was signed.

Turkish coordinating partners took great care for teachers of international project teams, showing their natural hospitality and attention. We were also warmly accepted by representatives of official local authorities.

Trips to become familiar with geographical and historical background of that region of Turkey were organized by very attentive host Turkish teachers.





SORTING WASTE = protecting environment



Students of our school putting the wastes into the proper containers of particular colours. They are familiar with the system of sorting and separate correctly the wastes made of different materials.

Sorted waste - separated waste collection

In the Czech Republic – servise called AVE CZ arrange the collection and recovery of separated waste throughout the whole country. They have advanced equipment and adequate facilities that they adjust to requirements for the frequency of collection and the volume of waste.

They collect sorted waste from cities and towns and from individuals and organisations. They collect paper, glass, plastic, Tetra Pak packaging, biological waste and ferrous metals. They rent out containers and packaging for storing separated waste.

- **They collect separated waste**
- **They provide containers for individual types of separated waste**
- **They offer both regular and individual collections**
- **Their modern fleet meets the highest European standards**

AVE CZ provides regular and individual sorted waste collection services. They have their own sorting lines which are the terminal equipment in the collection system for separated municipal solid waste from surrounding cities and towns. After the waste is sorted according to quality, it is compressed and subsequently reused as material.

In the vast majority of cases, three containers for sorting of usable components of municipal solid waste are located at the separation sites with the following colour coding.

Blue containers are used to collect paper. This includes:

- Uncontaminated dry paper
- Carton
- Cardboard
- Magazines
- Books, notebooks
- Clean wrapping paper
- Office paper

Yellow containers are used to collect plastic. This includes:

- PET bottles
- Bottles used for household cosmetics and chemicals
- Plastic film
- Plastic bags
- Polystyrene
- Small plastic products and packaging

Green containers are used to collect glass. This includes:

- White and coloured beverage bottles
- Large shards of glass
- Plate glass
- Glass bottles



1ST MOBILITY IN PORTUGAL – VILA VERDE

In February 2020 we participated in very interesting meeting for teachers and students in Portugal.

Portuguese partners developed and explained us the strategies of Green Entrepreneurship, with interactive participation of specialist teachers and all host and international students and their teachers.

Everybody had opportunity personally and physically work on various topics related to the circular economy, environmental awareness and other related themes and problems of current situation.

Host Portuguese team prepared for this mobility very professional presentations highlighting common environmental problems.

We appreciated nice Portuguese people – both families and teachers – especially their hospitality and care for international teams in all aspect during the stay were great!





STUDENTS PRESENTATIONS





HANDLING OVER CERTIFICATES



GARBAGE-WASTE ENVIRONMENTAL

Research survey

CZECH REPUBLIC RESULTS



Dear students!

This questionnaire has been designed to evaluate the situation in our school on garbage-waste, which is a major problem today. Answer the following questions, considering the situation in our school. You can choose more than one option (x).

When you choose the "Other" option, please fill in the explanation section. Thank you for your participation in the survey.

1. Where are the areas with high trash density in your school?

Classes 15

Corridors 1

Canteen 1

Toilets 2

Schoolyard 21

2. What is the most common type of waste in your school?

Paper 21

Plastic 19

Glass 0

Electronics 0

Battery 0

Aluminum 0

Fat 0

Other 0

3. Does your school has recycling bins?

Yes 40

No 0

4. What is the most important source of garbage in your school?

Working Papers / Copies 0

Packaging waste (juice boxes, chocolate can etc.) 40

Classroom Activities (cardboards, handcraft papers etc.) 0

Other 0

5. If the location of recycling bins in your school is not suitable for applications or not available, where are the most suitable places to put? Why?

Several recycling bins on all floors

6. Do you know what recycled products are?

Yes 40 No 0

7. Do you throw out your garbage by separating them? (Do you collect your paper, glass, plastic etc. waste in different places and throw them into the relevant recycling bins?)

Yes 21 No 19

8. How much of the waste in your school is recyclable waste?

Less than half 4 Approximately half 30
More than half 6 Almost all ()
I do not know ()

9. How long do you think the following wastes are lost in nature?

Cola Tin average 113 years	Gum average 52 years
Plastic water bottle average 82 years	Paper 2,3 months
Cigarette litter average 2,5 years	Glass 73 years
Fruit leftover average 1,2 months	Battery 24 years

10. Is there enough trash bin in your school?

Yes 38 No 2

11. Do you warn your friends who throw garbage on the floor? Why?

Yes 5 No 35

Y - It makes me angry.

N - Everybody is responsible for himself.

12. Do you think recycling is important? Why?

Yes 22 No 18

Y - good for environment

N - they mix it together again

13. Do you think is it possible to reduce the amount of paper used in school? How?

Yes 31 No 9

Y - by PCs

N -they like writing on paper

14. Do you think there is a garbage-waste problem in your school? What should be done to solve this problem, if any?

Yes 1 No 39

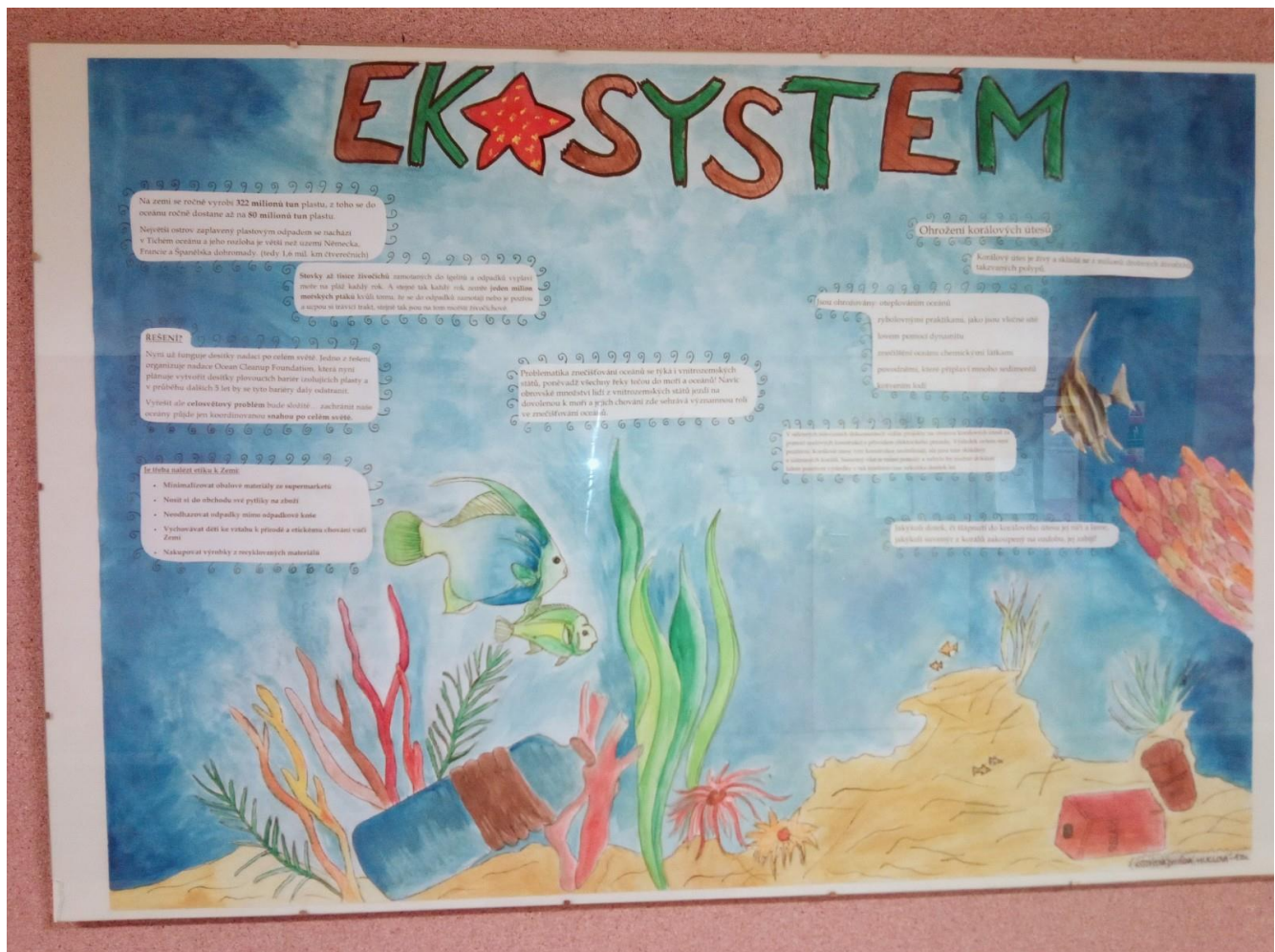
Y- students should sort out more

“EVVO” school activities

In the Czech Republic - “EVVO” is the programme of environmental education and counselling in which regions, towns and cities, schools of all types, non-profit organizations, research institutions, museums, zoos, and other national institutions participate and cooperate.

Our school SZŠ a VOŠZ Plzeň is involved into different activities of this programme, organizing seminars, competitions, presentations and excursions in facilities focussing on the topics like Nature, Landscape, Sustainability, Climate...

Example of students’ activity: Creating posters on the topics - ECO DIVERSITY, BIODIVERSITY, ECO THINKING...



PLASTY V OCEÁNU

Základní informace

- 70% plastů vyrobených v České republice je vyvezeno do zahraničí
- Plastový odpad v oceánu představuje 80% z celkového množství odpadu v oceánu
- Plastový odpad v oceánu představuje 80% z celkového množství odpadu v oceánu

Statistiky

- USA: 100% plastů vyvezeno do zahraničí
- ČR: 70% plastů vyvezeno do zahraničí

MRTVÉ MOŘE

Základní informace

- nachází se 420 metrů pod hladinou mořské hladiny
- rozloha 100 km²
- max. hloubka 100 metrů
- mořská voda je 3,7% hustší než sladká voda
- hlavní příčina je sucha

1984

2016

Obnova Mrtvého moře

Projekt obnovy Mrtvého moře je plánován na dobu 30 let. Jeho cílem je zvýšit hladinu moře o 100 metrů a vytvořit tak nové ekosystémy. Projekt zahrnuje výstavbu přehrad a kanálů, které umožní zavlažování úrodných oblastí. Obnova Mrtvého moře je považována za jeden z největších ekologických projektů světa.

SMÍŠENÉ LESY

Návrh smíšených lesů

Smíšené lesy jsou lesy, které obsahují různé druhy dřevinných stromů. Tyto lesy jsou považovány za ekologicky zdravější a odolnější vůči škodlivým organismům a klimatickým změnám. Smíšené lesy také poskytují různorodější prostředí pro živočišnou říši.

PROJECT SEMINAR – “KOVOZOO”



“Kov(o)” – in the Czech language means “made of metal”. In the project seminar both students and some teachers interested in the topic “WASTE IS NOT GARBAGE” participated. The seminar presented interesting place in our country where they may receive inspiration, knowledge and amusement.

KOVOZOO is original zoopark in Europe situated in the town of Staré Město in the Czech Republic. Nowadays you can find there more than 250 animals made of metal wastes.

The aim of this exceptional place is to show both to children and adults the possibility to create something not only beautiful and interesting, but very useful as well. All animals are of a real size and in details they were made very precisely. In the KovoZoo you can see giraffes, elephants, camels, gorillas, cheetahs, horses, rhinoceroses, crocodiles, swans, different fishes and many others. Our students hope to visit this very interesting place sometimes in the future even if it is located quite far from Pilsen.





DISSEMINATION MEETING

Meeting with students of mixed branches – Dental assistant, Nursing assistant, Masseur – members of project club, and teachers – participants of Erasmus + activities and members of the main school project team.



Knowledge and experiences from international mobility, ecological and environmental issues and problems, as well as waste sorting were presented during the session.

Discussion on green programmes in the Czech Republic and students' involvement in voluntary eco-activities were also discussed during this meeting.



Break of school and project activities

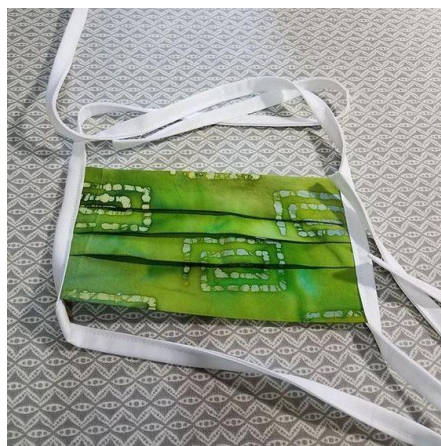
CORONA EPIDEMY

Students were given special tasks connected to world pandemic of COVID 19:



1. Task for students

- To sew face masks from **waste or useless textile material** (found in their homes).
- To donate them or distribute them to houses of seniors, social care institutions, organizations helping homeless people, socially disadvantaged and physically handicapped people, etc.



2. Task for students

- To find a suitable English article referring to medical facts about disease Covid 19.
- To create/adapt **educational English material** on this topic for students of our school, to add vocabulary list and to make two exercises to practice the language.

The work of 2nd grade student Vladimíra Maxová – branch of Laboratory technician:

Coronavirus disease COVID19

Virus SARS-CoV-2 causes human coronavirus disease COVID19. This virus belongs to a group of Beta-coronavirus together with the agents causing the disease MERS – The Middle East respiratory syndrome - caused by coronavirus MERS-CoV and SARS – Sever Acute Respiratory Syndrome - caused by coronavirus SARS-CoV.

Coronavirus disease COVID19 was first detected in Wuhan in China in December 2019, spread quickly around the world and caused pandemic.

The origin and first contamination of people with this infection is still not fully understood.

Human to human transmission of coronaviruses is primarily thought to occur among close contacts via respiratory droplets generated by sneezing and coughing. The interaction of the coronavirus spike protein with its complement host cell receptor is central in determining the tissue tropism, infectivity, and species range of the virus. The SARS coronavirus, for example, infects human cells by attaching to the angiotensin-converting enzyme 2 (ACE2) receptor. Some people who have the virus don't have symptoms, but they can still spread the virus.

The name "coronavirus" is derived from Latin corona, meaning "crown". The name refers to the characteristic appearance of virions (the infective form of the virus) by electron microscopy, which have a fringe of large, bulbous surface projections creating an image reminiscent of a crown or of a solar corona. This morphology is created by the viral spike peplomers, which are proteins on the surface of the virus. A core of virions consists of protein matrix which contains enclosed single strand of RNA.

Common signs of this infection include respiratory symptoms, headache, fever, dry cough, pain of muscle and joint, fatigue, breathing difficulties. In more severe cases of this infection can cause heavy pneumonia, severe acute respiratory syndrome, death.

It is important to follow the recommended preventive measures: wash your hands often with soap and warm water, or clean them with alcohol-based disinfections, cover mouth and nose with face mask or scarf. Eliminate contact with other people and do not travel. Do not touch your eyes, nose or mouth to eliminate transfer of the virus in your body. Clean and disinfect surface you touch often and wear gloves when you clean.

It is recommended to strengthen the immune system, for example use supplements with vitamin C, vitamin D and omega3 acids.

Laboratory diagnostic: it is necessary to make swab from the neck and nose of the sick patients and do microbiologic examination by PCR test.

Treatment: now, we don't know effective medicine against this coronavirus. We can treat only symptoms but not the cause of this disease. Doctors recommend bed rest, medication to low temperature, medicine for cough, drink enough. Those with severe symptoms need to be cared for in the hospital.

Numerous clinical trials are under way to explore treatments used for other conditions that could fight COVID-19 and to develop new ones. Several studies are focused on an antiviral medication called remdesivir, which was first created to fight with Ebola. A study in China showed that hydroxychloroquine and chloroquine, which are used to treat malaria and autoimmune conditions like rheumatoid arthritis and lupus, helped people with COVID-19 pneumonia.

Now, there is not vaccine, but clinical trials are under way in the U.S. and in China to test vaccines for SARS CoV / COVID19. One vaccine called mRNA-1273 (which was developed by using messenger RNA) would tell your cells to pump out a protein that will kick-start your immune system to fight the virus. It's worked well in animals and is ready to test in humans.



Vocabulary list

Cause – způsobovat, příčina

Causing the disease – způsobující nemoc

Belongs to – patří

Origin - původ

Via respiratory droplets – prostřednictvím respiračních kapének

Determining – určování

Attaching - připojení

Derived – odvozené

Appearance – vzhled

Creating an image – vytvářející obraz

Reminiscent – připomínající

Viral spike peplomers – glykoproteinové výběžky na virovém povrchu

Enclosed single strand – uzavřený jediný řetězec

Common signs – běžné příznaky

Severe acute syndrome – těžký akutní příznak

Disinfect – dezinfikovat

Strengthen – posílit

Swab – výtěr

Clinical trials - klinické testy, zkoušky

Focused on – soustředit, zaměřit se na něco

Created to fight – vytvořený k boji

Under way – probíhají „ jsou v plném proudu“

Kick- start your immune systém – nakopnout, nastartovat imunitní systém

Develop – vyvíjet, rozvíjet

Exercises

1) Answer the questions:

What are the common signs of coronavirus disease COVID 19?

Common signs are respiratory symptoms, headache, fever, dry cough, pain of muscle and joint, fatigue, breathing difficulties. In more severe cases of this infection can cause heavy pneumonia, severe acute respiratory syndrome, death.

How is coronavirus CoV-2 spread?

Transmission is primarily from person to person through close contacts via respiratory droplets generated by sneezing and coughing.

Where was this disease COVID19 first detected?

Coronavirus disease COVID19 was first detected in Wuhan in China in December 2019.

Is this disease very infectious for people?

Yes, it is very infectious and it spreads very quickly.

2) Complete the sentences:

The name "coronavirus" is from Latin corona, meaning "crown". /derived /

It is important to follow the preventive measures. /recommended /

Clean and surface you touch often and wear when you clean. / disinfect, gloves /

It is recommended to..... the immune system. / *strengthen* /

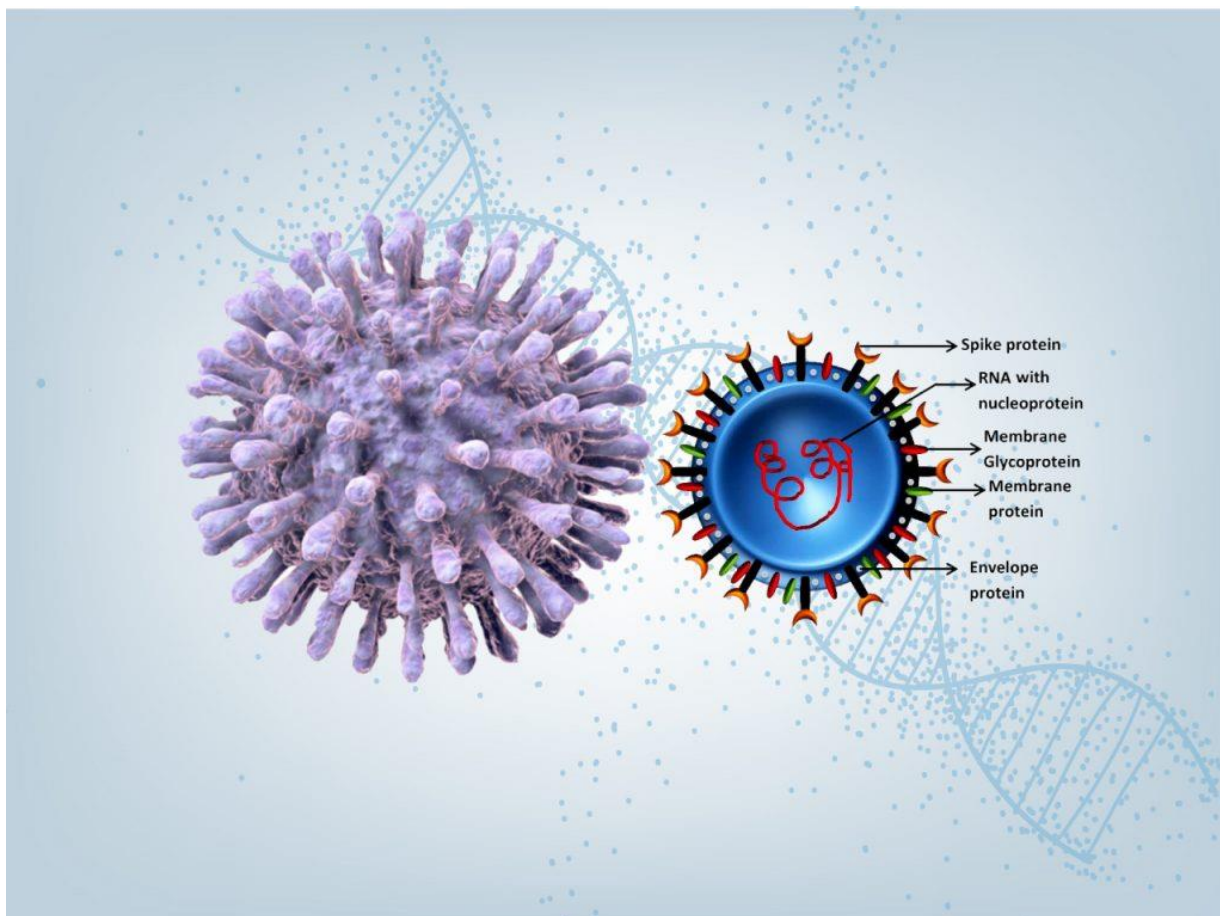
Several studies are antiviral medication called remdesivir, which was first created to fight Ebola. / *focused on* /

..... are performed in the U.S. and in China to test vaccines for SARS CoV / COVID19. / *clinical trials* /

References

<https://en.wikipedia.org/wiki/Coronavirus>

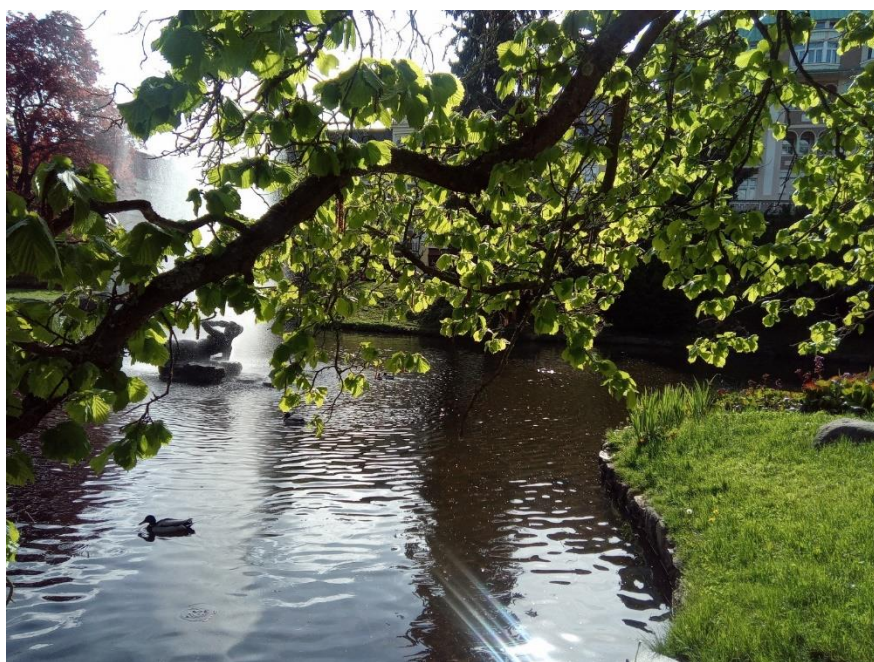
<https://www.webmd.com/lung/coronavirus>



GREEN THINKING

What can you visit in the Czech Republic

MARIÁNSKÉ LÁZNĚ (Marienbad) - Spa town in green



Mariánské Lázně is a health resort in the Karlovy Vary Region in the Czech Republic. The town, surrounded by green mountains, is a mosaic of parks and noble houses, most of which come from the town's Golden Era in the second half of the 19th century.

The top attraction of the town is its 100 mineral springs with high carbon dioxide content and often also higher iron content, both in the town itself and its

surroundings. The different chemical composition of the town's numerous springs makes it the perfect place to treat a wide variety of ailments.

In addition, it is a town full of historic, beautiful buildings, many of which are located on a hill surrounded by forests and parks.

Nature trail "Spa Forests" – presents a wide collection of different topics, focusing on spa care, forestry, balneology, history, geology, mining industry, zoology, botany as well as ecology.



