How to have a healthy respiratory system
Every year 3.9 million people die of chronic pulmonary disease across the world.

What are the most common respiratory diseases?

- Infections: pneumonia, tuberculosis, flu, COVID-19...
- Lung Cancer
- Chronic respiratory diseases: chronic obstructive pulmonary disease (COPD), asthma

Globally in 2017, 545 million people had chronic obstructive pulmonary disease.
Infectious Diseases

**Tuberculosis**
An infection caused by a type of bacterium called *Mycobacterium tuberculosis*

**Pneumonia**
A viral or bacterial infection that affects one or both lungs

**Other Respiratory Tract Infections**
Flu, COVID-19, other infections
Lung Cancer

Cancer most commonly spreads in the lymph nodes within the lungs or around major airways.

The main cause of cancer mortality for men in Spain.
Chronic respiratory diseases

**ASTHMA**
A disease caused by an inflammation to the lungs which makes it difficult to breath. Allergies or other factors may cause asthma.

**CHRONIC OBSTRUCTIVE PULMONARY DISEASE**
A disease caused by an alteration to pulmonary arteries that leads to an inadequate air flow to the lungs

**OTHER CHRONIC DISEASES**
Silicosis, Asbestosis...
What is COPD (Chronic Obstructive Pulmonary Disease)?

COPD is characterized by persistent respiratory symptoms with limited airflow caused by alveolar abnormalities or in airways paths.

Chronic inflammation leads to the narrowing of airways, and destruction of lung parenchmys. This obstructs and limits airflow to the lungs.

According to the WHO, COPD is the third cause of mortality across the world.
Symptoms of COPD

- Shortness of breath, especially during physical activities
- Chronic cough with mucus (sputum)
- Wheezing and chest tightness
- Fatigue, weight loss and anemia
Diagnosis for COPD

- A common disease that is preventable and treatable
- Physical examination and medical history: identify risk factors and presence of comorbidities
- Spirometry: diagnostic tool used to confirm COPD
A spirometry is a test that measures the velocity and airflow when a patient inhales and exhales air.
Treatment for COPD

Pharmacologic therapy: bronchodilators, corticosteroid...

Oxygen therapy and pulmonary rehabilitation

Surgeries, transplants
Treatment for COPD

Vaccines: Flu, COVID-19...

Treatments for infections

Healthy Habits: Smoking cessation
Prevention is better than cure!
Risk Factors

Tobacco:
Smokers have a higher risk to develop COPD compared to non-smokers. Including, pipes, cigars, bongs, vapes or marihuana.

Approximately, 40-50% of smokers develop COPD compared to non-smokers with a 10% risk!
Occupational risk factors: chemicals, dust, wood, mining, agriculture
Risk Factors

Air pollution: indoor and outdoor environmental contaminants
Risk Factors

Socio-economic status & lifestyle: nutrition, physical activity, access to parks and gardens/green space, and occupation
Risk Factors

Factors in early childhood: Mothers who smoke, infantile asthma, exposure to contamination... (chemicals, pollution)
Risk Factors

Genetic factors:
Alpha-1 antitrypsin deficiency (AATD)
Breath clean and uncontaminated air

Have a balanced diet (fruits and vegetables)

Avoid smoking

Practice outdoor physical activities or near nature

It is important...

Breath clean and uncontaminated air
Examples of Comics

- Medikidz - sobre EPOC
- Cómic - El Plan de Tuberculosis
- Redrawing Barcelona, about urbanism and health

