

EFA members' best examples

France

Collaboration between INSERM (National Network for Allergological Monitoring & Research) and ANRS (National Allergy Research Society)

INSERM collects pollen in the air and clinical data from 70 units each week. It provides a **bulletin** presenting the level of pollen and the allergy risks, by pollen and by sector - they have also developed an **application** for smartphones

The information is sent to the French health authorities, to the clinicians, and to the public



Subbook

Germany

The German Pollen Service (DPS) is a non-profit organization that provides pollen forecasts for Germany. It is a member of the EFA network and has developed a **website** and a **mobile app** for smartphones.



Thank you very much!

Impact of pollen-related allergies in Europe

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What is EFA?

The European Federation of Allergy and Airways Diseases Patients' Associations (EFA) is an independent non-profit European alliance of 38 allergy, asthma and chronic obstructive pulmonary disease (COPD) patients' associations representing 30% of European citizens currently living with these diseases.



Allergies for dummies

Allergy is a “crazy” disease as the immune system of an allergic person fails to distinguish between dangerous substances and harmless ones

BUT

Allergies can make you crazy too! as they might result in poor quality of life, fear, restrictions, social isolation, and sometimes even death (anaphylaxis)

My immune system attacks itself. What does yours do?



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user card



"Allergy is far more than huffing and sneezing for a couple of weeks during the pollen season. The quality of life of patients suffering from allergic rhinitis and allergic asthma is often severely impaired as is their social life, their career and even their school performance."

Breda Flood, EFA President

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The allergy epidemic in Europe

- Over **150 million** EU citizens suffer from chronic allergies >  +  population
- By **2025** more than **50%** of all Europeans will suffer from allergy, with no age, social or geographical distinction
- About **45%** of patients have never received an allergy diagnosis



Allergy is the most prevalent chronic disease in Europe with a **prevalence > 20%!!!**

Respiratory allergies



- Over **100 million** Europeans suffer from allergic rhinitis and **70 million** from asthma
- Asthma and allergies as **most common non-communicable diseases in children** - Prevent early diagnosis and treatment of chronic respiratory diseases in children (Polish Presidency Conclusion, December 2011)

The allergy epidemic in Europe

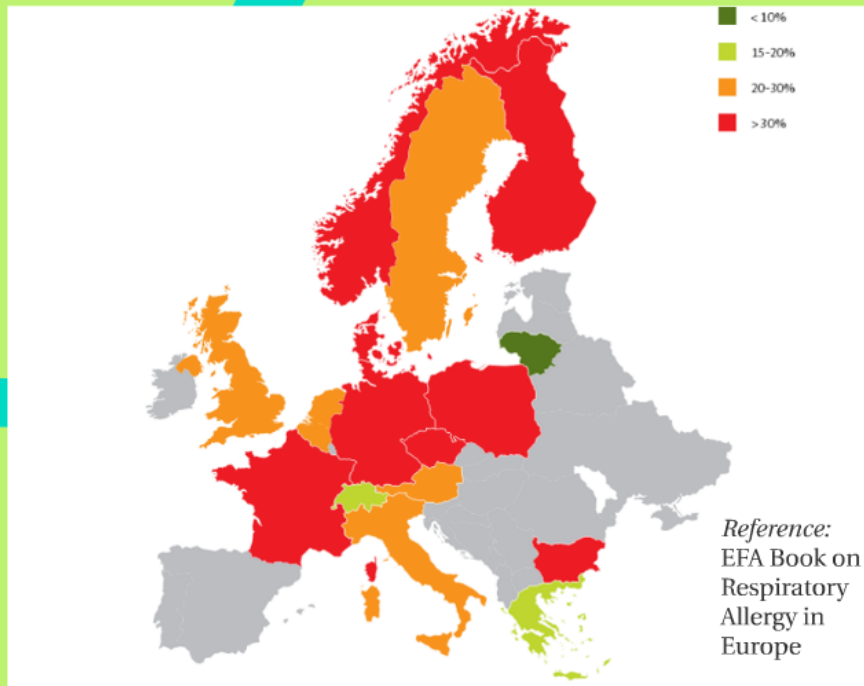
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The cost of allergy

Are we being smart?

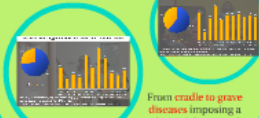


Untreated allergy entails **indirect costs between 55 and 151 billion Euros** per year **vs** **With proper diagnosis and treatment, 142 billion Euros could be saved every year**

Prevention is better than cure!!!

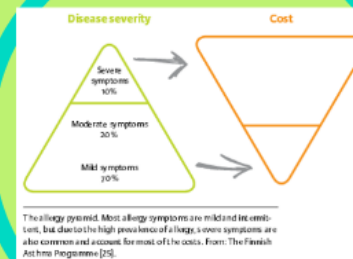
In the case of ragweed, the costs of medication amount to 3.5 billion EUR per year; 0.1 billion EUR is the staff costs to administer treatment based on countries average rates.

Asthma and allergic rhinitis are responsible for **100 million** lost workdays and missed school days in Europe per year



From cradle to grave diseases imposing a substantial economic burden on healthcare systems

Allergic rhinitis impairs the working capacity: costs are **twice** those of migraine or depression



But, first and foremost, disease severity implies:

• **Impaired social life:** 43% of patients with allergic rhinitis and asthma have sleep disturbances & 30% have difficulty in falling asleep



• **Decreased quality of life:** higher risk of emotional (shame, loss of self-esteem) or depressive disorders, and family problems (parent anxiety, overprotection, hostility)



The cost of allergy

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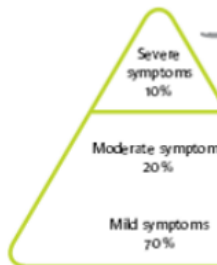


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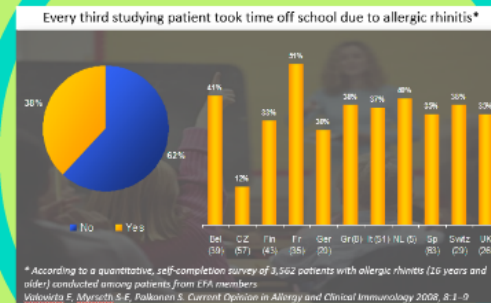
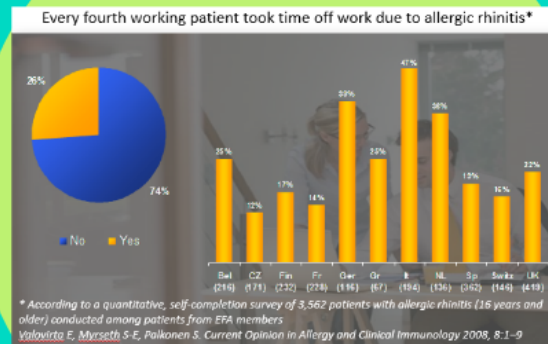
Disease severity



The allergy pyramid. Most allergies are mild, but due to the high prevalence of moderate and severe allergies, they also account for a significant portion of the Asthma Programme [25].

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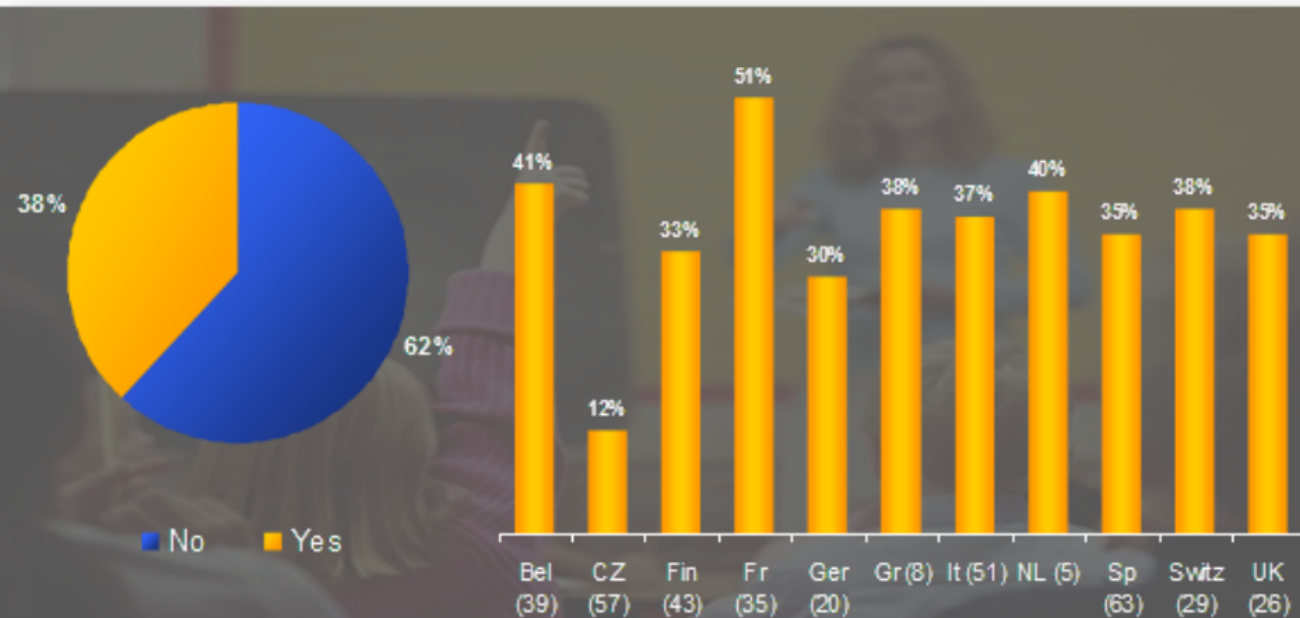
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From **cradle to grave** diseases imposing a substantial economic burden on healthcare systems

missed Europe

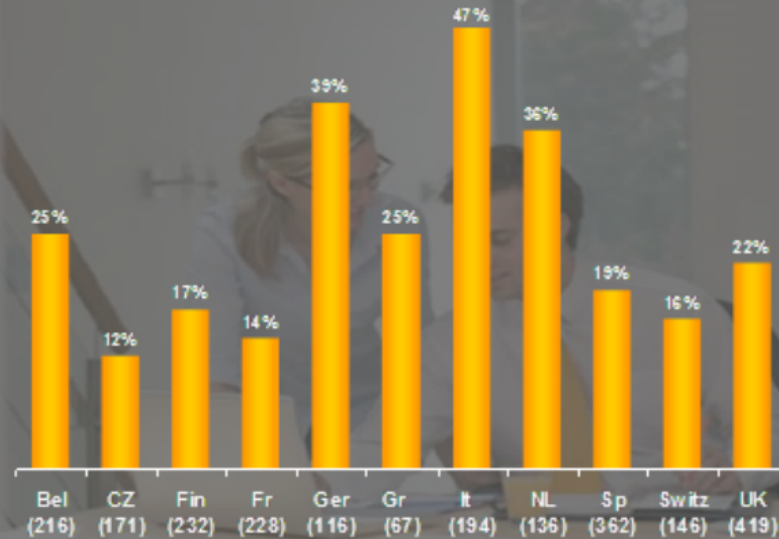
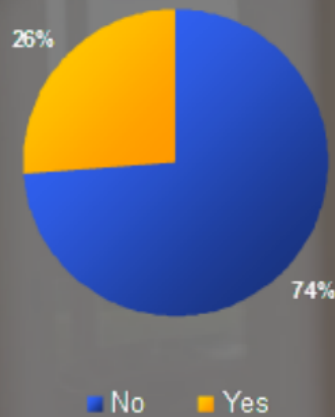
Every third studying patient took time off school due to allergic rhinitis*



* According to a quantitative, self-completion survey of 3,562 patients with allergic rhinitis (16 years and older) conducted among patients from EFA members

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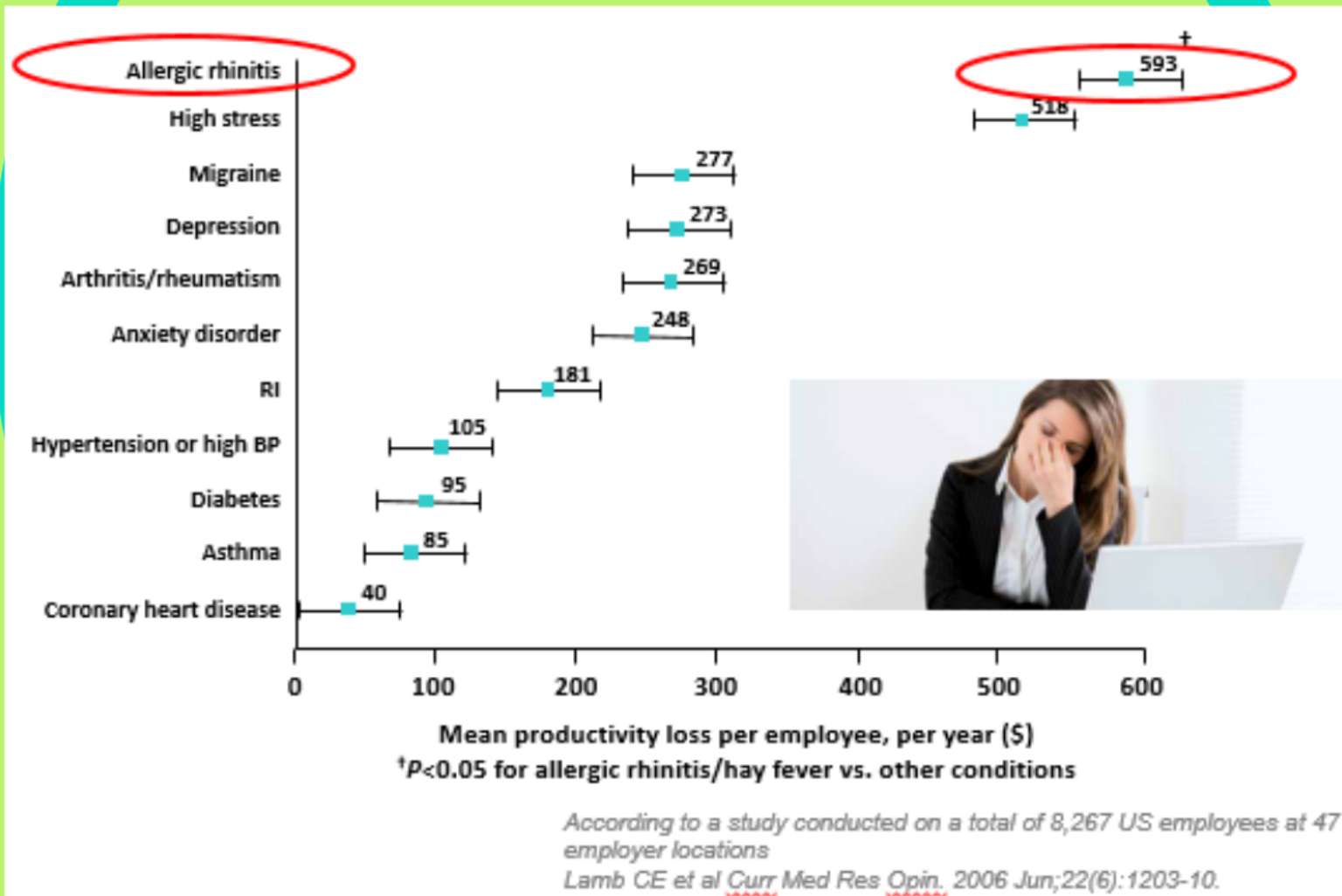
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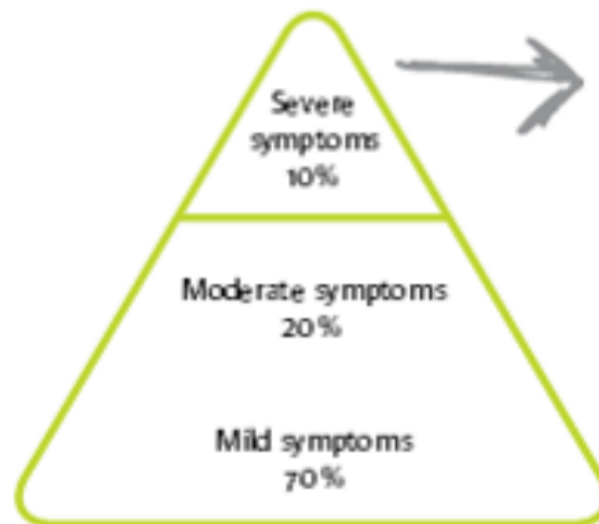
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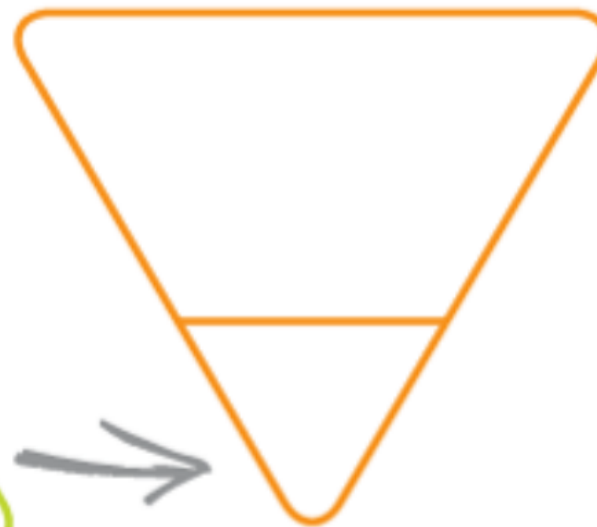
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Disease severity



Cost



The allergy pyramid. Most allergy symptoms are mild and intermittent, but due to the high prevalence of allergy, severe symptoms are also common and account for most of the costs. From: The Finnish Asthma Programme [25].

*Bu
dis*

- **Impaired social functioning**
patients with severe asthma have
39% have difficulty sleeping
- **Decreased quality of life**
risk of emotional problems (e.g. low self-esteem),
disorders, and anxiety (parent anxiety, hostility)

*But, first and foremost,
disease severity implies:*

- **Impaired social life:** 43% of patients with allergic rhinitis and asthma have sleep disturbances & 39% have difficulty in falling asleep
- **Decreased quality of life:** higher risk of emotional (shame, loss of self-esteem) or depressive disorders, and family problems (parent anxiety, overprotection, hostility)



What's needed?

National level:

Harmonising the **education** for medical specialists (allergologists) and increasing **coordination** among the different medical doctors dealing with allergy (paediatricians, pulmonologists, ENT doctors, dermatologists) - improving early diagnosis, avoiding the allergic march



EU level:

- Fostering allergy **research** in Europe by allocating funds under Horizon 2020 and the Third Public Health Programme
- discovering the still unknown causes, moving towards personalised treatments
- Developing an **EU strategy on chronic diseases** with disease specific best practices, including the Finnish Allergy Programme - improving allergy management, enhancing patients' quality of life
- Preventing allergy onset and symptoms worsening through **real-time pollen information** in Europe

Pollen myth-buster

Myth:

"EU environmental protection legislation...excludes [pollen monitoring] because pollen emissions are not from man-made activities and hence cannot be reduced by Member State action" (European Commission answer to MEP Zanoni written question on real-time information on allergenic pollen in the European Union, April 2013)

Fact:

Pollen emissions affected by human activities as regards:

- Air pollution
- Climate change
- City planning

BUSTED



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someecards
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Poll

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"EU environment [pollen monitoring] not from man-made reduced by Member Commission answer question on real-pollen in the Europe"

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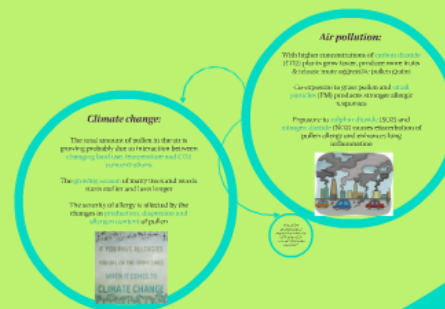
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Air pollution:

With higher concentrations of **carbon dioxide** (CO₂) plants grow faster, produce more fruits & release more aggressive pollen grains

Co-exposure to grass pollen and **small particles** (PM) produces stronger allergic responses

Exposure to **sulphur dioxide** (SO₂) and **nitrogen dioxide** (NO₂) causes exacerbation of pollen allergy and enhances lung inflammation





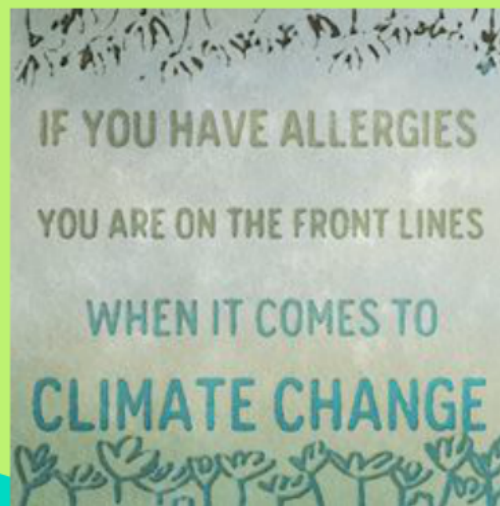
*The pollen
productivity of
ragweed increases by
60% when CO₂
concentrations are
doubled!!!*

Climate change:

The total amount of pollen in the air is growing probably due to interaction between changing land use, temperature and CO2 concentrations

The growing season of many trees and weeds starts earlier and lasts longer

The severity of allergy is affected by the changes in production, dispersion and allergen content of pollen



City planning:

Highly allergenic trees are planted close to people's houses and schools (e.g.: birch, alder, hazelnut, cypress)

Large monocultures of certain cultivated plants (e.g.: spruce, olive trees, oilseed rape) aggravate allergies

New or non-indigenous allergenic species, such as ragweed, are introduced by human activities (e.g.: transportation, contaminated seeds)



EFA members' best examples

France

Collaboration between **RNSA** (National Network for Aerobiological Monitoring) & **Association Asthme & Allergies** (Asthma and Allergy Association)

RNSA collects pollen in the air and clinical data from 70 towns: each week, it provides **alerts** and a **bulletin** presenting the level of pollens and the allergic risks, by pollen and/or by area - they have also developed an **application** for smartphones

The information is sent to the French health authorities, to the clinicians, and to the public



Denmark

Astma-Allergi Danmark (Danish Asthma and Allergy Association) is running the pollen information service with 15 pollen stations

Daily pollen counts and pollen forecasting are published

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Daily pollen counts and pollen forecasting are published and communicated to the public via [free e-mail service](#), [applications for smartphones](#), [Internet pages](#), [written and visual medias](#)

In the specific case of ambrosia, they monitor pollen and provide information to allergic people, including a guide on how to recognise and remove the plant

Each year in the season, they run ambrosia campaigns to bring the problem into public attention

Because in the end...



Thank you very much!



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