Main objective: lessen the burden of asthma to individuals and society

Finnish Asthma Programme 1994-2004 – major change for the better

Focus: (1) inflammation, (2) early detection and intervention, (3) guided self-management, and (4) networking

Ministry of Health; National Public Health Institute; NGOs: Allergy & Asthma Federation, Finnish Lung Health Association FILHA, Finnish Pulmonary Association HELI
Hit early and hit hard!
Early intervention with anti-inflammatory treatment to stop exacerbations

- Early detection and intervention with anti-inflammatory therapy
- Usual time point for intervention
- Severe exacerbation
- Mild exacerbation
- Asthma in control

**Finnish Asthma Programme**

**Flow chart of strategic planning**

**BACKGROUND**
- NEW BODY OF KNOWLEDGE
  - ETIOLOGY
    - airway
    - inflammation
  - EPIDEMIOLOGY
    - incidence
    - prevalence
  - ECONOMY
    - costs
  - EVIDENCE
    - early use of inhaled corticosteroids

**PROGRAMME**
- NATIONAL CONCLUSIONS
  - Community problem
  - Governmentally steered action (committee)
  - Broad commitment
  - Reallocation of resources

**STRATEGIC CHOICES**
- Practical action plan instead of a consensus report
- Population and risk group strategies
- Qualitative and quantitative goals
- Early activities
- Guided self-management
- Prevention focused on smoking/passive smoking
- Orientation on public health care and out-patient services
- Critical mass for change

**GOALS AND MEASURES**
- Five defined goals for prevention, treatment and rehabilitation
- Measures towards achieving the goals

**ACTIVITIES**
- Leadership and guidance
- Legislative
- Capacity building
- Networking
- Materials, information
- Improving diagnostics and treatment
- Feedback and follow-up

**PROCESS EVALUATION**

**OUTCOME EVALUATION**
Finnish Asthma Programme 1994-2004

**TRADITIONAL**
- Money
- Personnel
- Facilities
- Time

**NEW**
- Innovation and **new knowledge**
- Attitude and motivation
- Unused know-how
- Resources not organised for common goals
- Interest group participation
Finnish Health Care System

342 municipalities: responsible for the primary health care > ~ 250 health care centres

Private care and occupational units

REFERRAL SYSTEM

20 Hospital districts (5 Universities)
- Central hospitals with main specialities
  - Outpatient, inpatient and emergency care

Population: 5.3 million
Asthmapyramid

Great majority!

1%

Severe persistent

1%

Moderate persistent

5%

Mild persistent

5-10%

Intermittent or "preasthma"

85%

Finnish Asthma Programme 1994-2004

Costs
Severe asthma pyramid

Reduce Asthma Burden

Asthma deaths

Emergency, exacerbation visits

Bed days, hospitalizations

Disability: days off work, school, pensions….

Costs
Regional Asthma Programme in the study area

Hyvinkää Hospital District  
(population 200,000)

- Nomination and training of local-asthma co-ordinators in all health care centres (n=18)
- Continuous medical education
- Regional Asthma Programme 1997
  - referral process and lung function tests
Decrease of hospitalisations and emergency visits numbers in Hyvinkää District (Southern Finland) 1997-2007
A rapid decrease of hospital days and mortality

2003 - 2009: -40%

### Asthma Check

**Card/Stamp + Net/Mobile-version**

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>How are you doing?</strong></td>
<td><strong>Notice symptom increase</strong></td>
</tr>
<tr>
<td>1. Reliever max 2 dose/wk</td>
<td>1. Needing more reliever?</td>
</tr>
<tr>
<td>2. Symptoms max 2 day/wk</td>
<td>2. Feeling cold, flu?</td>
</tr>
<tr>
<td>3. Symptoms max 1 night/wk</td>
<td>3. Coughing</td>
</tr>
<tr>
<td>4. No activity restrictions</td>
<td>4. Exercise tolerance</td>
</tr>
<tr>
<td>5. PEF-var. max 50 l/min/wk</td>
<td>5. Morning-PEF</td>
</tr>
<tr>
<td><strong>How do you treat?</strong></td>
<td><strong>Prevent exacerbation</strong></td>
</tr>
<tr>
<td>1. Reliever need minimal</td>
<td>1. Increase controller 2-4 fold (2 wk), or start a course of controller (4 wk)</td>
</tr>
<tr>
<td>2. Controller dose adequate</td>
<td>2. Increase reliever 2-4 fold (2 wk), or start to use it regularly</td>
</tr>
<tr>
<td>3. Adherent to treatment</td>
<td>3. Cort. tabl. 20mg/d in need (1-2wk)</td>
</tr>
<tr>
<td>4. Correct inhalation</td>
<td>4. Go to emergency, if no help</td>
</tr>
<tr>
<td>5. Exacerbation plan exists</td>
<td>5. Check anti-infl. treatment, later</td>
</tr>
<tr>
<td><strong>► Good morning PEF_____</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Doctor/Nurse uses the check-list to assure asthma control, and guide the patient to self-management.** **Zero tolerance to asthma attacks**
Finnish Asthma Programme 1994-2004

New patients, disability pensions and rehabilitation

Number of asthmatics still slightly growing

Absolute decrease in disability 76%

Zero tolerance to asthma deaths!
Asthma mortality has almost disappeared in Finland (population 5.3 million)

6 deaths < 65 years, 2007

13 asthma deaths < 75 years, 2007
Asthma costs in Finland 1987-2007

Reissell E, et al. Asthma costs in Finland. A public health model to indicate cost effectiveness during 20 years
In Finland, hospital days caused by asthma in 2008
asthma as the main diagnosis

Puhtas astma, käyttö 2008

young boys and old ladies!

Kauppi P, Linna M, Haahtela T, in preparation
Asthma Programme 1994-2004

Focus: (1) inflammation, (2) early intervention, (3) guided self-management, and (4) networking


National Allergy Programme 2008 -2018
– time to act and change the course

In association with the WHO GARD Programme = Global Alliance against Respiratory Diseases

Focus: (1) children, young people, (2) prevention, (3) tolerance, (4) diagnostic quality, and (5) early intervention to control severe allergies

Ministry of Health; National Public Health Institute; NGOs: Allergy & Asthma Federation, Finnish Lung Health Association, Finnish Pulmonary Association HELI