

**BAMSE Barn Allergi Miljö Stockholm Epidemiologi-**  
***(Children Allergy Environment Stockholm Epidemiology)***

An investigation to study the prevalence of  
allergic illness among children in Stockholm

Environmental department, Stockholm county  
Astrid Lindgren Children's Hospital  
Institute for Environmental Medicine,  
Karolinska Institutet  
Stockholm

Please help us by writing legibly and marking the checkboxes clearly. Thanks!

Survey regards:

--

Fill in the following information if different from the above

Child's street address	
City and Postal Code	Telephone of child's place of residence

Mother's address (if other than child's)	
Father's address (if other than child's)	
Mother's daytime phone	Father's daytime phone

Email address we can use to contact you and send project-related information

Email address
---------------

Date filled in

____/____/200__
-----------------

## **-Questions about the child's health-**

On this page we ask a series of general questions on the **general health of the child** and there is a "health-thermometer" on the next page. The questions are not directly connected to any specific illness and are determined by an internationally standardized form. Therefore we in the BAMSE group are not able to alter the phrasing of these questions.

1. Indicate by placing a checkmark in the box in each of the groups below which statement best describes your child's health condition today.

### **Mobility**

- Walks without difficulty
- Can walk but with some difficulty
- Is bed-ridden

### **Hygiene**

- Does not need any help with daily hygiene, feeding, or dressing
- Has certain problems washing or dressing unaided
- Cannot wash or dress unaided

### **Primary activities**

- Can manage primary activities
- Has certain problems managing primary activities
- Cannot manage primary activities

### **Pain/Discomfort**

- Has neither pain nor discomfort
- Has moderate pain or discomfort
- Has severe pain or discomfort

### **Anxiety/depression**

- Is not anxious or depressed
- Is anxious or depressed to a certain extent
- Is highly anxious or depressed

2. To help determine how good or bad a health condition is, there is a thermometer-like scale to the right. On it, the best imaginable health is marked with 100 and the worst imaginable health is marked with 0.

We would like you to mark on this scale how good or bad **your child's** health is, as you yourself would judge it. Please do this by drawing a line from the box below to the point on the scale that shows how good or bad **you judge your child's** current health to be.

Your child's  
current health

Best  
imaginable  
condition



Worst  
imaginable  
condition

**-Difficulty breathing-**

3. Has your child had trouble with wheezing or raspy breathing **since age 4?**

- No
- Yes

- From age 4-6
- From age 7-9

On how many occasions has your child had this difficulty in the **last 12 months?**

- 0 occasions
- 1-3 occasions
- 4-12 occasions
- More than 12 occasions

4. Has your child had wheezing or raspy breathing in conjunction with **physical exertion** in the **last 12 months?**

- No
- Yes

5. Has the trouble with wheezing or raspy breathing affected your child's daily activities in the **last 12 months?**

- No
- Yes

If yes, how much?

- Not at all
- A little bit
- Moderately
- Fairly much
- Greatly

6. Has your child had difficulty sleeping because of coughing or other breathing difficulties in the **last 12 months?**

- No
- Yes

If yes, how often?

- Less than once a month
- 1-2 times a month
- 3-6 times a month
- More than 6 times a month

7. Has your child had wheezing, raspy breathing or disruptive cough in conjunction with any of the following **since age 4**?

- No  
 Yes

- Physical exertion (such as running, playing)
- Cool air, mist
- Psychological strain (such as stress)
- Cats
- Dogs
- Horses
- Birch pollen
- Grass pollen
- Tobacco smoke
- Air pollution (such as car exhaust)
- Strong aromas (such as perfume, glue, paint)
- Food
- Other

8. Has your child received treatment for breathing difficulties in the **last 12 months**?

- No  
 Yes

If yes, please answer the questions below

	When needed	Routinely
Short-acting bronchodilation treatment (such as Bricanyl (terbutaline), Ventolin (salbutamol))	<input type="checkbox"/>	<input type="checkbox"/>
Cortisone inhalation (such as Pulmicort (budesonide), Flutide (flutikasone))	<input type="checkbox"/>	<input type="checkbox"/>
So-called "combination inhalers" (such as Symbicort (budesonide and formoterol), Seretide (flutikasone and salmeterol))	<input type="checkbox"/>	<input type="checkbox"/>
Long-acting bronchodilation treatment (such as Oxis (formoterol), Serevent (salmeterol))	<input type="checkbox"/>	<input type="checkbox"/>
Allergy vaccination/hyposensitization	<input type="checkbox"/>	<input type="checkbox"/>
Homeopathic treatment	<input type="checkbox"/>	<input type="checkbox"/>
Acupuncture	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>

**"Routinely" here refers to daily use of some form of asthma medication totaling at least two months out of the year.**

9. Has your child been diagnosed with asthma by a doctor **since age 4?**

- No
- Yes

- From age 4-6
- From age 7-9

10. Has your child sought care for asthma or breathing difficulty in the **last 12 months?**

- No
- Yes

If yes, please answer the questions below

Sought care for acute asthma attacks at:

	1-3 times	3+ times	With doctor	With nurse
District medical office	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Child clinic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hospital emergency room	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Sought care for check-up of asthma at:

	1-3 times	3+ times	With doctor	With nurse
District medical office	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Child clinic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pediatric allergy ward in hospital	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. Has your child been admitted to the hospital for asthma in the **last 12 months?**

- No
- Yes

If yes, how many times?

- 1 time
- 2 times
- More than 2 times

12. Has your child been absent from school because of asthma, allergic reactions, eczema, or food allergy in the **last 12 months?**

- No
- Yes

If yes, for how many days?

- Less than 5 days
- Between 5-10 days
- More than 10 days

13. Has the mother or father been absent from work because of the child's asthma, allergic reactions, eczema, or food allergy in the **last 12 months?**

- No
- Yes

If yes, for how many days?

- Less than 5 days
- Between 5-10 days
- More than 10 days

**-Skin problems-**

14. Does your child have dry skin?

- No
- Yes

15. Has your child had an itchy rash that caused the child to itch and scratch for at least 2 weeks in the **last 12 months?**

- No
- Yes

Where was/is the rash?

- Face
- Scalp
- Outside of the arms and/or legs
- Underarms
- Hollow of the elbow and/or knee
- Wrists or ankles
- Throat
- Chest, stomach, and/or back
- Buttocks

16. Has your child been diagnosed with eczema by a doctor **since age 4?**

- No
- Yes

If yes, please answer the questions below

Atopic eczema  
Contact allergic eczema  
Other eczema

From age 4-6

From age 7-9

- |                          |                          |
|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> |

17. Has your child had eczema that caused the child to itch and scratch in conjunction with any of the following **from age 4?**

- No
- Yes

- Respiratory infections (runny nose, colds)
- Heat, sweating
- Cold temperature (winter)
- Psychological strain (such as stress)
- Cats
- Dogs
- Horses
- Birch pollen
- Grass pollen
- Food
- Other

18. Has your child been given cortisone ointment/cream because of itching rash **from age 4?**

- No
- Yes

If yes, please answer the questions below

As needed  
Routinely

From age 4-6

From age 7-9

- |                          |                          |
|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> |

19. Is your child allergic to rubber (latex)?

- No
- Yes

**-Eye and nose problems-**

20. Has your child been afflicted with persistent sniffing or stuffy nose lasting more than 3 weeks **since age 4?**

- No  
 Yes

- For 4-8 weeks  
 For 2-6 months  
 For more than 6 months

21. Has your child been afflicted with sneezing, runny nose, or stuffy nose without having a cold in the **last 12 months?**

- No  
 Yes

Did these symptoms occur at the same time as the child had itchy, watery eyes in the **last 12 months?**

- No  
 Yes

22. Has your child been afflicted with sneezing, runny nose, stuffy nose, or red, irritated eyes in conjunction with any of the following **since age 4?**

- No  
 Yes

- Cool air, mist  
 Cats  
 Dogs  
 Horses  
 Birch pollen  
 Grass pollen  
 Tobacco smoke  
 Air pollution (such as car exhaust)  
 Strong aromas (such as perfume, glue, paint)  
 Food  
 Other

23. Has your child been diagnosed with hay fever by a doctor **since age 4?**

- No  
 Yes

- From age 4-6  
 From age 7-9

**-Food-related problems-**

23. Is your child allergic to anything in food?

- No  
 Yes

If yes, please answer the questions below  
(check all that apply)

	Nose/Eye problems	Itching in mouth	Trouble breathing	Vomiting or diarrhea	Eczema	Nettle rash	Avoided foodstuff because of previous adverse reaction
Milk	<input type="checkbox"/>						
Eggs	<input type="checkbox"/>						
Fish	<input type="checkbox"/>						
Shellfish	<input type="checkbox"/>						
Wheat flour	<input type="checkbox"/>						
Soy	<input type="checkbox"/>						
Apples	<input type="checkbox"/>						
Peaches	<input type="checkbox"/>						
Kiwi	<input type="checkbox"/>						
Avocado	<input type="checkbox"/>						
Bananas	<input type="checkbox"/>						
Raw carrots	<input type="checkbox"/>						
Peanuts	<input type="checkbox"/>						
Nuts/Almonds	<input type="checkbox"/>						
Other(specify)	<input type="checkbox"/>						

25. Has your child been diagnosed with food allergy by a doctor **since age 4?**

- No  
 Yes

- From age 4-6  
 From age 7-9

**-Questions to the mother-**

26. Have you been afflicted with asthma for the first time since your child was 2-3 months old?

- No  
 Yes

Was the diagnosis made by a doctor?

- No  
 Yes

27. Have you been afflicted with allergic fever (hay fever) for the first time since your child was 2-3 months old?

- No  
 Yes

Was the diagnosis made by a doctor?

- No  
 Yes

28. Have you been afflicted with eczema for the first time since your child was 2-3 months old? (psoriasis excluded)

- No  
 Yes

- Atopic eczema  
 Seborrheic eczema  
 Contact allergic eczema  
 Other eczema

Was the diagnosis made by a doctor?

- No  
 Yes

29. Have you been afflicted with allergy to furred animals for the first time since your child was 2-3 months old?

- No  
 Yes

Was the diagnosis made by a doctor?

- No  
 Yes

30. Have you been afflicted with allergy to pollen for the first time since your child was 2-3 months old?

- No  
 Yes

Was the diagnosis made by a doctor?

- No  
 Yes

31. What is your profession?

*(Try to give a description of your work that as accurately as possible describes your main work duties. For example, instead of "teacher," write: pre-school teacher, elementary teacher, textiles teacher).*

**-Questions to the father-**

32. Have you been afflicted with asthma for the first time since your child was 2-3 months old?

- No  
 Yes

Was the diagnosis made by a doctor?

- No  
 Yes

33. Have you been afflicted with allergic fever (hay fever) for the first time since your child was 2-3 months old?

- No  
 Yes

Was the diagnosis made by a doctor?

- No  
 Yes

34. Have you been afflicted with eczema for the first time since your child was 2-3 months old? (psoriasis excluded)

- No  
 Yes

- Atopic eczema  
 Seborrheic eczema  
 Contact allergic eczema  
 Other eczema

Was the diagnosis made by a doctor?

- No  
 Yes

35. Have you been afflicted with allergy to furred animals for the first time since your child was 2-3 months old?

- No  
 Yes

Was the diagnosis made by a doctor?

- No  
 Yes

36. Have you been afflicted with allergy to pollen for the first time since your child was 2-3 months old?

- No  
 Yes

Was the diagnosis made by a doctor?

- No  
 Yes

37. What is your profession?

*(Try to give a description of your work that as accurately as possible describes your main work duties. For example, instead of "teacher," write: pre-school teacher, elementary teacher, textiles teacher).*

**-Questions about the child's biological siblings (natural- or half siblings)**

38. Does your child have any biological siblings?

- No *go to question 40*  
 Yes

39. Has any sibling been diagnosed with asthma, hay fever, allergy, atopic eczema, or food allergy by a doctor?

- No  
 Yes

If yes, please answer the questions below

	Sibling 1	Sibling 2	Sibling 3	Sibling 4	Sibling 5
Year of birth					
Natural sibling	<input type="checkbox"/>				
Half sibling	<input type="checkbox"/>				
Twin	<input type="checkbox"/>				
Boy	<input type="checkbox"/>				
Girl	<input type="checkbox"/>				
	<input type="checkbox"/>				
Asthma	<input type="checkbox"/>				
Allergic fever (hay fever)	<input type="checkbox"/>				
Atopic eczema	<input type="checkbox"/>				
Allergy to furred animals	<input type="checkbox"/>				
Allergy to pollen	<input type="checkbox"/>				
Food allergies	<input type="checkbox"/>				

**-Child's dietary habits-**

40. What type of fat substance do you usually use for **cooking**?

*(indicate only one alternative, the one most frequently used)*

- Butter
- Mixed butter/oil soft spread, 80% fat
- Household margarine
- Table margarine
- Squeezable margarine
- Cooking oil
- Other
- Unsure
- Don't use any fat substance for cooking

41. What type of fat substance does your child usually use for **sandwiches**?

*(indicate only one alternative, the one most frequently used)*

- Butter
- Mixed butter/oil soft spread, 80% fat
- Soft spread, 60% fat
- Household margarine
- Light margarine
- "Functional food" spreads, e.g. Benecol
- Other
- Unsure
- Does not use any fat substance on bread

42. Does your child have any special diet?

- No
- Yes
  - Biodynamic/ecologic
  - Vegetarian
  - Free of cow milk
  - Free of gluten
  - Other

43. Does your child eat fish?

No Why?

- Does not tolerate fish
- Does not like fish
- Other reasons

Yes What type of fish does your child eat and how often?

	1-3 times per month	1-2 times per week	2-3 times per week	5-6 times per week	7 times or more per week
Herring, Baltic herring, mackerel	<input type="checkbox"/>				
Salmon, trout	<input type="checkbox"/>				
Cod, pollack, pike, fish sticks, etc.	<input type="checkbox"/>				
Caviar, fish roe products	<input type="checkbox"/>				
Other fish	<input type="checkbox"/>				

**-Smoking habits-**

44. Does the mother smoke?

- No
- Yes, daily at home
- Yes, daily but not in the home
- Yes, less frequently

45. How many cigarettes, pipes, cigars, or cigarillos does the mother smoke per day?

\_\_\_\_\_ per day

46. Does the father smoke?

- No
- Yes, daily at home
- Yes, daily but not in the home
- Yes, less frequently

47. How many cigarettes, pipes, cigars, or cigarillos does the father smoke per day? \_\_\_\_\_ per day

48. Do any siblings or anyone else living at home smoke?

- No
- Yes, daily at home
- Yes, daily but not in the home
- Yes, less frequently

49. How many cigarettes, pipes, cigars, or cigarillos do siblings or others living at home smoke per day? \_\_\_\_\_ per day

50. Does your child regularly (more than 1 time per month) spend time in another environment **where there is** tobacco smoke?

- No
- Yes

**-Child's home environment-**

51. What is your child's primary place of residence?

- Parents' joint household
- Mother's household
- Father's household
- Spends equal time at both
- Other place of residence

If your child spends **equal time at both** mother's and father's place of residence, then questions 52-62 apply to whatever parent is filling out the questionnaire.

52. What type of building does the child live in?

- Multi-unit dwelling (apartment), bottom floor
- Multi-unit dwelling (apartment), one floor or more up from bottom
- Single family home (detached home, row house, etc.)

53. If single-family home or bottom floor in a multi-unit dwelling, what type of foundation does the house have?

- Concrete slab on ground
- Crawlspace, sleeper wall
- Plinth-course
- Cellar or underground room
- Unsure

54. When was the building constructed?

- Before 1941
- 1941-1960
- 1961-1975
- 1976-1985
- 1986-1995
- 1996-
- Unsure

55. Is there condensation (mist around the entire lower edge and at least 2 cm high) on the inside of window panes in the bedroom during winter (Nov-Mar)?

- No
- Yes, sometimes
- Yes, often

56. Is it hard to get wet or damp towels to dry in the bathroom/shower area in the winter (Nov-Mar)?

- No
- Yes, sometimes
- Yes, often

57. Has there been visible moisture damage (stains or similar) in the home **since the child turned 4?**

- No
- Yes, in the child's room
- Yes, in other areas

58. Has there been visible mold damage/odor in the home (excluding superficial growth in tile grout/on walls in wet room and the like) **since the child turned 4?**

- No
- Yes, in the child's room
- Yes, in other areas

59. What type of stove has been used for cooking **since the child turned 4?**

- Electric stove
- Gas stove
- Other

60. Have you made any changes because of suspected asthma or allergy in family members?

- No
- Yes

- Refrained from getting furred animals
- Gotten rid of furred animals
- Stopped smoking
- Purchased air purifiers
- Moved
- Removed carpets
- Mopped floor more often
- Vacuumed more often
- Other change, namely:

**-Animal contacts-**

61. Have there been furred pets in the child's home since age 4?

- No
- Yes, there are now
- Yes, there have been earlier

62. If yes, which animal(s)?

- Cat
- Dog
- Rodents (guinea pig, rabbit, hamster, rat, mouse etc)
- Other, namely:

63. Does your child ride horses?

- No
- Yes

- Rarely (less than once a week)
- Once a week
- Often (more than once a week)

64. Does any other family member ride horses?

- No
- Yes

- Rarely (less than once a week)
- Once a week
- Often (more than once a week)

**-Other questions-**

65. Has your child taken antibiotics/penicillin?

- No
- Yes

Antibiotics for:	For the first time at age:
<input type="checkbox"/> Urinary tract infection	___ years old
<input type="checkbox"/> Pneumonia	___ years old
<input type="checkbox"/> Ear inflammation	___ years old
<input type="checkbox"/> Other, what?	___ years old

66. If yes, on how many occasions has your child been treated with antibiotics/penicillin?

- 1-2 times
- 3-5 times
- 6-10 times
- More than 10 times

67. Has your child your child been prescribed an Epi-Pen (adrenalin injection for anaphylactic shock)?

- No
- Yes

68. Has your child undergone medical treatment because of intestinal parasites?

- No
- Yes

Has been treated:

For pinworm:	1 time	2-3 times	3+ times
For other parasite(s):			

69. Was the mother born outside Sweden?

- No
- Yes

In what country?

70. Was the father born outside Sweden?

- No
- Yes

In what country?

71. What type of school does the child attend?

- Public elementary
- Waldorf school
- Other school

72. Does your child participate in any type of organized physical activity or sport (excluding school phys. ed.)?

- No
- Yes

- Less than once a week
- 1-2 times a week
- 3-5 times a week
- 6-7 times a week

73. Has your child moved since turning 4?	<input type="checkbox"/> No <input type="checkbox"/> Yes  <input type="checkbox"/> Once <input type="checkbox"/> 2 times <input type="checkbox"/> 3 times or more
---	--

74. If so, at what addresses has your child lived after turning 4?

From year	To year	Street address	Street number	Municipality

75. Has your child attended childcare outside the home after turning 4?	<input type="checkbox"/> No <input type="checkbox"/> Yes
---	---

76. What preschools or childminders has your child gone to since turning 4?

From year	To year	Name of preschool	Street address	Street number	Municipality

77. What schools has your child gone to since starting school (including kindergarten)?

From year	To year	Name of school	Street address	Street number	Municipality

78. Who filled in this questionnaire?

- Only the mother
- Only the father
- Both mother and father
- Other person, please specify:

Space for additional comments.

Please check to make sure you have answered all the questions.  
Thanks for your help!