Appendix to the ISAAC Phase II Codebook

Country codes

The country codes consist of two lowercase letters usually known from internet addresses.

ad	Andorra	kh	Cambodia
af	Afghanistan	cm	Cameroon
al	Albania	ca	Canada
dz	Algeria	cv	Cape Verde
as	American Samoa	ky	Cayman Islands
ao	Angola	cf	Central African Republic
ai	Anguilla	td	Chad
aq	Antarctica	cl	Chile
ag	Antigua and Barbuda	cn	China
ar	Argentina	cx	Christmas Island
am	Armenia	cc	Cocos (Keeling) Islands
aw	Aruba	co	Colombia
au	Australia	km	Comoros
at	Austria	cg	Congo
az	Azerbaidjan	ck	Cook Islands
bs	Bahamas	cr	Costa Rica
bh	Bahrain	hr	Croatia
bd	Bangladesh	cu	Cuba
bb	Barbados	cy	Cyprus
by	Belarus	cz	Czech Republic
be	Belgium	dk	Denmark
bz	Belize	dj	Djibouti
bj	Benin	dm	Dominica
bm	Bermuda	do	Dominican Republic
bt	Bhutan	tp	East Timor
bo	Bolivia	ec	Ecuador
ba	Bosnia-Herzegovina	eg	Egypt
bw	Botswana	sv	El Salvador
bv	Bouvet Island	gq	Equatorial Guinea
br	Brazil	er	Eritrea
io	British Indian Ocean Territory	ee	Estonia
bn	Brunei Darussalam	et	Ethiopia
bg	Bulgaria	fk	Falkland Islands
bf	Burkina Faso	fo	Faroe Islands
bi	Burundi	fj	Fiji

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fi	Finland	jp	Japan
cs	Former Czechoslovakia	jo	Jordan
su	Former USSR	kz	Kazakhstan
fr	France	ke	Kenya
fx	France (European Territory)	ki	Kiribati
gf	French Guyana	kw	Kuwait
tf	French Southern Territories	kg	Kyrgyzstan
ga	Gabon	la	Laos
gm	Gambia	lv	Latvia
ge	Georgia	lb	Lebanon
de	Germany	ls	Lesotho
gh	Ghana	lr	Liberia
gi	Gibraltar	ly	Libya
gb	Great Britain	li	Liechtenstein
gr	Greece	lt	Lithuania
gl	Greenland	lu	Luxembourg
gd	Grenada	mo	Macau
gp	Guadeloupe (French)	mk	Macedonia
gu	Guam (USA)	mg	Madagascar
gt	Guatemala	mw	Malawi
gn	Guinea	my	Malaysia
gw	Guinea Bissau	mv	Maldives
gy	Guyana	ml	Mali
ht	Haiti	mt	Malta
hm	Heard and McDonald Islands	mh	Marshall Islands
hn	Honduras	mq	Martinique (French)
hk	Hong Kong	mr	Mauritania
hu	Hungary	mu	Mauritius
is	Iceland	yt	Mayotte
in	India	mx	Mexico
id	Indonesia	fm	Micronesia
ir	Iran	md	Moldavia
iq	Iraq	mc	Monaco
ie	Ireland	mn	Mongolia
il	Israel	ms	Montserrat
it	Italy	ma	Morocco
ci	Ivory Coast (Cote D'Ivoire)	mz	Mozambique
jm	Jamaica	mm	Myanmar

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na	Namibia	lc	Saint Lucia
nr	Nauru	pm	Saint Pierre and Miquelon
np	Nepal	st	Saint Tome (Sao Tome) and Principe
nl	Netherlands	vc	Saint Vincent / Grenadines
an	Netherlands Antilles	ws	Samoa
nt	Neutral Zone	sm	San Marino
nc	New Caledonia (French)	sa	Saudi Arabia
nz	New Zealand	sn	Senegal
ni	Nicaragua	sc	Seychelles
ne	Niger	sl	Sierra Leone
ng	Nigeria	sg	Singapore
nu	Niue	sk	Slovak Republic
nf	Norfolk Island	si	Slovenia
kp	North Korea	sb	Solomon Islands
mp	Northern Mariana Islands	so	Somalia
no	Norway	za	South Africa
om	Oman	kr	South Korea
pk	Pakistan	es	Spain
px	Palestine	lk	Sri Lanka
pw	Palau	sd	Sudan
pa	Panama	sr	Suriname
pg	Papua New Guinea	sj	Svalbard and Jan Mayen Islands
py	Paraguay	sz	Swaziland
pe	Peru	se	Sweden
ph	Philippines	ch	Switzerland
pn	Pitcairn Island	sy	Syria
pl	Poland	tj	Tadjikistan
pf	Polynesia (French)	tw	Taiwan
pt	Portugal	tz	Tanzania
pr	Puerto Rico	th	Thailand
qa	Qatar	tg	Togo
re	Reunion (French)	tk	Tokelau
ro	Romania	to	Tonga
ru	Russian Federation	tt	Trinidad and Tobago
rw	Rwanda	tn	Tunisia
gs	S. Georgia / S. Sandwich Isls.	tr	Turkey
sh	Saint Helena	tm	Turkmenistan
kn	Saint Kitts / Nevis Anguilla	tc	Turks and Caicos Islands

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tv	Tuvalu		vn	Vietnam
ug	Uganda		vg	Virgin Islands (British)
ua	Ukraine		vi	Virgin Islands (USA)
ae	United Arab Emirates		wf	Wallis and Futuna Islands
uk	United Kingdom		eh	Western Sahara
us	United States		ye	Yemen
uy	Uruguay		yu	Yugoslavia
um	USA Minor Outlying Islands		zr	Zaire
uz	Uzbekistan		zm	Zambia
vu	Vanuatu		zw	Zimbabwe
va	Vatican City State			
ve	Venezuela			

Centre codes

11	Spain, Cartagena
12	Spain, Almería
13	Spain, Madrid
14	Spain, Valencia
15	Albania, Tirana
16	Estonia, Tallinn
17	France, Creteil
23	Germany, Dresden
24	Germany, Munich
25	Greece, Athens
26	Greece, Thessaloniki
27	Italy, Rome
28	Iceland, Reykjavik
29	Netherlands,Utrecht
30	Norway, Tromsø
32	Sweden, Linköping
33	Sweden, Östersund
34	Turkey, Ankara
35	U.K., West Sussex
36	New Zealand, Hawkes Bay
37	China, Hong Kong
38	China, Beijing
39	China, Guangzhou
40	Ghana, Kintampo
42	India, Mumbai
44	Brazil, Uruguaiana
45	Ecuador, Pichincha
46	Georgia ,Tbilisi
48	Palestine, Ramallah
49	Latvia, Riga

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Demographic characteristics questionnaire (DC)

****
I2CDC_ID

Meaning: **Special Id which shall help to merge easily the different modules for the centres. This Id contains the ccode and a serial number**
e.g. es110001 -- es111471

Derived Variable: I2CDC_ID
Derived from: ccode: Country and Centre
serial number: SAS Variable **_n_**

SAS-Code:
```
    *New I2CDC_ID;
    null1="0";
    null2="00";
    null3="000";

    number= _n_;

    array idnumb(*) number;

    do n=1 to dim(idnumb);
        IF 1 <= idnumb(n) < 10  THEN I2CDC_ID=compress(ccode||null3||idnumb(n));
        IF 10 <= idnumb(n) < 100 THEN I2CDC_ID=compress(ccode||null2||idnumb(n));
        IF 100 <= idnumb(n) < 1000 THEN I2CDC_ID=compress(ccode||null1||idnumb(n));
        IF idnumb(n) >= 1000 THEN I2CDC_ID=compress(ccode||idnumb(n));
    end;
```

****
PARTPUP

Meaning: **Derived Variable for the Participation Definition. An I2CDC Participant must have answered at least one question in the written Core Questionnaire. That means at least one question in WH, RH or EC must be answered.**

Derived Variable: PARTPUP
Derived from: All Variables in Module WH, RH and EC!
Coding: **1 = I2CDC Participant; 2 = Non-I2CDC-Participant**

SAS Code
```
*********************************************************************
Programming of Participant (at least one Question of the            *************
written Core Questionnaire(WH,RH,EC must be answered )          *****************
Derived Variable PARTPUP=1(Participant)/2(NO Participant)          *************
*********************************************************************;

IF WH01=.M AND WH02=.M AND WH03=.M AND WH04=.M AND WH06=.M AND WH07=.M
AND WH08=.M AND RH01=.M AND RH02=.M AND RH03=.M AND RH04_01=.M AND
RH04_02=.M AND RH04_03=.M AND RH04_04=.M AND RH04_05=.M AND RH04_06=.M AND
RH04_07=.M AND RH04_08=.M AND RH04_09=.M AND RH04_10=.M AND RH04_11=.M AND
RH04_12=.M AND RH05=.M AND RH06=.M AND EC01=.M AND EC02=.M AND EC03=.M AND
EC04=.M AND EC06=.M AND EC07=.M THEN


        PARTPUP=2;

ELSE PARTPUP=1;
```

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```
***********************************************************************************
```
DC

Meaning: **Individual has answered the DC Module or not.**

Derived Variable: dc
Derived from: dc01 to dc10

Coding: **1 = Individual has at least one question answered in dc**
                        2 = Individual has no question answered in dc
SAS-Code:

```
    dc=1;
    IF DC01 = 9 AND DC02 = "99999999" AND DC03_01 = 9 AND DC03_02 = "99" AND DC04 =
    "9999" AND DC05_01 = 9 AND DC05_02 = "99" AND DC06 = "9999" AND DC07_01 = 9 AND
    DC07_02 = "99" AND DC08_1M = 99 AND DC08_2M = 99 AND DC08_1F = 99 AND DC08_2F
    = 99 AND
    DC09_01 = 9 AND DC09_02 = 9 AND DC09_03 = 9 AND DC10 = "99999999" THEN dc=2;
    run;
```

```
***********************************************************************************
```
CCode

Meaning: **Country and Centre Code together in one Variable.**
                       e.g. country es and centre 11 the ccode will be es11.

Derived Variable: ccode
Derived from: countryp: Makro variable for Country
                         centrep: Makro variable for Centre

SAS-Code:

```
*CentreCode als Variable einfügen;
ccode=lowcase("&countryp&centrep");
```

```
***********************************************************************************
```
DC03_01x

Meaning: **Was your child born in xxx?**

Derived Variable: DC03_01x
Derived from: dc03_01:   Was your child born in xxx?
  dc03_02:   If no, in which country?
Coding: dc03_01:   before Task: 1=Yes, 2=No, 9=any other response
                                           after Task: 1=Yes, 2=No, **.M** =missing
                        dc03_02:   before Task: xxx, 99=missing
                                           after Task: xxx, **.A**=not applicable, **.M** =missing
                        COUNTRY: Value of country variable, e.g. **de** for Germany

                        DC03_01x: **xxx, .M =missing country**

Event-table:

Before Task		After Task	
DC03_01	**DC03_02**	**DC03_02 (Char)**	**Derived Variable DC03_01x (Char)**
2	99	„.M"	„.M"
1	99	„.A"	COUNTRY
9	99	„.M"	„.M"
1	COUNTRY	COUNTRY	COUNTRY
2	COUNTRY	COUNTRY	„.M"
9	COUNTRY	COUNTRY	COUNTRY
9	not COUNTRY	Keep the value	Keep the value
2	not COUNTRY	Keep the value	Keep the value
1	not COUNTRY	Keep the value	„.M"

Num.	Character
.A	„.A"
.M	„.M"

SAS-Code:

```
* Was your child born in xxx?;

IF dc03_01  = 2 AND dc03_02 = "99" THEN
  dc03_02  = ".M";

IF dc03_01  = 1 AND dc03_02 = "99" and dc03_01q in (1,2) THEN
  dc03_02  = ".A";
IF dc03_01  = 1 AND dc03_02 = "99" and dc03_01q in (3,4,5) THEN
  dc03_02  = ".M";

IF dc03_01  = 9 AND dc03_02 = "99" THEN
  dc03_02  = ".M";


* change code;

IF dc03_01  = 1 AND dc03_02 = ".A" THEN DO;
  dc03_01x = COUNTRY;
END;
ELSE IF dc03_01  = 1 AND dc03_02 NE COUNTRY THEN DO;
  dc03_01x = ".M";
END;
ELSE IF dc03_01  = 2 AND dc03_02 EQ COUNTRY THEN DO;
  dc03_01x = ".M";
END;
ELSE DO;
  dc03_01x = dc03_02;
END;

IF dc03_01 = 9 THEN dc03_01 = .M;
```

****

DC05_01x

Meaning: **Was the mother born in xxx?**

Derived Variable: DC05_01x
Derived from: dc05_01:   Was the mother born in xxx?
                        dc05_02:   If no, in which country?
Coding: dc05_01:   <u>before Task</u>: 1=Yes, 2=No, 9=any other response
                                      <u>after Task</u>: 1=Yes, 2=No, **.M** =missing
                        dc05_02:   <u>before Task</u>: xxx, 99=missing
                                      <u>after Task</u>: xxx, **.A**=not applicable, **.M** =missing
                        COUNTRY: Value of country variable, e.g. **de** for Germany

                        DC05_01x: **xxx, .M =missing**

Event-table:

Before Task		After Task	
DC05_01	**DC05_02**	**DC05_02 (Char)**	**Derived Variable DC05_01x (Char)**
2	99	„.M"	„.M"
1	99	„.A"	COUNTRY
9	99	„.M"	„.M"
1	COUNTRY	COUNTRY	COUNTRY
2	COUNTRY	COUNTRY	„.M"
9	COUNTRY	COUNTRY	COUNTRY
9	not COUNTRY	Keep the value	Keep the value
2	not COUNTRY	Keep the value	Keep the value
1	not COUNTRY	Keep the value	„.M"

Num.	Character
.A	„.A"
.M	„.M"

SAS-Code:

```
* Was she born in xxx?;

IF dc05_01 = 2 AND dc05_02 = "99" THEN
  dc05_02 = ".M";

IF dc05_01 = 1 AND dc05_02 = "99" AND dc05_01q in (1,2) THEN
  dc05_02 = ".A";
IF dc05_01 = 1 AND dc05_02 = "99" AND dc05_01q in (3,4,5) THEN
  dc05_02 = ".M";

IF dc05_01 = 9 AND dc05_02 = "99" THEN
  dc05_02 = ".M";


* Change code;

IF dc05_01 = 1 AND dc05_02 = ".A" THEN DO;
  dc05_01x = COUNTRY;
END;
ELSE IF dc05_01 = 1 AND dc05_02 NE COUNTRY THEN DO;
  dc05_01x = ".M";
END;
ELSE IF dc05_01 = 2 AND dc05_02 EQ COUNTRY THEN DO;
```

```
  dc05_01x = ".M";
END;
ELSE DO;
  dc05_01x = dc05_02;
END;
```

IF dc05_01 = 9 THEN dc05_01 = .M;

****
DC07_01x

Meaning: **Was the father born in xxx?**

Derived Variable: DC07_01x
Derived from: dc07_01:   Was the father born in xxx?
                               dc07_02:   If no, in which country?
Coding: dc07_01:   <u>before Task</u>: 1=Yes, 2=No, 9=any other response
                                               <u>after Task</u>: 1=Yes, 2=No, **.M** =missing
                               dc07_02:   <u>before Task</u>: xxx, 99=missing
                                               <u>after Task</u>: xxx, **.A**=not applicable, **.M** =missing
                               COUNTRY: Value of country variable, e.g. **de** for Germany

                               DC07_01x: **xxx, . =missing**

Event-table:

Before Task		After Task	
DC07_01	**DC07_02**	**DC07_02 (Char)**	**Derived Variable DC07_01x (Char)**
2	99	„.M"	„.M"
1	99	„.A"	COUNTRY
9	99	„.M"	„.M"
1	COUNTRY	COUNTRY	COUNTRY
2	COUNTRY	COUNTRY	„.M"
9	COUNTRY	COUNTRY	COUNTRY
9	not COUNTRY	Keep the value	Keep the value
2	not COUNTRY	Keep the value	Keep the value
1	not COUNTRY	Keep the value	„.M"

Num.	Character
.A	„.A"
.M	„.M"

SAS-Code:

* Was the father born in xxx?;

```
IF dc07_01  = 2 AND dc07_02 = "99" THEN
  dc07_02  = ".M";

IF dc07_01  = 1 AND dc07_02 = "99" AND dc07_01q in (1,2) THEN
  dc07_02  = ".A";
IF dc07_01  = 1 AND dc07_02 = "99" AND dc07_01q in (3,4,5) THEN
  dc07_02  = ".M";

IF dc07_01  = 9 AND dc07_02 = "99" THEN
  dc07_02  = ".M";
```

* Change code;

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```
IF dc07_01  = 1 AND dc07_02 = ".A" THEN DO;
  dc07_01x = COUNTRY;
END;
ELSE IF dc07_01  = 1 AND dc07_02 NE COUNTRY THEN DO;
  dc07_01x = ".M";
END;
ELSE IF dc07_01  = 2 AND dc07_02 EQ COUNTRY THEN DO;
  dc07_01x = ".M";
END;
ELSE DO;
  dc07_01x = dc07_02;
END;

IF dc07_01 = 9 THEN dc07_01 = .M;
```
****

DC08_mx

Meaning:	**For how long did the child's mother attend school and professional training?**	
Derived Variable:	dc08_mx	
Derived from:	dc08_1m:	Mother's years of school
	dc08_2m:	Mother's years of College / University
Coding:	dc08_1m:	before Task: n, 99=any other response
		after Task: n, .M=missing
	dc08_2m:	before Task: n, 99=any other response
		after Task: n, .M=missing
	dc08_mx:	**n, .M=missing**

SAS-Code:

```
* Mother's years of school / College / University;

If dc08_1m EQ 99 OR dc08_2m EQ 99 THEN DO;
  dc08_mx = .M ;
END;
ELSE DO;
 IF dc08_1m NE 99 AND dc08_2m NE 99  THEN DO;
  dc08_mx = dc08_1m + dc08_2m;
 END;
END;

IF dc08_1m EQ 99 THEN dc08_1m  = .M;
IF dc08_2m EQ 99 THEN dc08_2m  = .M;
```

****

DC08_fx

Meaning:	**For how long did the child's father attend school and professional training?**	
Derived Variable:	dc08_fx	
Derived from:	dc08_1f:	Father's years of school
	dc08_2f:	Father's years of College / University
Coding:	dc08_1f:	n, .M=any other response
	dc08_2f:	n, .M=any other response
	dc08_fx:	**n, .M=missing years**

SAS-Code:

* Father's years of school / College / University;

```
If dc08_1f EQ 99 OR dc08_2f EQ 99  THEN DO;
  dc08_fx = .M ;
END;
ELSE DO;
  IF dc08_1f NE 99 AND dc08_2f NE 99  THEN DO;
    dc08_fx = dc08_1f + dc08_2f;
  END;
END;

IF dc08_1f EQ 99 THEN dc08_1f  = .M;
IF dc08_2f EQ 99 THEN dc08_2f  = .M;
```

****
DC0210dx/ DC0210yx

Meaning:	**Age of the child in days / years at questionnaire date (in full years / integer)**	
Derived Variable:	dc0210dx	
	dc0210yx	
Derived from:	dc02:	When was your child born? (Date of birth)
	dc10:	Questionaire date
Coding:	**dc0210dx:**	**Age of the child at dc-measuring in days**
	dc0210yx:	**Age of the child at dc-measuring in years**

SAS-Code:

```
* Date of birth - child;
kinddatd   = SUBSTR(dc02,1,2);
kinddatm   = SUBSTR(dc02,3,2);
kinddaty1  = SUBSTR(dc02,5,2);
kinddaty2  = SUBSTR(dc02,7,2);
kinddaty   = SUBSTR(dc02,5,4);

IF kinddaty NE 9999 AND kinddatd NE 99 AND kinddatm NE 99 THEN
  kinddat = MDY(kinddatm,kinddatd,kinddaty2);

* questionnaire date;
fragdatd   = SUBSTR(dc10,1,2);
fragdatm   = SUBSTR(dc10,3,2);
fragdaty1  = SUBSTR(dc10,5,2);
fragdaty2  = SUBSTR(dc10,7,2);
fragdaty   = SUBSTR(dc10,5,4);

IF fragdaty NE 9999 AND fragdatd NE 99 AND fragdatm NE 99 THEN
  fragdat = MDY(fragdatm,fragdatd,fragdaty2);

* Age of the child at dc-measuring in days;
dc0210dx = fragdat-kinddat;

* Age of the child at dc-measuring in years;
IF kinddaty NE 9999 AND fragdaty NE 9999 THEN
  dc0210yx = fragdaty - kinddaty;

IF dc0210dx EQ . THEN dc0210dx = .M;
IF dc0210yx EQ . THEN dc0210yx = .M;
```

****
DC0210yxx

Meaning: **Age of the child in years at questionnaire date (not rounded)**

Derived Variable: dc0210yxx
Derived from: dc0210dx: Age of child in days at questionnaire date
Coding: **dc0210yxx:**   **Age of the child at dc-measuring in exact years (not rounded)**

SAS-Code:

IF dc0210dx ne .M THEN dc0210yxx=dc0210dx/365.25;
ELSE dc0210yxx=.M;

```
*******************************************************************************
```
DATEDCRF

Meaning:	The value of DC10 will be passed over to DATEDCRF if DC10 is given completely what means that whether day, nor month nor year is missing and the year of DC10 must be within the fieldwo range. If the value of DC10 is implausible or missing, the value of RF35 will be checked. If day, month or year are not missing and the year of RF35 is within the fieldwork range, the value of RF35 will be passed over to DATEDCRF. If RF35 and DC10 are plausible then always the value of DC10 will be passed over to DATEDCRF.

Derived Variable:	DATEDCRF	
Derived from:	dc10:	When was the questionnaire answered?
	rf35:	When was the questionnaire answered?
	beginf:	Year of Fieldwork begin
	endf:	Year of Fieldwork end
Help Variables:	dd01,mm01,yy01:	Substrings of day month year of dc10
	dd02,mm02,yy02:	Substrings of day month year of rf35

SAS-Code:
```
*help variable day month year of dc10;
      dd01=substr(dc10,1,2)/1;
      mm01=substr(dc10,3,2)/1;
      yy01=substr(dc10,5,4)/1;
      *help variable day month year of rf35;
      dd02=substr(rf35,1,2)/1;
      mm02=substr(rf35,3,2)/1;
      yy02=substr(rf35,5,4)/1;
      *help variable day month year of Birthdate;
      dd03=substr(dc02,1,2)/1;
      mm03=substr(dc02,3,2)/1;
      yy03=substr(dc02,5,4)/1;
      *help variables for begin(bf) and end fieldwork (ef);
      ddbf=substr(beginf,1,2)/1;
      mmbf=substr(beginf,3,2)/1;
      yybf=substr(beginf,5,4)/1;
      ddef=substr(endf,1,2)/1;
      mmef=substr(endf,3,2)/1;
      yyef=substr(endf,5,4)/1;

/*eventuell Fieldwork Range -+1Jahr
Beschluß abwarten*/

      datedcrf="99999999";

if dd01 ne 99 and mm01 ne 99 and yy01 ne 9999 then do;
     if yybf <= yy01 <= yyef then datedcrf=compress(dc10);
     if yybf=9999 or yyef=9999 then datedcrf=compress(dc10);
       end;

if (dd01 eq 99 or mm01 eq 99 or yy01 eq 9999 or yybf > yy01 or yy01 > yyef) and (dd02 ne 99 and
mm02 ne 99 and yy02 ne 9999) then do;
    if  yybf <= yy02 <= yyef then datedcrf=compress(rf35);
   if yybf=9999 or yyef=9999 then datedcrf=compress(rf35);end;
```

```
*****************************************************************************
```
AGEDC01, AGEDC02, AGEDC03

Meaning:	**Calculation of age at completion of DC or RF Questionnaire by using the derived variable DATEDCRF and the variable DC02. AGEDC01 is the calculated Age in days, AGEDC02 is the exact calculated Age in years, AGEDC03 is the calculated Age truncated to an integer value.**

Derived Variable:	AGEDC01, AGEDC02, AGEDC03	
Derived from:	DATEDCRF:	When was the questionnaire answered?
	dc02:	When was your child born?
Help Variables:	dd03,mm03,yy03	Substrings of day month year of dc02
	dd04,mm04,yy04	Substrings of day month year of DATEDCRF

SAS-Code:

```
*help variable day month year of datedcrf;

      dd04=substr(datedcrf,1,2)/1;
      mm04=substr(datedcrf,3,2)/1;
      yy04=substr(datedcrf,5,4)/1;

      agedc01=.M;
      agedc02=.M;
      agedc03=.M;

       if dd04 ne 99 and mm04 ne 99 and yy04 ne 9999 and
         dd03 ne 99 and mm03 ne 99 and yy03 ne 9999 then do;

          diff01=mdy(mm03,dd03,yy03);*Birthdate DC;
          diff02=mdy(mm04,dd04,yy04);*Derived Date;

          agedc01=diff02-diff01;*Age in Days;
          agedc02=(agedc01/365.25);*Age in Years;
          agedc03=int(agedc01/365.25);*Age Ganzzahlig;

      end;
      ELSE DO;
          agedc01=.M;
          agedc02=.M;
          agedc03=.M;
      END;
```

```
*****************************************************************************
```
AGEFW
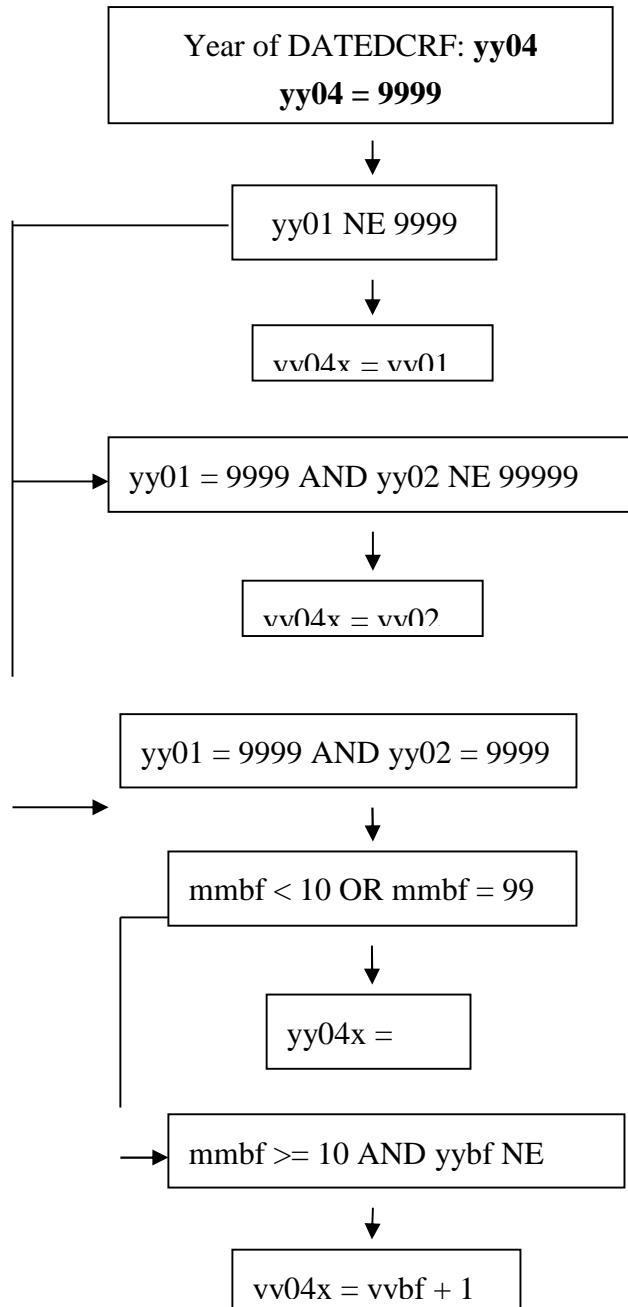
Meaning:	**If the Year when the questionnaire is filled out is not available, the age of the child is estimated by using the year of the fieldwork begin.**
Derived Variable:	**AGEFW**, yy04x

Derived from: DATEDCRF: When was the questionnaire answered?
dc02: When was your child born?

Help Variables: dd03,mm03,yy03: Substrings of day month year of dc02
dd04,mm04,yy04: Substrings of day month year of DATEDCRF
ddbf, mmbf, yybf: Substrings of day month year of beginf
ddef, mmef, yyef: Substrings of day month year of endf

Coding yy04x contains the year of questionnaire date or the year of begin or end of fieldwork. AGEFW contains the approximately Age in years measured by yy04x-yy03.

Flowchart: *Year in Questionnaire Date is Missing:*

```
                    ┌────────────────────────────────┐
                    │   Year of DATEDCRF: yy04        │
                    │        yy04 = 9999              │
                    └────────────────────────────────┘
                                   │
                                   ▼
                         ┌──────────────────────┐
              ┌──────────│     yy01 NE 9999      │
              │          └──────────────────────┘
              │                     │
              │                     ▼
              │             ┌──────────────────┐
              │             │   yy04x = yy01    │
              │             └──────────────────┘
              │
              │      ┌─────────────────────────────────────┐
              └─────▶│  yy01 = 9999 AND yy02 NE 99999       │
                     └─────────────────────────────────────┘
                                   │
                                   ▼
                            ┌──────────────────┐
                            │   yy04x = yy02    │
                            └──────────────────┘


                     ┌─────────────────────────────────────┐
                     │   yy01 = 9999 AND yy02 = 9999         │
                     └─────────────────────────────────────┘
              ───────▶              │
                                    ▼
                         ┌────────────────────────────┐
                    ┌────│   mmbf < 10 OR mmbf = 99     │
                    │    └────────────────────────────┘
                    │                 │
                    │                 ▼
                    │          ┌──────────────┐
                    │          │   yy04x =    │
                    │          └──────────────┘
                    │
                    │    ┌────────────────────────────┐
              ──────┼───▶│   mmbf >= 10 AND yybf NE     │
                    └────└────────────────────────────┘
                                     │
                                     ▼
                          ┌────────────────────────┐
                          │   yy04x = yybf + 1      │
                          └────────────────────────┘
```

SAS-Code:

```
*********************************************************
DC10 und Fieldwork information
*********************************************************;


IF yy04 = 9999 THEN DO;
   IF yy01 NE 9999 THEN yy04x=yy01;
=  IF yy01 = 9999 AND yy02 NE 9999 THEN yy04x=yy02;
   IF yy01 = 9999 AND yy02 = 9999 THEN DO;
   IF mmbf < 10 OR mmbf = 99 THEN yy04x=yybf;
   IF mmbf >= 10 and mmbf ne 99 AND yybf NE yyef
         AND yybf ne 9999
   THEN yy04x=yybf+1;
END;
IF (yy04x < (yybf-1) or yy04x > (yyef+1))
  THEN yy04x=9999;
END;



*********************************************************************;
IF yy04 NE 9999 THEN yy04x=yy04;
IF yy04 NE 9999 AND (yy04 < (yybf-1) or yy04 > (yyef+1)) AND yybf ne
9999
                 AND yyef ne 9999 THEN yy04x=9999;

   *unplausible Jahresangaben werden auf 9999 gesetzt;
         IF yy01 = 2099 or yy02 = 2099 THEN yy04x=9999;
         IF yy01 = 1989 AND yy02 = 1989 THEN yy04x=9999;
*********************************************************************;
IF (yy04x NE 9999 AND yy03 NE 9999) THEN AGEFW=yy04x-yy03;
     ELSE AGEFW=.M;

IF datedcrf="99999999" THEN datedcrf=".M";
IF AGEFW=. THEN AGEFW=.M;
IF agedc02=. THEN agedc02=.M;
IF agedc03=. THEN agedc03=.M;
```

```
********************************************************************************
```

AGE_ALL, Flag_age

Meaning:	**Overall Derived Variable for AGE and flag Variable for this derived Variable**

Derived Variable:	**Age_All, flag_age**	
Derived from:	dc0210yx:	Exact Age for dc02 with dc10
	agedc03:	Exact Age for dc02 with rf35 for centres: 23 and 24
	agefw:	Estimated Age for dc02 - year with begin of fieldwork - year for centres 29,32,33 and 40.

SAS - Code:

AGE_ALL=dc0210yx;**flag_age**=**1**;
IF centre IN (**23**,**24**) THEN DO;AGE_ALL=AGEDC03;flag_age=**2**;END;
IF centre IN (**29**,**32**,**33**,**40**) THEN DO;AGE_ALL=AGEFW;flag_age=**3**;END;

Questionnaire on wheezing (WH)

****

WH

Meaning: **Individual has answered the WH Module or not.**

Derived Variable: wh
Derived from: wh01 to wh08

Coding: **1 = Individual has answered at least one question in wh**
                          2 = Individual has answered no question in wh
SAS-Code:

wh=**1**;
IF WH01 = **9** AND WH02 = **9** AND WH03 = **9** AND WH04 = **9** AND WH05 = **9**
AND WH06 = **9** AND WH07 = **9** AND WH08 = **9** THEN wh=**2**;

****

WH02x

Meaning: **Has your child had wheezing or whistling in the chest in the last 12 months?**

Derived Variable: wh02x
Derived from: wh01:   Has your child ever had wheezing or whistling in the chest at any time in the past?
                                  IF YOU HAVE ANSWERED "NO" PLEASE SKIP TO QUESTION 6 (WH06)
                          wh02:   Has your child had wheezing or whistling in the chest in the last 12 months?
                                  IF YOU HAVE ANSWERED "NO" PLEASE SKIP TO QUESTION 6 (WH06)
help variable: response: wh01=2 then response=2, any other case response=1
Coding: wh01:   <u>before Task:</u> 1=Yes, 2=No, 9=any other response
                                  <u>after Task:</u> 1=Yes, 2=No, .M=missing
                          wh02:   <u>before Task:</u> 1=Yes, 2=No, 9=any other response
                                  <u>after Task:</u> 1=Yes, 2=No, .A= not applicable, .M=missing
                          wh02x: 1=Yes, 2=No, .M=missing

Event-tables:

Coding of response	
WH01	**response**
2	2
1	1
9	1

Before Task		After Task	
response	**WH02**	**WH02**	**Derived Variable WH02x**
2	1	1	1
2	2	2	2
2	9	.A	2
1	1	1	1
1	2	2	2
1	9	.M	.M

SAS-Code:

```
****  for wh01  * wh01 = 2 then response=2  ****;
response = 1;
wh01org = wh01;
IF wh01 = 9 THEN wh01 = .M;

IF wh01org = 2 THEN response = 2;

****  for wh02  * wh01 = 2 then response=2  ****;
wh02org = wh02;
IF response = 2 AND wh02 = 9 AND wh02q IN (1,2) THEN wh02 = .A;
IF response = 2 AND wh02 = 9 AND wh02q IN (3,4,5) THEN wh02 = .M;
IF response = 1 AND wh02 = 9 THEN wh02 = .M;

* change code;
wh02x = wh02;
IF wh02 = .A THEN wh02x = 2;
```

```
***********************************************************************
```
WH03x

Meaning:	**How many attacks of wheezing has your child had in the last 12 months?**

Derived Variable:	wh03x	
Derived from:	wh01:	Has your child ever had wheezing or whistling in the chest at any time in the past? IF YOU HAVE ANSWERED "NO" PLEASE SKIP TO QUESTION 6 (WH06)
	wh02:	Has your child had wheezing or whistling in the chest in the last 12 months? IF YOU HAVE ANSWERED "NO" PLEASE SKIP TO QUESTION 6 (WH06)
	wh03:	How many attacks of wheezing has your child had in the last 12 months?
help variable:	response2:	(wh01,wh02) = (2,2),(1,2),(9,2),(2,9) then response2=2, any other case response2=1
Coding:	wh01:	<u>before Task</u>: 1=Yes, 2=No, 9=any other response <u>after Task</u>: 1=Yes, 2=No, .M=missing
	wh02:	<u>before Task</u>: 1=Yes, 2=No, 9=any other response <u>after Task</u>: 1=Yes, 2=No, .A= not applicable, .M=missing
	wh03:	<u>before Task</u>: 1=none, 2=1 to 3, 3=4 to 12, 4=more than12, 9=any other response <u>after Task</u>: 1=none, 2=1 to 3, 3=4 to 12, 4=more than 12, .A= not applicable, .M=missing
	wh03x:	**1=none, 2=1 to 3, 3=4 to 12, 4=more than 12, .M=missing**

Event-tables:

Coding of response2		
WH01	**WH02**	**response2**
2	2	2
1	2	2
9	2	2
2	9	2
2	1	1
1	1	1
1	9	1
9	1	1
9	9	1

Before Task		After Task	
response2	**WH03**	**WH03**	**Derived Variable WH03x**
2	1	1	1
2	2	2	2
2	3	3	3
2	4	4	4
2	9	.A	1
1	1	1	1
1	2	2	2
1	3	3	3
1	4	4	4
1	9	.M	.M

SAS-Code:

```
****  for wh03 * (wh01,wh02) = (2,2),(1,2),(9,2),(2,9) then response2=2*;
**** preparing step for derived variable wh03x ****;
response2 = 1;
IF wh02x = 2 THEN response2 = 2;

IF response2 = 2 AND wh03 = 9 AND WH03q in (1,2) THEN wh03 = .A;
IF response2 = 2 AND wh03 = 9 AND WH03q in (3,4,5) THEN wh03 = .M;
IF response2 = 1 AND wh03 = 9 THEN wh03 = .M;

* change code;
wh03x = wh03;
IF wh03 = .A THEN wh03x = 1;
```

****
WH04x

Meaning:	**In the last 12 months, how often, on average, has your child's sleep been disturbed due to wheezing?**
Derived Variable:	wh04x
Derived from:	wh01: Has your child ever had wheezing or whistling in the chest at any time in the past? IF YOU HAVE ANSWERED "NO" PLEASE SKIP TO QUESTION 6 (WH06)
	wh02: Has your child had wheezing or whistling in the chest in the last 12 months? IF YOU HAVE ANSWERED "NO" PLEASE SKIP TO QUESTION 6 (WH06)
	wh04: In the last 12 months, how often, on average, has your child's sleep been disturbed due to wheezing?
help variable:	response2:(wh01,wh02) = (2,2),(1,2),(9,2),(2,9) then response2=2, any other case response2=1
Coding:	wh01: <u>before Task:</u> 1=Yes, 2=No, 9=any other response <u>after Task:</u> 1=Yes, 2=No, .M=missing
	wh02: <u>before Task:</u> 1=Yes, 2=No, 9=any other response <u>after Task:</u> 1=Yes, 2=No, .A= not applicable, .M=missing
	wh04: <u>before Task:</u> 1=never woken, 2=less than one night per week, 3=one or more nights per week, 9=any other response <u>after Task:</u> 1=never woken, 2=less than one night per week, 3=one or more nights per week, .A=not applicable, .M=missing
	wh04x: 1=never woken, 2=less than one night per week, 3=one or more nights per week, .M=missing

Event-table:

Coding of response2		
WH01	**WH02**	**response2**
2	2	2
1	2	2
9	2	2
2	9	2
2	1	1
1	1	1
1	9	1
9	1	1
9	9	1

Before Task		After Task	
response2	**WH04**	**WH04**	**Derived Variable WH04x**
2	1	1	1
2	2	2	2
2	3	3	3
2	9	.A	1
1	1	1	1
1	2	2	2
1	3	3	3
1	9	.M	.M

SAS-Code:

```
****  for wh04 * (wh01,wh02) = (2,2),(1,2),(9,2),(2,9) then response2=2 **;
IF response2  = 2 AND wh04 = 9 AND wh04q in (1,2) THEN wh04 = .A;
IF response2  = 2 AND wh04 = 9 AND wh04q in (3,4,5) THEN wh04 = .M;
IF response2  = 1 AND wh04 = 9 THEN wh04 = .M;

* change code;
wh04x = wh04;
IF wh04 = .A THEN wh04x = 1;
```

****

WH05x

Meaning:	**In the last 12 months, has wheezing ever been severe enough to limit your child's speech to only one or to words at a time between breath?**

Derived Variable:	wh05x	
Derived from:	wh01:	Has your child ever had wheezing or whistling in the chest at any time in the past? IF YOU HAVE ANSWERED "NO" PLEASE SKIP TO QUESTION 6 (WH06)
	wh02:	Has your child had wheezing or whistling in the chest in the last 12 months? IF YOU HAVE ANSWERED "NO" PLEASE SKIP TO QUESTION 6 (WH06)
	wh05:	In the last 12 months, has wheezing ever been severe enough to limit your child's speech to only one or to words at a time between breath?
help variable:	response2:	(wh01,wh02) = (2,2),(1,2),(9,2),(2,9) then response2=2, any other case response2=1
Coding:	wh01:	<u>before Task</u>: 1=Yes, 2=No, 9=any other response <u>after Task</u>: 1=Yes, 2=No, .M=missing
	wh02:	<u>before Task</u>: 1=Yes, 2=No, 9=any other response <u>after Task</u>: 1=Yes, 2=No, .A= not applicable, .M=missing
	wh05:	<u>before Task</u>: 1=yes, 2=no, 9=any other response <u>after Task</u>: 1=yes, 2=no, .A=not applicable, .M=missing
	wh05x:	**1=yes, 2=no, .M=missing**

Event-table:

Coding of response2		
WH01	**WH02**	**response2**
2	2	2
1	2	2
9	2	2
2	9	2
2	1	1
1	1	1
1	9	1
9	1	1
9	9	1

Before Task		After Task	
response2	**WH05**	**WH05**	**Derived Variable WH05x**
2	1	1	1
2	2	2	2
2	9	.A	2
1	1	1	1
1	2	2	2
1	9	.M	.M

SAS-Code:

```
****  for wh05 * (wh01,wh02) = (2,2),(1,2),(9,2),(2,9) then response2=2 *;
IF response2  = 2 AND wh05 = 9 AND wh05q in (1,2) THEN wh05 = .A;
IF response2  = 2 AND wh05 = 9 AND wh05q in (3,4,5) THEN wh05 = .M;
IF response2  = 1 AND wh05 = 9 THEN wh05 = .M;

* change code;
wh05x = wh05;
IF wh05 = .A THEN wh05x = 2;
```

Questionnaire of Rhinits (RH)

****
RH

Meaning: **Individual has answered the RH Module or not.**

Derived Variable: rh
Derived from: rh01 to rh06

Coding: **1 = Individual has answered at least one question in rh**
                        2 = Individual has answered no question in rh
SAS-Code:

rh=**1**;
IF RH01 = **9** AND RH02 = **9** AND RH03 = **9** AND RH04_01 = **9** AND RH04_02 = **9**
AND RH04_03 = **9** AND RH04_04 = **9** AND RH04_05 = **9** AND RH04_06 = **9** AND RH04_07 = **9**
AND RH04_08 = **9** AND RH04_09 = **9** AND RH04_10 = **9** AND RH04_11 = **9** AND RH04_12 = **9**
AND RH05 = **9** AND RH06 = **9** THEN rh=**2**;

****
RH02x

Meaning: **In the past 12 months, has your child had a problem with sneezing**
                        or a runny or blocked nose, when he/she DID NOT
                        have a cold or the 'flu?

Derived Variable: rh02x
Derived from: rh01:   Has your child ever had a problem with sneezing or a
                                 Runny or blocked nose, when he/she DID NOT have a
                                 Cold or the 'flu?
                        rh02:   In the past 12 months, has your child had a problem with
                                 sneezing or a runny or blocked nose, when he/she
                                 DID NOT have a cold or the 'flu?
help variable: response: rh01 = 2 then response=2, any other case response=1
Coding: rh01:   <u>before Task</u>: 1=Yes, 2=No, 9=any other response
                                 <u>after Task</u>: 1=Yes, 2=No, .M=missing
                        rh02:   <u>before Task</u>: 1=Yes, 2=No, 9=any other response
                                 <u>after Task</u>: 1=Yes, 2=No, .A= not applicable, .M=missing
                        rh02x: **1=Yes, 2=No, .M=missing**

Coding of response	
RH01	**response**
2	2
1	1
9	1

Event-table:

Before Task		After Task	
response	**RH02**	**RH02**	**Derived Variable RH02x**
2	1	1	1
2	2	2	2
2	9	.A	2
1	1	1	1
1	2	2	2
1	9	.M	.M

SAS-Code:

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```
****  for rh01 * rh01 = 2 then response=2 ****;
* Save original variable only for the help variable "response" (global Flag);
response = 1;
rh01org = rh01;
IF rh01 = 9 THEN rh01 = .M;


IF rh01org = 2 THEN response = 2;


****  for rh02 * rh01 = 2 then response=2 ****;
rh02org = rh02;
IF response = 2 AND rh02 in (9,.M) and rh02q in (1,2) THEN rh02 = .A;
IF response = 2 AND rh02 in (9,.M) and rh02q in (3,4,5) THEN rh02 = .M;
IF response = 1 AND rh02 in (9,.M) THEN rh02 = .M;


* change code;
rh02x = rh02;
IF rh02 = .A THEN rh02x = 2;
```

****

RH03x

Meaning:	**In the past 12 months, has this nose problem been accompanied by itchy-water eyes?**

Derived Variable:	rh03x	
Derived from:	rh01:	Has your child ever had a problem with sneezing or a Runny or blocked nose, when he/she DID NOT have a Cold or the 'flu?
	rh02:	In the past 12 months, has your child had a problem with sneezing or a runny or blocked nose, when he/she DID NOT have a cold or the 'flu?
	rh03:	In the past 12 months, has this nose problem been accompanied by itchy-water eyes?
help variable:	response2:	(rh01,rh02) = (2,2),(1,2),(9,2),(2,9) then response2=2, any other case response2=1
Coding:	rh01:	<u>before Task</u>: 1=Yes, 2=No, 9=any other response <u>after Task</u>: 1=Yes, 2=No, .M=missing
	rh02:	<u>before Task</u>: 1=Yes, 2=No, 9=any other response <u>after Task</u>: 1=Yes, 2=No, .A= not applicable, .M=missing
	rh03:	<u>before Task</u>: 1=Yes, 2=No, 9=any other response <u>after Task</u>: 1=Yes, 2=No, .A=not applicable, .M=missing
	rh03x:	**1=Yes, 2=No, .M=missing**

Event-table:

Coding of response2		
RH01	**RH02**	**response2**
2	2	2
1	2	2
9	2	2
2	9	2
2	1	1
1	1	1
1	9	1
9	1	1
9	9	1

Before Task		After Task	
response2	**RH03**	**RH03**	**Derived Variable RH03x**
2	1	1	1
2	2	2	2
2	9	.A	2
1	1	1	1
1	2	2	2
1	9	.M	.M

**** for rh03 * (rh01,rh02) = (2,2),(1,2),(9,2),(2,9) (= rh02x=2) then response2=2 ****;
**** preparing step for derived variable rh03x ****;
response2 = **1**;
IF rh02x = **2** THEN response2 = **2**;

IF response2 = **2** AND rh03 in (**9**,**.M**) and rh03q in (**1**,**2**) THEN rh03 = **.A**;
IF response2 = **2** AND rh03 in (**9**,**.M**) and rh03q in (**3**,**4**,**5**) THEN rh03 = **.M**;
IF response2 = **1** AND rh03 in (**9**,**.M**) THEN rh03 = **.M**;

* change code;
rh03x = rh03;
IF rh03 = **.A** THEN rh03x = **2**;

```
*************************************************************************
```
RH04_01x

Meaning: **Did this nose problem occur in January?**

Derived Variable: rh04_01x

Derived from: rh01:   Has your child ever had a problem with sneezing or a
                                    Runny or blocked nose, when he/she DID NOT have a
                                    Cold or the 'flu?
                          rh02:   In the past 12 months, has your child had a problem with
                                    sneezing or a runny or blocked nose, when he/she
                                    DID NOT have a cold or the 'flu?
                          rh04_01: Did this nose problem occur in January?

help variable: response2: (rh01,rh02) = (2,2),(1,2),(9,2),(2,9) then response2=2,
                                    any other case response2=1

Coding: rh01:   <u>before Task</u>: 1=Yes, 2=No, 9=any other response
                                    <u>after Task</u>: 1=Yes, 2=No, .M=missing
                          rh02:   <u>before Task</u>: 1=Yes, 2=No, 9=any other response
                                    <u>after Task</u>: 1=Yes, 2=No, .A= not applicable, .M=missing
                          rh04_01: <u>before Task</u>: 1=Yes, 2=No, 9=any other response
                                     <u>after Task</u>: 1=Yes, 2=No, .A=not applicable, .M=missing
                          rh04_01x: 1=Yes, 2=No, .M=missing

Event-table:

Coding of response2		
RH01	**RH02**	**response2**
2	2	2
1	2	2
9	2	2
2	9	2
2	1	1
1	1	1
1	9	1
9	1	1
9	9	1

Before Task		After Task	
response2	RH04_01	RH04_01	Derived Variable RH04_01x
2	1	1	1
2	2	2	2
2	9	.A	2
1	1	1	1
1	2	2	2
1	9	.M	.M

SAS-Code:

```
****  for rh04_01 * (rh01,rh02) = (2,2),(1,2),(9,2),(2,9) then response2=2 ****;
IF response2 = 2 AND rh04_01 in (9,.M) and rh04_01q in (1,2) THEN rh04_01 = .A;
IF response2 = 2 AND rh04_01 in (9,.M) and rh04_01q in (3,4,5) THEN rh04_01 = .M;
IF response2 = 1 AND rh04_01 in (9,.M) THEN rh04_01 = .M;


* change code;
rh04_01x = rh04_01;
IF rh04_01 = .A THEN rh04_01x = 2;
```

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```
****************************************************************************
```
RH04_02x

Meaning:	**Did this nose problem occur in February?**

Derived Variable:	rh04_02x	
Derived from:	rh01:	Has your child ever had a problem with sneezing or a runny or blocked nose, when he/she DID NOT have a cold or the 'flu?
	rh02:	In the past 12 months, has your child had a problem with sneezing or a runny or blocked nose, when he/she DID NOT have a cold or the 'flu?
	rh04_02:	Did this nose problem occur in February?
help variable:	response2:	(rh01,rh02) = (2,2),(1,2),(9,2),(2,9) then response2=2, any other case response2=1
Coding:	rh01:	<u>before Task</u>: 1=Yes, 2=No, 9=any other response <u>after Task</u>: 1=Yes, 2=No, .M=missing
	rh02:	<u>before Task</u>: 1=Yes, 2=No, 9=any other response <u>after Task</u>: 1=Yes, 2=No, .A= not applicable, .M=missing
	rh04_02:	<u>before Task</u>: 1=Yes, 2=No, 9=any other response <u>after Task:</u> 1=Yes, 2=No, .A=not applicable, .M=missing
	rh04_02x:	**1=Yes, 2=No, .M=missing**

Event-table:

Coding of response2		
RH01	**RH02**	**response2**
2	2	2
1	2	2
9	2	2
2	9	2
2	1	1
1	1	1
1	9	1
9	1	1
9	9	1

Before Task		After Task	
Response2	**RH04_02**	**RH04_02**	**Derived Variable RH04_02x**
2	1	1	1
2	2	2	2
2	9	.A	2
1	1	1	1
1	2	2	2
1	9	.M	.M

SAS-Code:

```
****  for rh04_02 * (rh01,rh02) = (2,2),(1,2),(9,2),(2,9) then response2=2 ****;
IF response2 = 2 AND rh04_02 in (9,.M) and rh04_02q in (1,2) THEN rh04_02 = .A;
IF response2 = 2 AND rh04_02 in (9,.M) and rh04_02q in (3,4,5) THEN rh04_02 = .M;
IF response2 = 1 AND rh04_02 in (9,.M) THEN rh04_02 = .M;


* change code;
rh04_02x = rh04_02;
IF rh04_02 = .A THEN rh04_02x = 2;
```

For variables rh04_03 to rh04_12 this procedure is equal.

****

RH05x

Meaning:	**In the past 12 months, how much did this nose problem interfere with your child's daily activities?**

Derived Variable: rh05x

Derived from:

rh01: Has your child ever had a problem with sneezing or a Runny or blocked nose, when he/she DID NOT have a Cold or the 'flu?

rh02: In the past 12 months, has your child had a problem with sneezing or a runny or blocked nose, when he/she DID NOT have a cold or the 'flu?

rh05: In the past 12 months, how much did this nose problem interfere with your child's daily activities?

help variable: response2: (rh01,rh02) = (2,2),(1,2),(9,2),(2,9) then response2=2, any other case response2=1

Coding:

rh01: <u>before Task:</u> 1=Yes, 2=No, 9=any other response
<u>after Task:</u> 1=Yes, 2=No, .M=missing

rh02: <u>before Task:</u> 1=Yes, 2=No, 9=any other response
<u>after Task:</u> 1=Yes, 2=No, .A= not applicable, .M=missing

rh05: <u>before Task:</u> 1=No at all, 2=A little, 3=A moderate amount, 4=A lot, 9=any other response
<u>after Task:</u> 1=No at all, 2=A little, 3=A moderate amount, 4=A lot, .A=not applicable, .M=missing

rh05x: **1=Not at all, 2=A little, 3= A moderate amount, 4=A lot, .M=missing**

Event-table:

Coding of response2		
RH01	**RH02**	**response2**
2	2	2
1	2	2
9	2	2
2	9	2
2	1	1
1	1	1
1	9	1
9	1	1
9	9	1

Before Task		After Task	
response2	**RH05**	**RH05**	**Derived Variable RH05x**
2	1	1	1
2	2	2	2
2	3	3	3
2	4	4	4
2	9	.A	1
1	1	1	1
1	2	2	2
1	3	3	3
1	4	4	4
1	9	.M	.M

SAS-Code:
```
****  for rh05 * (rh01,rh02) = (2,2),(1,2),(9,2),(2,9) then response2=2 ****;
IF response2 = 2 AND rh05 = 9 and rh05q in (1,2) THEN rh05 = .A;
IF response2 = 2 AND rh05 = 9 and rh05q in (3,4,5) THEN rh05 = .M;
IF response2 = 1 AND rh05 = 9 THEN rh05 = .M;

* change code;
rh05x = rh05;
IF rh05 = .A THEN rh05x = 1;
```

Questionnaire of eczema (EC)

****

EC

Meaning:	**Individual has answered the EC Module or not.**
Derived Variable:	ec
Derived from:	ec01 to ec07
Coding:	**1 = Individual has answered at least one question in ec**
	2 = Individual has answerd no question in ec
SAS-Code:	

ec=**1**;
IF EC01 = **9** AND EC02 = **9** AND EC03 = **9** AND EC04 = **9** AND EC05 = **9** AND EC06 = **9** AND EC07
= **9** THEN ec=**2**;
run;

****

EC02x

Meaning:	**Has your child had this itchy rash at any time in the last 12 months?**	
Derived Variable:	ec02x	
Derived from:	ec01:	Has your child ever had an itchy rash which was coming and going and going for at least six months?
	ec02:	Has your child had this itchy rash at any time in the last 12 months?
help variable:	response:	ec01 = 2 then response=2, any other case response=1
Coding:	ec01:	<u>before Task</u>: 1=Yes, 2=No, 9=any other response
		<u>after Task</u>: 1=Yes, 2=No, .M=missing
	ec02:	<u>before Task</u>: 1=Yes, 2=No, 9=any other response
		<u>after Task</u>: 1=Yes, 2=No, .A= not applicable, .M=missing
	ec02x:	**1=Yes, 2=No, .M=missng**

Event-table:

Coding of response	
EC01	**response**
2	2
1	1
9	1

Before Task		After Task	
response	**EC02**	**EC02**	**Derived Variable EC02x**
2	1	1	1
2	2	2	2
2	9	.A	2
1	1	1	1
1	2	2	2
1	9	.M	.M

SAS-Code:

**** for ec02 * ec01 = 2 then response=2 ****;

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* Save original variable only for the help variable "response" (global Flag);
response = **1**;
ec01org = ec01;
IF ec01 = **9** THEN ec01 = **.M**;

IF ec01org = **2** THEN response = **2**;

**** for ec02 * ec01 = 2 then response=2 ****;
ec02org = ec02;
IF response = **2** AND ec02 = **9** and ec02q in (**1**,**2**) THEN ec02 = **.A**;
IF response = **2** AND ec02 = **9** and ec02q in (**3**,**4**,**5**) THEN ec02 = **.M**;
IF response = **1** AND ec02 = **9** THEN ec02 = **.M**;

 change code;
ec02x = ec02;
IF ec02 = **.A** THEN ec02x = **2**;

****

EC03x

Meaning:	**Has this itchy rash at any time affected any of the following places: folds of the elbows, behind the knees, in front of the ankles, under the buttocks, or around the neck, ears or eyes?**

Derived Variable:	ec03x	
Derived from:	ec01:	Has your child ever had an itchy rash which was coming and going and going for at least six months?
	ec02:	Has your child had this itchy rash at any time in the last 12 months?
	ec03:	Has this itchy rash at any time affected any of the following places: folds of the elbows, behind the knees, in front of the ankles, under the buttocks, or around the neck, ears or eyes?
help variable:	response2:	(ec01,ec02) = (2,2),(1,2),(9,2),(2,9) then response2=2, any other case response2=1
Coding:	ec01:	<u>before Task</u>: 1=Yes, 2=No, 9=any other response
		<u>after Task</u>: 1=Yes, 2=No, .M=missing
	ec02:	<u>before Task</u>: 1=Yes, 2=No, 9=any other response
		<u>after Task</u>: 1=Yes, 2=No, .A= not applicable, .M=missing
	ec03:	<u>before Task</u>: 1=Yes, 2=No, 9=any other response
		<u>after Task</u>: 1=Yes, 2=No, .A= not applicable, .M=missing
	ec03x:	**1=Yes, 2=No, .M=missing**

Event-table:

Coding of response2		
EC01	**EC02**	**response2**
2	2	2
1	2	2
9	2	2
2	9	2
2	1	1
1	9	1
1	1	1
9	1	1
9	9	1

Before Task		After Task	
response2	**EC03**	**EC03**	**Derived Variable EC03x**
2	1	1	1

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2	2	2	2
2	9	.A	2
1	1	1	1
1	2	2	2
1	9	.M	.M

SAS-Code:
```
****  for ec03 * (ec01,ec02) = (2,2),(1,2),(9,2),(2,9) than response2=2 ****;
****  preparing step for derived variable ec03x ****;
response2 = 1;
IF ec02x = 2 THEN response2 = 2;

IF response2 = 2 AND ec03 = 9 and ec03q in (1,2) THEN ec03 = .A;
IF response2 = 2 AND ec03 = 9 and ec03q in (3,4,5) THEN ec03 = .M;
IF response2 = 1 AND ec03 = 9 THEN ec03 = .M;

* change code;
ec03x = ec03;
IF ec03 = .A THEN ec03x = 2;
```

****

EC04x

Meaning:	At what age did this itchy rash first occur?

Derived Variable:	ec04x	
Derived from:	ec01:	Has your child ever had an itchy rash which was coming and going and going for at least six months?
	ec02:	Has your child had this itchy rash at any time in the last 12 months?
	ec04:	At what age did this itchy rash first occur?
help variable:	response2:	(ec01,ec02) = (2,2),(1,2),(9,2),(2,9) then response2=2, any other case response2=1
Coding:	ec01:	<u>before Task</u>: 1=Yes, 2=No, 9=any other response
		<u>after Task</u>: 1=Yes, 2=No, .M=missing
	ec02:	<u>before Task</u>: 1=Yes, 2=No, 9=any other response
		<u>after Task</u>: 1=Yes, 2=No, .A= not applicable, .M=missing
	ec04:	<u>before Task</u>: 1=Under 2 years, 2=Age 2-4 years, 3=Age 5 or more, 9= any other response
		<u>after Task</u>: 1=Under 2 years, 2=Age 2-4 years, 3=Age 5 or more, .M=missing
	ec04x:	**1=Under 2 years, 2=Age 2-4 years, 3=Age 5 or more, .A=not applicable, .M=missing**

Event-table:

Coding of response2		
EC01	**EC02**	**response2**
2	2	2
1	2	2
9	2	2
2	9	2
2	1	1
1	9	1
1	1	1
9	1	1
9	9	1

Before Task		After Task	
response2	EC04	EC04	Derived Variable EC04x
2	1	1	1
2	2	2	2
2	3	3	3
2	9	.A	.A
1	1	1	1
1	2	2	2
1	3	3	3
1	9	.M	.M

SAS-Code:

```
**** for ec04 ****;
IF response2 = 2 AND ec04 = 9 and ec04q in (1,2) THEN ec04 = .A;
IF response2 = 2 AND ec04 = 9 AND ec04q in (3,4,5) THEN ec04 = .M;
IF response2 = 1 AND ec04 = 9 THEN ec04 = .M;

* change code;
ec04x = ec04;
```

****
EC05x

Meaning:	**Has this rash cleared completely at any time during the last 12 months?**

Derived Variable:	ec05x	
Derived from:	ec01:	Has your child ever had an itchy rash which was coming and going and going for at least six months?
	ec02:	Has your child had this itchy rash at any time in the last 12 months?
	ec05:	Has this rash cleared completely at any time during the last 12 months?
help variable:	response2:	(ec01,ec02) = (2,2),(1,2),(9,2),(2,9) then response2=2, any other case response2=1
Coding:	ec01:	<u>before Task</u>: 1=Yes, 2=No, 9=any other response <u>after Task</u>: 1=Yes, 2=No, .M=missing
	ec02:	<u>before Task</u>: 1=Yes, 2=No, 9=any other response <u>after Task</u>: 1=Yes, 2=No, .A= not applicable, .M=any other response
	ec05:	<u>before Task</u>: 1=Yes, 2=No, 9=any other response <u>after Task</u>: 1=Yes, 2=No, .A= not applicable, .M=missing
	ec05x:	**1=Yes, 2=No, .M=missing**

Event-table:

Coding of response2		
EC01	EC02	response2
2	2	2
1	2	2
9	2	2
2	9	2
2	1	1
1	9	1
1	1	1
9	1	1
9	9	1

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Before Task		After Task	
response2	**EC05**	**EC05**	**Derived Variable EC05x**
2	1	1	1
2	2	2	2
2	9	.A	2
1	1	1	1
1	2	2	2
1	9	.M	.M

SAS-Code:

```
**** for ec05 ****;
IF response2 = 2 AND ec05 = 9 and ec05q in (1,2) THEN ec05 = .A;
IF response2 = 2 AND ec05 = 9 AND ec05q in (3,4,5) THEN ec05 = .M;
IF response2 = 1 AND ec05 = 9 THEN ec05 = .M;

* change code;
ec05x = ec05;
IF ec05 = .A THEN ec05x = 2;
```

****
EC06x

Meaning:		**In the last 12 months, how often, on average, has your child been kept awake at night by this itchy rash?**
Derived Variable:	ec06x	
Derived from:	ec02x:	Has your child had this itchy rash at any time in the last 12 months?
	ec06:	In the last 12 months, how often, on average, has your child been kept awake at night by this itchy rash?
Coding:	ec02x:	before Task: 1=Yes, 0=No, .M=missing
	ec06:	before Task: 1=Never in the last 12 months, 2=Less than one night per week, 3=One or more nights per week, .A=not applicable, .M= any other response
		after Task: 1=Never in the last 12 months, 2=Less than one night per week, 3=One or more nights per week, .M=missing
Coding:	ec06x:	**0 = No itchy rash in the past 12 months i.e. EC02x=0** **1= Itchy rash but never kept awake in the last 12 months** **2=Less than one night per week,** **3=One or more nights per week,** **.M=missing**

Event-table:

Coding of response2		
EC01	**EC02**	**response2**
2	2	2
1	2	2
9	2	2
2	9	2
2	1	1
1	9	1
1	1	1
9	1	1
9	9	1

Before Task		After Task
response2	**EC06**	**EC06**
2	1	1
2	2	2
2	3	3
2	9	.A
1	1	1
1	2	2
1	3	3
1	9	.M

Before Task		After Task
EC02x	**EC06**	**Derived Variable EC06x**
0	1	0
0	2,3	2,3
0	.A	0
1	1,2,3	1,2,3
1	.M	.M
.M	2,3	2,3
.M	1	.M
.M	.M	.M

SAS-Code:

```
**** for ec06x ****;

EC06x=0;
IF EC06=2 THEN EC06x=2;
IF EC06=3 THEN EC06x=3;
IF EC02x=1 AND EC06=1 THEN EC06x=1;
IF EC02x=1 AND EC06=.M THEN EC06x=.M;
IF EC02x=.M AND EC06 in (.M, 1) THEN EC06x=.M;
```

****

EC06x2

Meaning:	**In the last 12 months, how often, on average, has your child been kept awake at night by this itchy rash?**

Derived Variable:	ec06x2	
Derived from:	ec01:	Has your child ever had an itchy rash which was coming and going and going for at least six months?
	ec02:	Has your child had this itchy rash at any time in the last 12 months?

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	ec06:	In the last 12 months, how often, on average, has your child been kept awake at night by this itchy rash?
help variable:	response2:	(ec01,ec02) = (2,2),(1,2),(9,2),(2,9) then response2=2, any other case response2=1
Coding:	ec01:	<u>before Task</u>: 1=Yes, 2=No, 9=any other response
		<u>after Task</u>: 1=Yes, 2=No, .M=missing
	ec02:	<u>before Task</u>: 1=Yes, 2=No, 9=any other response
		<u>after Task</u>: 1=Yes, 2=No, .A= not applicable, .M=missing
	ec06:	<u>before Task</u>: 1=Never in the last 12 months, 2=Less than one night per week, 3=One or more nights per week, 9=any other response
		<u>after Task</u>: 1=Never in the last 12 months, 2=Less than one night per week, 3=One or more nights per week, .A=not applicable, .M= any other response
	ec06x2:	**1=Never in the last 12 months, 2=Less than one night per week, 3=One or more nights per week, .M=missing**

Event-table:

Coding of response2		
EC01	**EC02**	**response2**
2	2	2
1	2	2
9	2	2
2	9	2
2	1	1
1	9	1
1	1	1
9	1	1
9	9	1

Before Task		After Task	
response2	**EC06**	**EC06**	**Derived Variable EC06x2**
2	1	1	1
2	2	2	2
2	3	3	3
2	9	.A	1
1	1	1	1
1	2	2	2
1	3	3	3
1	9	.M	.M

SAS-Code:

```
**** for ec06 ****;
IF response2 = 2 AND ec06 = 9 and ec06q in (1,2) THEN ec06 = .A;
IF response2 = 2 AND ec06 = 9 AND ec06q in (3,4,5) THEN ec06 = .M;
IF response2 = 1 AND ec06 = 9 THEN ec06 = .M;

* change code;
ec06x = ec06;
IF ec06 = .A THEN ec06x = 1;
```

Additional respiratory questions – Cough & Phleg (CP)

****
CP

Meaning: **Individual has answered the CP Module or not.**

Derived Variable: cp
Derived from: cp01 to cp04

Coding: **1 = Individual has answered at least one question in cp**
                           2 = Individual has answered no question in cp

SAS-Code:

cp=**1**;
IF CP01 = **9** AND CP02 = **9** AND CP03 = **9** AND CP04 = **99** THEN cp=**2**;

****
CP03x

Meaning: **Does your child seem congested in the chest or cough up**
                          plegm (mucus) on most days (4 or more days a week)
                          for as much as 3 months of the year?

Derived Variable: cp03x
Derived from: cp01:   In the last 12 months, has your child usually seemed
                                   congested in the chest or coughed up plegm with colds?
                          cp02:   In the last 12 months, has your child usually seemed
                                   congested in the chest or coughed up plegm when
                                   he/she did not have a cold?
                                   IF YOU HAVE ANSWERED "NO" TO BOTH OF THESE
                                   QUESTIONS PLEASE SKIP QUESTIONS 3&4 (i.e.CP03&
                                   CP04)
                          cp03:   Does your child seem congested in the chest or cough up
                                   plegm (mucus) on most days (4 or more days a week)
                                   for as much as 3 months of the year?
help variable: response: if cp01 = 2 and cp02 = 2 then response=2,
                                   any other case response=1
Coding: cp01:   <u>before Task</u>: 1=Yes, 2=No, 9=any other response
                                   <u>after Task</u>: 1=Yes, 2=No, .M=missing
                          cp02:   <u>before Task</u>: 1=Yes, 2=No, 9=any other response
                                   <u>after Task</u>: 1=Yes, 2=No, .M=missing
                          cp03:   <u>before Task</u>: 1=Yes, 2=No, 9=any other response
                                   <u>after Task:</u> 1=Yes, 2=No, .A = not applicable,
                                   .M=missing
                          cp03x: **1=Yes, 2=No, .M=missing**

Event-tables:

Coding of response		
CP01	**CP02**	**response**
2	2	2
2	1	1
1	2	1
2	9	1
9	2	1
1	1	1
1	9	1
9	1	1
9	9	1

Before Task		After Task	
response	**CP03**	**CP03**	**Derived Variable CP03x**
2	1	1	1
2	2	2	2
2	9	.A	2
1	1	1	1
1	2	2	2
1	9	.M	.M

SAS-Code:

```
****  for cp01  * cp01 = 2 and cp02 = 2 then response=2  ****;
* Save original variable only for the help variable "response" (globales Flag) ;

response = 1;
cp01org = cp01;
cp02org = cp02;

IF cp01 = 9  THEN cp01 = .M;
IF cp02 = 9  THEN cp02 = .M;

IF cp01org = 2  AND cp02org = 2
  THEN response = 2;

**** for cp03 * cp01 = 2 and cp02 = 2 then response=2  ****;
**** preparing step for derived variable cp03x ****;
cp03org = cp03;
IF response = 2 AND cp03 = 9 AND cp03q in (1,2) THEN cp03 = .A;
IF response = 2 AND cp03 = 9 AND cp03q in (3,4,5) THEN cp03 = .M;
IF response = 1 AND cp03 = 9  THEN cp03 = .M;

* change code;
cp03x = cp03;
IF cp03 = .A THEN cp03x = 2;
```

****

CP04x

Meaning: **For how many years has this happened (congestion in the chest or coughing up plegm)?**

Derived Variable: cp04

Derived from:
cp01: In the last 12 months, has your child usually seemed congested in the chest or coughed up plegm with colds?

cp02: In the last 12 months, has your child usually seemed congested in the chest or coughed up plegm when he/she did not have a cold?
IF YOU HAVE ANSWERED "NO" TO BOTH OF THES QUESTIONS PLEASE SKIP QUESTIONS 3&4 (i.e.CP03& CP04)

cp03: Does your child seem congested in the chest or cough up plegm (mucus) on most days (4 or more days a week) for as much as 3 months of the year?

cp04: For how many years has this happened?

Coding:
cp01: <u>before Task</u>: 1=Yes, 2=No, 9=any other response
<u>after Task</u>: 1=Yes, 2=No, .M=missing

cp02: <u>before Task</u>: 1=Yes, 2=No, 9=any other response
<u>after Task</u>: 1=Yes, 2=No, .M=missing

cp03: <u>before Task</u>: 1=Yes, 2=No, 9=any other response
<u>after Task</u>: 1=Yes, 2=No, .A = not applicable, .M=missing

cp04: <u>before Task</u>: nn, 99= any other response
<u>after Task</u>: nn, .A=not applicable, .M=missing

cp04x: **nn, 0=no years, .M=missing**

Event-table:

Coding of response		
CP01	**CP02**	**response**
2	2	2
2	1	1
1	2	1
2	9	1
9	2	1
1	1	1
1	9	1
9	1	1
9	9	1

Before Task			After Task	
response	CP03	CP04	CP04	Derived Variable CP04x
1	1	99	.M	.M
1	2	99	.A	0
1	9	99	.M	.M
2	9	99	.A	0
2	1	99	.M	.M
2	2	99	.A	0
1,2	1,2,9	nn	nn	nn

SAS-Code:

```
CP04X=CP04;

IF CP03 IN (1,.M) AND CP04 = 99 THEN DO;
        CP04=.M; CP04X=.M;
END;

IF response=1 AND CP03 = .M AND CP04 = 99 THEN DO;
        CP04=.M; CP04X=.M;
END;

IF response=1 AND CP03 = 2 AND CP04 = 99 AND CP04q in (1,2) THEN DO;
        CP04=.A; CP04X=0;
END;

IF response=1 AND CP03 = 2 AND CP04 = 99 AND CP04q in (3,4,5) THEN DO;
        CP04=.M; CP04X=.M;
END;

IF response = 2 AND CP03 IN (2,.A) AND CP04 = 99 AND CP04q in (1,2) THEN DO;
        CP04=.A; CP04X=0;
END;

IF response = 2 AND CP03 IN (2,.A) AND CP04 = 99 AND CP04q in (3,4,5) THEN DO;
        CP04=.M; CP04X=.M;
END;
```

Wheeze and Breathlessness (WB)

****
WB

Meaning:	**Individual has answered the WB Module or not.**

Derived Variable: wb
Derived from: wb01 to wb07_03

Coding: **1 = Individual has answered at least one question in wb**
2 = Individual has answered no question in wb

SAS-Code:

wb=**1**;
IF WB01 = **9** AND WB02 = **9** AND WB03 = **9** AND WB04 = **9** AND WB05 = **9** AND
WB06 = **9** AND WB07_01 = **9** AND WB07_02 = **9** AND WB07_03 = **9** AND WB07_04 = **9** AND
WB07_05 = **9** AND WB07_06 = **9** AND WB07_07 = **9** AND WB07_08 = **9**
AND WB07_09 = **9** AND WB07_10 = **9** AND WB07_11 = **9** AND WB07_12 = **9** AND WB07_13 = **9**
THEN wb=**2**;

Asthma management (AM)

****

AM

Meaning: **Individual has answered the AM Module or not.**

Derived Variable: am
Derived from: am01 to am09

Coding: **1 = Individual has answered at least one question in am**
                           2 = Individual has answered no question in am

SAS-Code:

am=**1**;
IF AM01_01 = **9** AND AM01W1a = "9" AND AM01W1b = **9** AND AM01W2a ="9" AND AM01W2b =
9 AND AM01W3a = "9" AND AM01W3b = **9** AND AM01W4a = "9" AND AM01W4b = **9** AND
AM01T1a = "9" AND AM01T1b = **9** AND AM01T2a = "9" AND AM01T2b = **9** AND AM01T3a = "9"
AND AM01T3b = **9** AND AM02_01 = **9** AND AM02W1a = "9" AND AM02W2a = "9" AND
AM02W3a = "9" AND AM02W4a = "9"
AND AM02T1a = "9" AND AM02T2a = "9" AND AM02T3a = "9" AND AM03 = **9** AND AM04 = **9**
AND AM05_01 = **9** AND AM05_02 = **9** AND AM05_03 = **9** AND AM05_04 = **9** AND AM05_05 = **9**
AND AM05_06 = **9** AND AM05_07 = **9** AND AM05_08 = **9** AND AM05_09 = **9** AND AM06 = **9** AND
AM07_01 = **9** AND AM07_02 = **9** AND AM07_03 = **9** AND AM07_04 = **9** AND AM07_05 = **9** AND
AM07_06 = **9** AND AM07_07 = **9** AND AM07_08 = **9** AND AM08 = **9** AND AM09 = **9** THEN am=**2**;

Eczema management (EM)

****

EM

Meaning:	**Individual has answered the EM Module or not.**
Derived Variable:	em
Derived from:	em01 to em04
Coding:	**1 = Individual has answered at least one question in em**
	2 = Individual has answered no question in em

SAS-Code:

```
em=1;
IF EM01_01 = 9 AND EM01W1a = "9" AND EM01W1b = 9 AND EM01W2a = "9" AND EM01W2b =
9 AND EM01W3a = "9" AND EM01W3b = 9 AND EM01W4a = "9" AND EM01W4b = 9 AND
EM01T1a = "9" AND EM01T1b = 9 AND EM01T2a = "9" AND EM01T2b = 9 AND EM01T3a = "9"
AND EM01T3b = 9 AND EM02_01 = 9 AND EM02_02 = 9 AND EM02_03 = 9 AND EM02_04 = 9
AND EM02_05 = 9 AND EM02_06 = 9 AND EM02_07 = 9 AND EM02_08 = 9 AND EM03 = 9 AND
EM04 = 9 THEN em=2;
```

Rhinitis management (RM)

****

RM

Meaning: **Individual has answered the RM Module or not.**

Derived Variable: rm
Derived from: rm01 to em05

Coding: **1 = Individual has answered at least one question in rm**
                           2 = Individual has answered no question in rm

SAS-Code:

```
rm=1;
IF RM01_01 = 9 AND RM01W1a = "9" AND RM01W1b = 9 AND RM01W2a = "9" AND
RM01W2b = 9
AND RM01W3a = "9" AND RM01W3b = 9 AND RM01W4a = "9" AND RM01W4b = 9
AND RM01T1a = "9"
AND RM01T1b = 9 AND RM01T2a = "9" AND RM01T2b = 9 AND RM01T3a = "9"
AND RM01T3b = 9
AND RM02_01 = 9 AND RM02_02 = 9 AND RM02_03 = 9 AND RM02_04 = 9 AND
RM02_05 = 9
AND RM02_06 = 9 AND RM03 = 9 AND RM04 = 9 AND RM05 = 9 THEN rm=2;
run;
```

Risk factor questionnaire (RF)

```
*******************************************************************************
                                    RF
```

Meaning: **Individual has answered the RF Module or not.**

Derived Variable: rf
Derived from: rf01 to rf35

Coding: **1 = Individual has answered at least one question in rf**
                          2 = Individual has answered no question in rf

SAS-Code:

rf=**1**;
IF RF01 = **9** AND RF02 = **9** AND RF03 = **9** AND RF04_01 = **9** AND RF04_02 = **9** AND RF04_03 = **9**
AND RF05_01 = **9** AND RF05_02 = **99** AND RF05_03 = **99** AND RF06_01 = **9** AND RF06_02 = **99**
AND RF06_03 = **99** AND RF07_01 = **9** AND RF07_02 = **999** AND RF08_01 = **9** AND RF08_02 = **999**
AND RF09_01 = **9** AND RF09_02 = **9** AND RF09_03 = **9** AND RF10_01 = **9** AND RF10_02 = **9** AND
RF10_03 = **9** AND RF11_01 = **9** AND RF11_1a = **999** AND RF11_1b = **999** AND RF11_1c = **999** AND
RF11_02 = **9** AND RF11_2a = **999** AND RF11_2b = **999** AND RF11_2c = **999** AND RF11_03 = **9** AND
RF11_3a = **999** AND RF11_3b = **999** AND RF11_3c = **999** AND RF12_01 = **9** AND RF12_1a = **999**
AND RF12_02 = **9** AND RF12_2a = **999** AND RF12_03 = **9** AND RF12_3a = **999** AND RF12_04 = **9**
AND RF12_4a = **999** AND RF13_1a = **9** AND RF13_1b = **9** AND RF14_1a = **9** AND RF14_1b = **9**
AND RF14_2a = **9** AND RF14_2b = **9** AND RF14_3a = **9** AND RF14_3b = **9** AND RF14_4a = **9** AND
RF14_4b = **9** AND RF14_5a = **9** AND RF14_5b = **9** AND RF15_1a = **9** AND RF15_1b = **9** AND
RF15_2a = **9** AND RF15_2b = **9** AND RF15_3a = **9** AND RF15_3b = **9** AND RF15_4a = **9**
AND RF15_4b = **9** AND RF16_1a = **9** AND RF16_1b = **9** AND RF16_1c = **9** AND RF17_01 = **9** AND
RF17_02 = **9** AND RF18_1a = **9** AND RF18_1b = **9** AND RF18_2a = **9** AND RF18_2b = **9** AND
RF18_3a = **9** AND RF18_3b = **9** AND RF18_4a = **9** AND RF18_4b = **9** AND RF19_1a = **9** AND
RF19_1b = **9** AND RF20_1a = **9** AND RF20_1b = **9** AND RF20_2a = **9** AND RF20_2b = **9**
AND RF20_3a = **9** AND RF20_3b = **9** AND RF20_4a = **9** AND RF20_4b = **9** AND RF20_5a = **9** AND
RF20_5b = **9** AND RF20_6a = **9** AND RF20_6b = **9** AND RF21_1a = **9** AND RF21_1b = **9** AND
RF22_1a = **9** AND RF22_1b = **9** AND RF23_1a = **9** AND RF23_1b = **9** AND RF24_1a = **9** AND
RF24_1b = **9** AND RF24_2a = **9** AND RF24_2b = **9** AND RF24_3a = **9** AND RF24_3b = **9**
AND RF25_1a = **9** AND RF25_1b = **9** AND RF25_2a = **9** AND RF25_2b = **9** AND RF25_3a = **9** AND
RF25_3b = **9** AND RF25_4a = **9** AND RF25_4b = **9** AND RF26_1a = **9** AND RF26_1b = **9** AND
RF26_2a = **9** AND RF26_2b = **9** AND RF26_3a = **9** AND RF26_3b = **9** AND RF26_4a = **9** AND
RF26_4b = **9** AND RF26_5a = **9** AND RF26_5b = **9** AND RF27_1a = **9** AND RF27_1b = **9**
AND RF27_2a = **9** AND RF27_2b = **9** AND RF27_3a = **9** AND RF27_3b = **9** AND RF27_4a = **9** AND
RF27_4b = **9** AND RF28_1a = **9** AND RF28_1b = **999** AND RF28_2a = **9** AND RF28_2b = **999** AND
RF28_3a = **9** AND RF28_3b = **999** AND RF28_4a = **9** AND RF28_4b = **999** AND RF28_5a = **9** AND
RF28_5b = **999** AND RF28_6a = **9** AND RF28_6b = **999** AND RF28_6c = "**9**" AND RF29_1a = **9**
AND RF29_1b = **9** AND RF30 = "**9**" AND RF31 = "**9**" AND RF32 = **9** AND RF33_01 = **9** AND
RF33_02 = **9** AND RF33_03 = **9** AND RF33_04 = **9** AND RF33_05 = **9** AND RF33_06 = **9** AND
RF33_07 = **9** AND RF33_08 = **9** AND RF34_01 = **9** AND RF34_02 = **9** AND RF34_03 = **9** AND RF35
= "**99999999**"
THEN rf=**2**;

```
**************************************************************************
```
RF04_02x

Meaning:	**For how long was your child breast fed?**

Derived Variable:	rf04_02x	
Derived from:	rf04_01:	Was your child ever breast fed?
	rf04_02:	If yes, for how long?
Coding:	rf04_01:	1=Yes, 2=No, 9=any other response
	rf04_02:	before Task: 1=less than 6 months, 2=6-12 months,
		3=more than one year, .M=many other response
		after Task: 1=less than 6 months, 2=6-12 months,
		3=more than one year,
		.A=not applicable, .M=missing
	rf04_02x:	**0=no months, 1=less than 6 months, 2=6-12 months,**
		3=more than one year, .M=missing

Event-table:

Before Task		After Task	
RF04_01	**RF04_02**	**RF04_02**	**Derived Variable RF04_02x**
1	1	1	1
1	2	2	2
1	3	3	3
1	9	.M	.M
2	1	1	1
2	2	2	2
2	3	3	3
2	9	.A	0
9	1	1	1
9	2	2	2
9	3	3	3
9	9	.M	.M

```
**************************************************************************
```
RF04_03x

Meaning:	**For how long was your child breast fed without adding other foods or juices?**

Derived Variable:	rf04_03x	
Derived from:	rf04_01:	Was your child ever breast fed?
	rf04_03:	If yes, for how long was your child breast fed without adding other foods or juices?
Coding:	rf04_01:	1=Yes, 2=No, 9=any other response
	rf04_03:	before Task: 1=less than 2 months, 2=2-4 months,
		3=5-6 months, 4=more than as 6 months,
		.M=many other response
		after Task: 1=less than 2 months, 2=2-4 months,
		3=5-6 months, 4=more than as 6 months,
		.A=not applicable, .M=missing
	rf04_03x:	**0=no months, 1=less than 2 months, 2=2-4 months,**
		3=5-6 months, 4=more than as 6 months,
		.M=missing

Event-table:

Before Task		After Task	
RF04_01	**RF04_03**	**RF04_03**	**Derived Variable RF04_03x**
1	1	1	1
1	2	2	2
1	3	3	3
1	4	4	4
1	9	.M	.M
2	1	1	1
2	2	2	2
2	3	3	3
2	4	4	4
2	9	.A	0
9	1	1	1
9	2	2	2
9	3	3	3
9	4	4	4
9	9	.M	.M

SAS-Code:

```
IF rf04_01 = 1 THEN DO;
   IF rf04_02 = 9 THEN rf04_02 = .M;
   IF rf04_03 = 9 THEN rf04_03 = .M;
END;

IF rf04_01 = 2 THEN DO;
   IF rf04_02 = 9 AND rf04_02q in (1,2) THEN rf04_02 = .A;
   IF rf04_02 = 9 AND rf04_02q in (3,4,5) THEN rf04_02 = .M;
   IF rf04_03 = 9 AND rf04_03q in (1,2) THEN rf04_03 = .A;
   IF rf04_03 = 9 AND rf04_03q in (3,4,5) THEN rf04_03 = .M;
END;

IF rf04_01 = 9 THEN DO;
   IF rf04_02 = 9 THEN rf04_02 = .M;
   IF rf04_03 = 9 THEN rf04_03 = .M;
END;

* change code;
IF rf04_01 = 2 AND rf04_02 = .A THEN
   rf04_02x = 0;
ELSE
   rf04_02x = rf04_02;   * keep the value;
END;

IF rf04_01 = 2 AND rf04_03 = .A THEN
   rf04_03x = 0;
ELSE
   rf04_03x = rf04_03;   * keep the value;
END;
```

****
RF05_02x

Meaning: **How many older brothers does your child have?**

Derived Variable: rf05_02x
Derived from: rf05_01:   Does your child have any older brothers or sisters?
                             rf05_02:   If yes, how many older brothers?

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Coding:	rf05_01:	1=Yes, 2=No, 9=any other response
	rf05_02:	before Task: n= number of older brothers,
		.M=any other response
		after Task: n= number of older brothers,
		.A=not applicable, .M=missing
	rf05_02x:	**0=no older brothers, n=number of older brothers,**
		.M=missing

Event-table:

Before Task		After Task	
RF05_01	**RF05_02**	**RF05_02**	**Derived Variable RF05_02x**
1	99	.M	.M
1	N	n	n
2	99	.A	0
2	N	n	n
9	99	.M	.M
9	N	n	n

```
*************************************************************************
```

RF05_03x

Meaning:		**How many older sisters does your child have?**
Derived Variable:	rf05_03x	
Derived from:	rf05_01:	Does your child have any older brothers or sisters?
	rf05_03:	If yes, how many older sisters?
Coding :	rf05_01:	1=Yes, 2=No, 9=any other response
	rf05_03:	before Task: n= number of older sisters,
		.M=any other response
		after Task: n= number of older sisters,
		.A=not applicable, .M=missing
	rf05_03x:	**0=no older sisters, n=number of older sisters,**
		.M=missing

Event-table:

Before Task		After Task	
RF05_01	**RF05_03**	**RF05_03**	**Derived Variable RF05_03x**
1	99	.M	.M
1	n	n	n
2	99	.A	0
2	n	n	n
9	99	.M	.M
9	n	n	n

SAS-Code:

```
IF rf05_01 = 1 THEN DO;
   IF rf05_02 = 99 THEN rf05_02 = .M;
   IF rf05_03 = 99 THEN rf05_03 = .M;
END;

IF rf05_01 = 2 THEN DO;
   IF rf05_02 = 99 and rf05_02q in (1,2) THEN rf05_02 = .A;
   IF rf05_02 = 99 and rf05_02q in (3,4,5) THEN rf05_02 = .M;
   IF rf05_03 = 99 and rf05_03q in (1,2) THEN rf05_03 = .A;
   IF rf05_03 = 99 and rf05_03q in (3,4,5) THEN rf05_03 = .M;
```

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END;

```
IF rf05_01 = 9 THEN DO;
   IF rf05_02 = 99 THEN rf05_02 = .M;
   IF rf05_03 = 99 THEN rf05_03 = .M;
END;

* change code;
IF rf05_01 = 2 AND rf05_02 = .A THEN
   rf05_02x = 0;
ELSE
   rf05_02x = rf05_02; * keep the value;
END;

IF rf05_01 = 2 AND rf05_03 = .A THEN
   rf05_03x = 0;
ELSE
   rf05_03x = rf05_03; * keep the value;
END;
```

****

RF06_02x

Meaning:	**How many younger brothers does your child have?**

Derived Variable:	rf06_02x	
Derived from:	rf06_01:	Does your child have any younger brothers or sisters?
	rf06_02:	If yes, how many younger brothers?
Coding:	rf06_01:	1=Yes, 2=No, 9=any other response
	rf06_02:	<u>before Task</u>: n=number of younger brothers, .A=not applicable, .M=any other response
		<u>after Task</u>: n=number of younger brothers, .M=missing
	rf06_02x:	**0=no younger brothers, n=number of younger brothers, .M=missing**

Event-table:

Before Task		After Task	
RF06_01	**RF06_02**	**RF06_02**	**Derived Variable RF06_02x**
1	99	.M	.M
1	n	n	n
2	99	.A	0
2	n	n	n
9	99	.M	.M
9	n	n	n

****
RF06_03x

Meaning:		**How many younger sisters does your child have?**
Derived Variable:	rf06_03x	
Derived from:	rf06_01:	Does your child have any younger brothers or sisters?
	rf06_03:	If yes, how many younger sisters?
Coding:	rf06_01:	1=Yes, 2=No, 9=any other response
	rf06_03:	<u>before Task:</u> n number of younger sisters,
		.M=any other response
		<u>after Task:</u> n number of younger sisters,
		.A=not applicable, .M=missing
	rf06_03x:	**0=no younger sisters, n=number of younger sisters,**
		.M=missing

Event-table:

Before Task		After Task	
RF06_01	**RF06_03**	**RF06_03**	**Derived Variable RF06_03x**
1	99	.M	.M
1	n	N	n
2	99	.A	0
2	n	N	n
9	99	.M	.M
9	n	N	n

SAS-Code:

```
IF rf06_01 = 1 THEN DO;
   IF rf06_02 = 99 THEN rf06_02 = .M;
   IF rf06_03 = 99 THEN rf06_03 = .M;
END;

IF rf06_01 = 2 THEN DO;
   IF rf06_02 = 99 and rf06_02q in (1,2) THEN rf06_02 = .A;
   IF rf06_02 = 99 and rf06_02q in (3,4,5) THEN rf06_02 = .M;
   IF rf06_03 = 99 and rf06_03q in (3,4,5) THEN rf06_03 = .M;
   IF rf06_03 = 99 and rf06_03q in (1,2) THEN rf06_03 = .A;
 END;

IF rf06_01 = 9 THEN DO;
   IF rf06_02 = 99 THEN rf06_02 = .M;
   IF rf06_03 = 99 THEN rf06_03 = .M;
END;

*  change code;
IF rf06_01 = 2 AND rf06_02 = .A THEN
   rf06_02x = 0;
ELSE
   rf06_02x = rf06_02; * keep the value;
END;

IF rf06_01 = 2 AND rf06_03 = .A THEN
   rf06_03x = 0;
ELSE
   rf06_03x = rf06_03; * keep the value;
END;
```

****

RF05_04x

Meaning: **Number of older siblings (the variable is set to missing, if one of the variables rf05_02x or rf05_03x is missing)**

Derived Variable: rf05_04x
Derived from: rf05_02x, rf05_03x: number of older siblings
Coding: **rf05_04x:**   **0=no older siblings, n=number of older siblings, .M=missing**

SAS-Code:

* Number of older siblings;

IF rf05_02x NE **.M** AND rf05_03x ne **.M** THEN rf05_04x = rf05_02x + rf05_03x;
IF rf05_02x EQ **.M** OR rf05_03x EQ **.M** THEN rf05_04x = **.M**;

****

RF05_04xx

Meaning: **Number of indicated older siblings (the number is calculated even if one of the variables rf05_02x or rf05_03x is missing)**

Derived Variable: rf05_04xx
Derived from: rf05_02x, rf05_03x: number of older siblings
Coding: **rf05_04xx:**   **0=no older siblings, n=number of older siblings, .M=missing**

SAS-Code:

* Number of older siblings;

rf05_04xx = 0;
IF rf05_02x NE .M THEN rf05_04xx = rf05_02x;
IF rf05_03x NE .M THEN rf05_04xx = rf05_04xx + rf05_03x;
IF rf05_02x EQ .M AND rf05_03x EQ .M THEN rf05_04xx = .M;

****

RF06_04x

Meaning: **Number of younger siblings (the variable is set to missing, if one of the variables rf06_02x or rf06_03x is missing)**

Derived Variable: rf06_04x
Derived from: rf06_02x, rf06_03x: number of younger siblings
Coding: **rf06_04x:**   **0=no younger siblings, n=number of younger siblings, .M=missing**

SAS-Code:

* Number of younger siblings;
IF rf06_02x NE **.M** AND rf06_03x ne **.M** THEN rf06_04x = rf06_02x + rf06_03x;
IF rf06_02x EQ **.M** OR rf06_03x EQ **.M** THEN rf06_04x = **.M**;

```
****************************************************************************
```
RF06_04xx

Meaning:	**Number of younger siblings (the number is calculated even if one of the variables rf06_02x or rf06_03x is missing)**

Derived Variable: rf06_04xx
Derived from: rf06_02x, rf06_03x: number of younger siblings
Coding: **rf06_04xx: 0=no younger siblings, n=number of younger siblings, .M=missing**

SAS-Code:

```
* Number of younger siblings;
rf06_04xx = 0;
IF rf06_02x NE .M THEN rf06_04xx = rf06_02x;
IF rf06_03x NE .M THEN rf06_04xx = rf06_04xx + rf06_03x;
IF rf06_02x EQ .M AND rf06_03x EQ .M THEN rf06_04xx = .M;
```

```
****************************************************************************
```
RF06_05x

Meaning:	**Number of all siblings (the variable is set to missing, if one of the variables rf05_04x or rf06_04x is missing)**

Derived Variable: rf06_05x
Derived from: rf05_04x, rf06_04x: number of all siblings
Coding: **rf06_05x: 0=no siblings, n=number of siblings, .M=missing**

SAS-Code:

```
* Number of all siblings;

IF rf05_04x NE .M AND rf06_04x NE .M THEN rf06_05x = rf05_04x + rf06_04x;
IF rf05_04x EQ .M OR rf06_04x EQ .M THEN rf06_05x = .M;
```

```
****************************************************************************
```
RF06_05xx

Meaning:	**Number of all siblings (the number is calculated even if one of the variables rf05_04x or rf06_04x is missing)**

Derived Variable: rf06_05xx
Derived from: rf05_04x, rf06_04x: number of all siblings
Coding: **rf06_05xx: 0=no siblings, n=number of siblings, .M=missing**

SAS-Code:

```
* Number of all siblings;

rf06_05xx = 0;
IF rf05_04x NE .M THEN rf06_05xx = rf05_04x;
IF rf06_04x NE .M THEN rf06_05xx = rf06_05xx + rf06_04x;
IF rf05_04x EQ .M AND rf06_04x EQ .M THEN rf06_05xx = .M;
```

****

RF07_02

Coding after filter question:

Filter question:	rf07_01:	Did your child ever go to a child care facility or nurse school?
Following question:	rf07_02:	If yes, from what age?
Coding before task:	rf07_01: rf07_02:	1=Yes, 2=No, 9=any other response n=number of months, 999 = any other response
Coding after task:	rf07_01: **rf07_02:**	1=Yes, 2=No, 9=any other response **n=number of months, .A=not applicable, .M=missing**

Event-table:

	Before Task	After Task
RF07_01	**RF07_02**	**RF07_02**
1	999	.M
1	n	N
2	999	.A
2	n	N
9	999	.M
9	n	n

SAS-Code:

IF rf07_01 = **1** AND rf07_02 = **999** THEN
  rf07_02 = **.M**;

IF rf07_01 = **2** AND rf07_02 = **999** and rf07_02q in (**1**,**2**) THEN
  rf07_02 = **.A**;
IF rf07_01 = **2** AND rf07_02 = **999** and rf07_02q in (**3**,**4**,**5**) THEN
  rf07_02 = **.M**;

IF rf07_01 = **9** AND rf07_02 = **999** THEN
  rf07_02 = **.M**;

****

RF07_02x

Coding after filter question:

Following question:	rf07_02:	If yes, from what age?
Coding before task:	rf07_02:	n=number of months, .A = not applicable, .M=missing
Coding after task:	**rf07_02x:**	**n=number of Years, .A=not applicable, .M=missing**

Event-table:

Before Task	After Task
RF07_02	**RF07_02x**
.M	.M
.A	.A
0-11	0
12-23	1
24-35	2
36-47	3
48-59	4
…	…

SAS-Code:

```
IF RF07_02 ne .M AND RF07_02 ne .A  THEN
  RF07_02x= INT (RF07_02 / 12);
IF RF07_02 = .M THEN RF07_02x = .M;
IF RF07_02 = .A THEN RF07_02x = .A;
```

****

RF08_02

Coding after filter question:

Filter question:	rf08_01:	Did your child ever go to a kindergarten?
Following question:	rf08_02:	If yes, from what age?
Coding before task:	rf08_01:	1=Yes, 2=No, 9=any other response
	rf08_02:	n=number of months, 999 = any other response
Coding after task:	rf08_01:	1=Yes, 2=No, 9=any other response
	rf08_02:	**n=number of months, .A=not applicable, .M=missing**

Event-table:

	Before Task	After Task
RF08_01	**RF08_02**	**RF08_02**
1	999	.M
1	n	n
2	999	.A
2	n	n
9	999	.M
9	n	n

SAS-Code:

IF rf08_01 = **1** AND rf08_02 = **999** THEN
  rf08_02 = **.M**;

IF rf08_01 = **2** AND rf08_02 = **999** AND rf08_02q in (**1**,**2**) THEN
  rf08_02 = **.A**;
IF rf08_01 = **2** AND rf08_02 = **999** AND rf08_02q in (**3**,**4**,**5**) THEN
  rf08_02 = **.M**;

IF rf08_01 = **9** AND rf08_02 = **999** THEN
  rf08_02 = **.M**;

****

<div align="center">

RF08_02x

</div>

Coding after filter question:

Following question: RF08_02:   If yes, from what age?

Coding before task: RF08_02:   n=number of months, .A = not applicable, .M=missing

Coding after task: **RF08_02x: n=number of Years, .A=not applicable,**
                                    .M=missing

Event-table:

Before Task	After Task
RF08_02	**RF08_02x**
.M	.M
.A	.A
0-11	0
12-23	1
24-35	2
36-47	3
48-59	4
…	…

SAS-Code:

IF RF08_02 ne **.M** and RF08_02 ne **.A** THEN
 rf08_02x= INT (RF08_02 / **12**);
IF RF08_02 eq **.M** THEN RF08_02x = **.M**;
IF RF08_02 eq **.A** THEN RF08_02x = **.A**;

****

RF09_01x

Meaning:	**Has the child's mother ever had any of the following diseases: Asthma, Hay fever or Eczema?**

Derived Variable: rf09_01x
Derived from: rf09_01, rf09_02, rf09_03: Has the child's mother Asthma or Hay fever or
                                          Eczema
Coding: rf09_01, rf09_02, rf09_03: before Task: 1=Yes, 2=No, 9=any other
                                                          response
                                          after Task: 1=Yes, 2=No, 9=missing
                      rf09_01x: **1=Yes, 2=No, .M=missing**

Event-table:

Before Task			After Task
RF09_01	**RF09_02**	**RF09_03**	**Derived Variable RF09_01x**
1	*	*	1
*	1	*	1
*	*	1	1

2	2	2	2
9	9	9	.M

* = Wildcards for 1, 2 ,9

Before Task			After Task
RF09_01	**RF09_02**	**RF09_03**	**Derived Variable RF09_01x**
9	*	*	.M
*	9	*	.M
*	*	9	.M

* = Wildcards for 2 or 9

SAS-Code:

* Has the child's mother ever had Asthma or Hay fever or Eczema;
rf09_01x = **0**;
IF rf09_01 = **1** OR rf09_02 = **1** OR rf09_03 = **1** THEN rf09_01x = **1**;
ELSE IF rf09_01 = **9** OR rf09_02 = **9** OR rf09_03 = **9** THEN rf09_01x = **.M**;
ELSE rf09_01x = **2**;

IF rf09_01 = 9 THEN rf09_01 = .M;
IF rf09_02 = 9 THEN rf09_02 = .M;
IF rf09_03 = 9 THEN rf09_03 = .M;

```
***********************************************************************
```

RF10_01x

Meaning:	**Has the child's father ever had any of the following diseases Asthma, Hay fever or Eczema?**

Derived Variable:	rf10_01x
Derived from:	rf10_01, rf10_02, rf10_03: Has the child's father Asthma or Hay fever or Eczema
Coding:	rf10_01, rf10_02, rf10_03: <u>before Task</u>: 1=Yes, 2=No, 9=any other response <u>after Task</u>: 1=Yes, 2=No, 9=missing
rf10_01x:	**1=Yes, 2=No, .M=missing**

Event-table:

Before Task			After Task
RF10_01	**RF10_02**	**RF10_03**	**Derived Variable RF10_01x**
1	*	*	1
*	1	*	1
*	*	1	1

2	2	2	2
9	9	9	.M

* = Wildcards for 1, 2 or 9

Before Task			After Task
RF10_01	**RF10_02**	**RF10_03**	**Derived Variable RF10_01x**
9	*	*	.M
*	9	*	.M
*	*	9	.M

* = Wildcards for 2 or 9

SAS-Code:

```
* Has the child's father Asthma or Hay fever or Eczema;
rf10_01x = 0;
IF rf10_01 = 1 OR rf10_02 = 1 OR rf10_03 = 1 THEN
  rf10_01x = 1;
ELSE IF rf10_01 = 9 OR rf10_02 = 9 OR rf10_03 = 9 THEN
  rf10_01x = .M;
ELSE
  rf10_01x = 2;

IF rf10_01 = 9 THEN rf10_01 = .M;
IF rf10_02 = 9 THEN rf10_02 = .M;
IF rf10_03 = 9 THEN rf10_03 = .M;
```

****

RF09101x

Meaning: Parental Asthma?

Derived Variable: rf09101x
Derived from: rf09_01, rf10_01: Has the child's mother/father everhad Asthma
Coding: rf09_01, rf10_01: 1=Yes, 2=No, 9=any other response
rf09101x: 1=Yes, 2=No, .M=missing

Event-table:

Before Task		After Task
RF09_01	**RF10_01**	**Derived Variable RF09101x**
1	1	1
2	1	1
9	1	1
1	2	1
2	2	2
9	2	.M
1	9	1
2	9	.M
9	9	.M

SAS-Code :

```
* Has the child's mother or the child's father Asthma;
rf09101x = 0;
IF rf09_01 = 2 AND rf10_01 = 2 THEN DO;
   rf09101x = 2;
END;
ELSE IF rf09_01 = 1 OR rf10_01 = 1  THEN DO;
   rf09101x = 1;
END;
ELSE
   rf09101x = .M;
END;
```

****

RF09102x

Meaning: **Parental Hay fever?**

Derived Variable: rf09102x
Derived from: rf09_02, rf10_02: Has the child's mother/father Hay fever
Coding: rf09_02, rf10_02: 1=Yes, 2=No, 9=any other response
                           rf09102x: 1=Yes, 2=No, .M=missing

Event-table:

Before Task		After Task
RF09_02	**RF10_02**	**Derived Variable RF09102x**
1	1	1
2	1	1
9	1	1
1	2	1
2	2	2
9	2	.M
1	9	1
2	9	.M
9	9	.M

SAS-Code:

```
* Has the child's mother or the child's father Hay fever;
rf09102x = 0;
IF rf09_02 = 2 AND rf10_02 = 2 THEN DO;
   rf09102x = 2;
END;
ELSE IF rf09_02 = 1 OR rf10_02 = 1  THEN DO;
   rf09102x = 1;
END;
ELSE
   rf09102x = .M;
END;
```

****

RF09103x

Meaning: **Parental Eczema?**

Derived Variable: rf09103x
Derived from: rf09_03, rf10_03: Has the child's mother/father Eczema
Coding: rf09_03, rf10_03: 1=Yes, 2=No, 9=any other response
rf09103x: **1=Yes, 2=No, .M=missing**

Event-table:

Before Task		After Task
RF09_03	**RF10_03**	**Derived Variable RF09103x**
1	1	1
2	1	1
9	1	1
1	2	1
2	2	2
9	2	.M
1	9	1
2	9	.M
9	9	.M

SAS-Code:

```
* Has the child's mother or the child's father Eczema;
rf09103x = 0;
IF rf09_03 = 2 AND rf10_03 = 2 THEN DO;
   rf09103x = 2;
END;
ELSE IF rf09_03 = 1 OR rf10_03 = 1  THEN DO;
  rf09103x = 1;
END;
ELSE
   rf09103x = .M;
END;
```

****

RF09104x

Meaning: **Parental allergic diseases?**

Derived Variable: rf09104x
Derived from: rf09_01, rf09_02, rf09_03,
                          rf10_01, rf10_01, rf10_03: Has the child's mother or the child's
                                              father Astma, Hay fever or Eczema
Coding: rf09_01, rf09_02, rf09_03,
                          rf10_01, rf10_01, rf10_03: <u>before Task</u>: 1=Yes, 2=No,
                                                          9=any other response
                                              <u>after Task</u>: 1=Yes, 2=No,
                                                          9=missing
                          rf09104x: 1=Yes, 2=No, .M=missing

Event-table:

Before Task						After Task
RF09_01	**RF09_02**	**RF09_03**	**RF10_01**	**RF10_02**	**RF10_03**	**Derived Variable RF09104x**
1	1, 2, 9	*	*	*	*	1
*	1	*	*	*	*	1
*	*	1	*	*	*	1
*	*	*	1	*	*	1
*	*	*	*	1	*	1
*	*	*	*	*	1	1

2	2	2	2	2	2	2
9	9	9	9	9	9	.M

* = Wildcards for 1, 2 or 9

Before Task						After Task
RF09_01	**RF09_02**	**RF09_03**	**RF10_01**	**RF10_02**	**RF10_03**	**Derived Variable RF09104x**
9	2, 9	*	*	*	*	.M
*	9	*	*	*	*	.M
*	*	9	*	*	*	.M
*	*	*	9	*	*	.M
*	*	*	*	9	*	.M
*	*	*	*	*	9	.M

* = Wildcards for 2 or 9

```
***************************************************************************
```
RF09104xx

Meaning:	**Parental allergic diseases? (Special solution for the chinese centres who didn't ask RF09_02 and RF10_02: If RF09_01, RF09_03, RF10_01 and RF10_03 are coded "no", the derived Variable RF09104xx also gets "no", though not all information are available, as questions RF09_02 and RF10_02 weren't asked)**

Derived Variable: rf09104xx
Derived from: rf09_01, rf09_03,
rf10_01, rf10_03: Has the child's mother or the child's
father Astma or Eczema
Coding: rf09_01, rf09_03,
rf10_01, rf10_03: <u>before Task</u>: 1=Yes, 2=No,
9=any other response
<u>after Task</u>: 1=Yes, 2=No,
9=missing
rf09104xx: 1=Yes, 2=No, .M=missing

Event-table:

Before Task				After Task
RF09_01	**RF09_03**	**RF10_01**	**RF10_03**	**Derived Variable RF09104xx**
1	1,2,9	*	*	1
*	1	*	*	1
*	*	1	*	1
*	*	*	1	1

2	2	2	2	2
9	9	9	9	.M

* = Wildcards for 1, 2 or 9

Before Task				After Task
RF09_01	**RF09_03**	**RF10_01**	**RF10_03**	**Derived Variable RF09104xx**
9	*	*	*	.M
*	9	*	*	.M
*	*	9	*	.M
*	*	*	9	.M

* = Wildcards for 2 or 9

rf09104xx = rf09104x;
if ccode in ('cn37','cn38','cn39') and rf09104x = .M
  and not (rf09_01 = .M and rf09_03 = .M and
       rf10_01 = .M and rf10_03 = .M)
  then rf09104xx = 2;

```
*************************************************************************
```
RF11_1a, RF11_1b, RF11_1c

Coding after filter question:

Filter question:	rf11_01:	Has your child been vaccinated against pertussis?

Following question:	rf11_1a,	If yes, at what age?
	rf11_1b,	If yes, at what age?
	rf11_1c:	If yes, at what age?

Coding before task:	rf11_01:	1=Yes, 2=No, 9=any other response
	rf11_1a,	n=number of months, 999 = any other response
	rf11_1b,	n=number of months, 999 = any other response
	rf11_1c:	n=number of months, 999 = any other response

Coding after task:	rf11_01:	1=Yes, 2=No, 9=any other response
	rf11_1a,	**n=number of months, .A=not applicable, .M=missing**
	rf11_1b,	**n=number of months, .A=not applicable, .M=missing**
	rf11_1c:	**n=number of months, .A=not applicable, .M=missing**

Event-table:

	Before Task			After Task		
RF11_01	**RF11_1a**	**RF11_1b**	**RF11_1c**	**RF11_1a**	**RF11_1b**	**RF11_1c**
1	999	999	999	.M	.M	.M
1	n	n	n	n	n	n
2	999	999	999	.A	.A	.A
2	n	n	n	n	n	n
9	999	999	999	.M	.M	.M
9	n	n	n	n	n	n

SAS-Code:

```
IF rf11_01 = 1 OR rf11_01 = 9 THEN DO;
   IF rf11_1a = 999 THEN rf11_1a = .M;
   IF rf11_1b = 999 THEN rf11_1b = .M;
   IF rf11_1c = 999 THEN rf11_1c = .M;
END;

IF rf11_01 = 2 THEN DO;
   IF rf11_1a = 999 And rf11_1aq in (1,2) THEN rf11_1a = .A;
   IF rf11_1a = 999 And rf11_1aq in (3,4,5) THEN rf11_1a = .M;
   IF rf11_1b = 999 And rf11_1bq in (1,2) THEN rf11_1b = .A;
   IF rf11_1b = 999 And rf11_1bq in (3,4,5) THEN rf11_1b = .M;
   IF rf11_1c = 999 And rf11_1cq in (1,2) THEN rf11_1c = .A;
   IF rf11_1c = 999 And rf11_1cq in (3,4,5) THEN rf11_1c = .M;
END;
```

****

RF11_1ax, RF11_1bx, RF11_1cx

Coding after filter question:

Following question:	rf11_1a,	If yes, at what age?
	rf11_1b,	If yes, at what age?
	rf11_1c:	If yes, at what age?
Coding before task:	rf11_1a,	n=number of months, 999 = any other response
	rf11_1b,	n=number of months, 999 = any other response
	rf11_1c:	n=number of months, 999 = any other response
Coding after task:	**rf11_1ax,**	**n=number of years, .A=not applicable, .M=missing**
	rf11_1bx,	**n=number of years, .A=not applicable, .M=missing**
	rf11_1cx:	**n=number of years, .A=not applicable, .M=missing**

Event-table:

Before Task	After Task
RF11_1a, RF11_1b, RF11_1c	**RF11_1a, RF11_1b, RF11_1c**
.M	.M
.A	.A
0-11	0
12-23	1
24-35	2
36-47	3
48-59	4
…	…

SAS-Code:

IF RF11_1a ne **.M** and RF11_1a ne **.A** THEN
  rf11_1ax= INT (RF11_1a / **12**);
IF RF11_1a eq **.M** THEN RF11_1ax = **.M**;
IF RF11_1a eq **.A** THEN RF11_1ax = **.A**;

The corresponding sheme is used for **RF11_1b** and **RF11_1c**!

****
RF11_2a, RF11_2b, RF11_2c

Coding after filter question:

Filter question:	rf11_02:	Has your child been vaccinated against measles?

Following question:	rf11_2a,	If yes, at what age?
	rf11_2b,	If yes, at what age?
	rf11_2c:	If yes, at what age?

Coding before task:	rf11_02:	1=Yes, 2=No, 9=any other response
	rf11_2a,	n=number of months, 999 = any other response
	rf11_2b,	n=number of months, 999 = any other response
	rf11_2c:	n=number of months, 999 = any other response

Coding after task:	rf11_02:	1=Yes, 2=No, 9=any other response
	rf11_2a,	**n=number of months, .A=not applicable, .M=missing**
	rf11_2b,	**n=number of months, .A=not applicable, .M=missing**
	rf11_2c	**n=number of months, .A=not applicable, .M=missing**

Event-table:

RF11_02	Before Task RF11_2a, RF11_2b, RF11_2c	After Task RF11_2a, RF11_2b, RF11_2c
1	999	.M
1	n	n
2	999	.A
2	n	n
9	999	.M
9	n	n

SAS-Code:

```
IF rf11_02 = 1 OR rf11_02 = 9 THEN DO;
   IF rf11_2a = 999 THEN rf11_2a = .M;
   IF rf11_2b = 999 THEN rf11_2b = .M;
   IF rf11_2c = 999 THEN rf11_2c = .M;
END;

IF rf11_02 = 2 THEN DO;
   IF rf11_2a = 999 And rf11_2aq in (1,2) THEN rf11_2a = .A;
   IF rf11_2a = 999 And rf11_2aq in (3,4,5) THEN rf11_2a = .M;
   IF rf11_2b = 999 And rf11_2bq in (1,2) THEN rf11_2b = .A;
   IF rf11_2b = 999 And rf11_2bq in (3,4,5) THEN rf11_2b = .M;
   IF rf11_2c = 999 And rf11_2cq in (1,2) THEN rf11_2c = .A;
   IF rf11_2c = 999 And rf11_2cq in (3,4,5) THEN rf11_2c = .M;
END;
```

****

RF11_2ax, RF11_2bx, RF11_2cx

Coding after filter question:

Following question:	rf11_2a,	If yes, at what age?
	rf11_2b,	If yes, at what age?
	rf11_2c:	If yes, at what age?

Coding before task:	rf11_2a,	n=number of months, 999 = any other response
	rf11_2b,	n=number of months, 999 = any other response
	rf11_2c:	n=number of months, 999 = any other response

Coding after task:	**rf11_2ax,**	**n=number of years, .A=not applicable, .M=missing**
	rf11_2bx,	**n=number of years, .A=not applicable, .M=missing**
	rf11_2cx	**n=number of years, .A=not applicable, .M=missing**

Event-table:

Before Task	After Task
RF11_2a, RF11_2b, RF11_2c	**RF11_2a, RF11_2b, RF11_2c**
.M	.M
.A	.A
1-23	1
24-35	2
36-47	3
48-59	4
…	…

SAS-Code:

IF RF11_2a NE **.M** and RF11_2a ne **.A** THEN
 rf11_2ax= INT (RF11_2a / **12**);
IF RF11_2a EQ **.M** THEN RF11_2ax = **.M**;
IF RF11_2a EQ **.A** THEN RF11_2ax = **.A**;

entsprechend für **RF11_2b** und **RF11_2c**!

****

```
*****************************************************************************
```
RF11_3a, RF11_3b, RF11_3c

Coding after filter question:

Filter question:	rf11_03: Has your child been vaccinated against tuberculosis?

Following question:	rf11_3a,	If yes, at what age?
	rf11_3b,	If yes, at what age?
	rf11_3c:	If yes, at what age?

Coding before task:	rf11_03:	1=Yes, 2=No, 9=any other response
	rf11_3a,	n=number of months, 999 = any other response
	rf11_3b,	n=number of months, 999 = any other response
	rf11_3c:	n=number of months, 999 = any other response

Coding after task:	rf11_03:	1=Yes, 2=No, 9=any other response
	rf11_3a,	**n=number of months, .A=not applicable, .M=missing**
	rf11_3b,	**n=number of months, .A=not applicable, .M=missing**
	rf11_3c	**n=number of months, .A=not applicable, .M=missing**

Event-table:

	Before Task	After Task
RF11_03	**RF11_3a, RF11_3b, RF11_3c**	**RF11_3a, RF11_3b, RF11_3c**
1	999	.M
1	N	n
2	999	.A
2	n	n
9	999	.M
9	n	n

SAS-Code:

```
IF rf11_03 = 1 OR rf11_03 = 9 THEN DO;
   IF rf11_3a = 999 THEN rf11_3a = .M;
   IF rf11_3b = 999 THEN rf11_3b = .M;
   IF rf11_3c = 999 THEN rf11_3c = .M;
END;

IF rf11_03 = 2 THEN DO;
   IF rf11_3a = 999 And rf11_3aq in (1,2) THEN rf11_3a = .A;
   IF rf11_3a = 999 And rf11_3aq in (3,4,5) THEN rf11_3a = .M;
   IF rf11_3b = 999 And rf11_3bq in (1,2) THEN rf11_3b = .A;
   IF rf11_3b = 999 And rf11_3bq in (3,4,5) THEN rf11_3b = .M;
   IF rf11_3c = 999 And rf11_3cq in (1,2) THEN rf11_3c = .A;
   IF rf11_3c = 999 And rf11_3cq in (3,4,5) THEN rf11_3c = .M;
END;
```

****

RF11_3ax, RF11_3bx, RF11_3cx

Coding after filter question:

Following question:	rf11_3a,	If yes, at what age?
	rf11_3b,	If yes, at what age?
	rf11_3c:	If yes, at what age?

Coding before task:	rf11_3a,	n=number of months, 999 = any other response
	rf11_3b,	n=number of months, 999 = any other response
	rf11_3c:	n=number of months, 999 = any other response

Coding after task:	**rf11_3ax,**	**n=number of years, .A=not applicable, .M=missing**
	rf11_3bx,	**n=number of years, .A=not applicable, .M=missing**
	rf11_3cx	**n=number of years, .A=not applicable, .M=missing**

Event-table:

Before Task	**After Task**
RF11_3a, RF11_3b, RF11_3c	**RF11_3a, RF11_3b, RF11_3c**
.M	.M
.A	.A
1-23	1
24-35	2
36-47	3
48-59	4
…	…

SAS-Code:

IF RF11_3a NE **.M** and RF11_3a ne **.A** THEN
 rf11_3ax= **INT** (RF11_3a / **12**);
IF RF11_3a EQ **.M** THEN RF11_3ax = **.M**;
IF RF11_3a EQ **.A** THEN RF11_3ax = **.A**;

entsprechend für **RF11_3b** und **RF11_3c**!

****

RF12_1a

Coding after filter question:

Filter question:	rf12_01:	Has your child ever had measles?
Following question:	rf12_1a:	If yes, at what age?
Coding before task:	rf12_01: rf12_1a:	1=Yes, 2=No, 9=any other response n=number of months, 999 = any other response
Coding after task:	rf12_01: **rf12_1a:**	1=Yes, 2=No, 9=any other response **n=number of months, .A=not applicable, .M=missing**

Event-table:

	Before Task	**After Task**
RF12_01	**RF12_1a**	**RF12_1a**
1	999	.M
1	n	n
2	999	.A
2	n	n
9	999	.M
9	n	n

SAS-Code:

```
IF rf12_01 = 1 AND rf12_1a = 999 THEN
    rf12_1a = .M;

IF rf12_01 = 2 AND rf12_1a = 999 and rf12_1aq in (1,2) THEN
    rf12_1a = .A;
IF rf12_01 = 2 AND rf12_1a = 999 and rf12_1aq in (3,4,5) THEN
    rf12_1a = .M;

IF rf12_01 = 9 AND rf12_1a = 999 THEN
    rf12_1a = .M;
```

****

RF12_1ax

Coding after filter question:

Following question: rf12_1a: If yes, at what age?

Coding before task: rf12_1a: n=number of months, 999 = any other response

Coding after task: **rf12_1ax: n=number of years, .A=not applicable,**
                                          .M=missing

Event-table:

Before Task	After Task
RF12_1a	**RF12_1ax**
.M	.M
.A	.A
1-23	1
24-35	2
36-47	3
48-59	4
…	…

SAS-Code:

```
IF RF12_1a NE .M and RF12_2a ne .A THEN
 rf12_1ax= INT (RF12_1a / 12);
IF RF12_1a EQ .M THEN  RF12_1ax = .M;
IF RF12_1a EQ .A THEN  RF12_1ax = .A;
```

****

RF12_2a

Coding after filter question:

Filter question:	rf12_02:	Has your child ever had whooping cough?
Following question:	rf12_2a:	If yes, at what age?
Coding before task:	rf12_02: rf12_2a:	1=Yes, 2=No, 9=any other response n=number of months, 999 = any other response
Coding after task:	rf12_02: **rf12_2a:**	1=Yes, 2=No, 9=any other response **n=number of months, .A=not applicable, .M=missing**

Event-table:

RF12_02	Before Task RF12_2a	After Task RF12_2a
1	999	.M
1	n	n
2	999	.A
2	n	n
9	999	.M
9	n	n

SAS-Code :

```
IF rf12_02 = 1 AND rf12_2a = 999 THEN
    rf12_2a = .M;

IF rf12_02 = 2 AND rf12_2a = 999 and rf12_2aq in (1,2) THEN
    rf12_2a = .A;
IF rf12_02 = 2 AND rf12_2a = 999 and rf12_2aq in (3,4,5) THEN
    rf12_2a = .M;

IF rf12_02 = 9 AND rf12_2a = 999 THEN
    rf12_2a = .M;
```

****
RF12_2ax

Coding after filter question:

Following question: rf12_2a: If yes, at what age?

Coding before task: rf12_2a: n=number of months, 999 = any other response

Coding after task: **rf12_2ax: n=number of years, .A=not applicable,**
                                 .M=missing

Event-table:

Before Task	After Task
RF12_2a	**RF12_2ax**
.M	.M
.A	.A
1-23	1
24-35	2
36-47	3
48-59	4
…	…

SAS-Code:

RF12_2ax=RF12_2a;

IF RF12_2a NE **.M** and RF12_2a ne **.A** THEN
 rf12_2ax= INT (RF12_2a / **12**);
IF RF12_2a EQ **.M** THEN RF12_2ax = **.M**;
IF RF12_2a EQ **.A** THEN RF12_2ax = **.A**;

****
RF12_3a

Coding after filter question:

Filter question:	rf12_03:	Has your child ever had tuberculosis?

Following question:	rf12_3a:	If yes, at what age?

Coding before task:	rf12_03:	1=Yes, 2=No, 9=any other response
	rf12_3a:	n=number of months, 999 = any other response

Coding after task:	rf12_03:	1=Yes, 2=No, 9=any other response
	rf12_3a:	**n=number of months, .A=not applicable, .M=missing**

Event-table:

	Before Task	After Task
RF12_03	**RF12_3a**	**RF12_3a**
1	999	.M
1	n	n
2	999	.A
2	n	n
9	999	.M
9	n	n

SAS-Code:

```
IF rf12_03 = 1 AND rf12_3a = 999 THEN
    rf12_3a = .M;

IF rf12_03 = 2 AND rf12_3a = 999 and rf12_3aq in (1,2) THEN
    rf12_3a = .A;
IF rf12_03 = 2 AND rf12_3a = 999 and rf12_3aq in (3,4,5) THEN
    rf12_3a = .M;

IF rf12_03 = 9 AND rf12_3a = 999 THEN
    rf12_3a = .M;
```

****

RF12_3ax

Coding after filter question:

Following question: rf12_3a: If yes, at what age?

Coding before task: rf12_3a: n=number of months, 999 = any other response

Coding after task: **rf12_3ax: n=number of years, .A=not applicable,
.M=missing**

Event-table:

Before Task	After Task
RF12_3a	**RF12_3ax**
.M	.M
.A	.A
1-23	1
24-35	2
36-47	3
48-59	4
…	…

SAS-Code:

```
IF RF12_3a NE .M and RF12_3a ne .A THEN
 rf12_3ax= INT (RF12_3a / 12);
IF RF12_3a EQ .M THEN  RF12_3ax = .M;
IF RF12_3a EQ .A THEN  RF12_3ax = .A;
```

****

RF12_4a

Coding after filter question:

Filter question:	rf12_01:	Has your child ever had worm infection?
Following question:	rf12_4a:	If yes, at what age?
Coding before task:	rf12_04: rf12_4a:	1=Yes, 2=No, 9=any other response n=number of months, 999 = any other response
Coding after task:	rf12_04: **rf12_4a:**	1=Yes, 2=No, 9=any other response **n=number of months, .A=not applicable, .M=missing**

Event-table:

	Before Task	After Task
RF12_04	**RF12_4a**	**RF12_4a**
1	999	.M
1	n	n
2	999	.A
2	n	n
9	999	.M
9	n	n

SAS-Code:

IF rf12_04 = 1 AND rf12_4a = 999 THEN
    rf12_4a = .M;

IF rf12_04 = **2** AND rf12_4a = **999** and rf12_4aq in (**1,2**) THEN
    rf12_4a = **.A**;
IF rf12_04 = **2** AND rf12_4a = **999** and rf12_4aq in (**3,4,5**) THEN
    rf12_4a = **.M**;

IF rf12_04 = 9 AND rf12_4a = 999 THEN
    rf12_4a = .M;

****

RF12_4ax

Coding after filter question:

Following question: rf12_4a: If yes, at what age?

Coding before task: rf12_4a: n=number of months, 999 = any other response

Coding after task: **rf12_4ax: n=number of years, .A=not applicable,
.M=missing**

Event-table:

Before Task	After Task
RF12_4a	**RF12_4ax**
.M	.M
.A	.A
1-23	1
24-35	2
36-47	3
48-59	4
…	…

SAS-Code:

```
IF RF12_4a NE .M and RF12_4a ne .A THEN
 rf12_4ax= INT (RF12_4a / 12);
IF RF12_4a EQ .M THEN  RF12_4ax = .M;
IF RF12_4a EQ .A THEN  RF12_4ax = .A;
```

```
****************************************************************************
```

RF17_02x

Meaning:	**How many cigarettes in total are smoked per day in the child's home?**

Derived Variable:	rf17_02x	
Derived from:	rf17_01:	Does anybody, at present, smoke inside your child's home?
	rf17_02:	If yes, how many cigarettes in total are smoked per day in the child's home?
Coding:	rf17_01:	1=Yes, 2=No, 9=any other response
	rf17_02:	<u>before Task</u>: 1=less than 10 cigarettes, 2=10-20 cigarettes, 3=more than 20 cigarettes, .M=any other response
		<u>after Task</u>: 1=less than 10 cigarettes, 2=10-20 cigarettes, 3=more than 20 cigarettes, .A=not applicable, .M=missing
	rf17_02x:	**0=no cigarettes, 1 less than 10 cigarettes, 2=10-20 cigarettes, 3=more than 20 cigarettes, .M=missing**

Event-table:

Before Task		After Task	
RF17_01	**RF17_02**	**RF17_02**	**Derived Variable RF17_02x**
1	1	1	1
1	2	2	2
1	3	3	3
1	9	.M	.M
2	1	1	1
2	2	2	2
2	3	3	3
2	9	.A	0
9	1	1	1
9	2	2	2
9	3	3	3
9	9	.M	.M

SAS-Code:

```
IF rf17_01 = 1 AND rf17_02 = 9 THEN
   rf17_02 = .M;

IF rf17_01 = 2 AND rf17_02 = 9 and rf17_02q in (1,2) THEN
   rf17_02 = .A;
IF rf17_01 = 2 AND rf17_02 = 9 and rf17_02q in (3,4,5) THEN
   rf17_02 = .M;

* change code;
IF rf17_01 = 2 AND rf17_02 = .A THEN
   rf17_02x = 0;
ELSE
   rf17_02x = rf17_02;   * keep the value;
END;
```

****

RF28_1b

Coding after filter question:

Filter question:	rf28_1a:	Have you made any changes in your home because your child had asthma or allergic problems? Removed pets?
Following question:	rf28_1b:	If yes, at what age of the child?
Coding before task:	rf28_1a: rf28_1b:	1=Yes, 2=No, 9=any other response n=number of months, 999 = any other response
Coding after task:	rf28_1a: **rf28_1b:**	1=Yes, 2=No, 9=any other response **n=number of months, .A=not applicable, .M=missing**

Event-table:

	Before Task	After Task
RF28_1a	**RF28_1b**	**RF28_1b**
1	999	.M
1	n	n
2	999	.A
2	n	n
9	999	.M
9	n	n

SAS-Code:

```
IF rf28_1a = 1 AND rf28_1b = 999 THEN
    rf28_1b = .M;

IF rf28_1a = 2 AND rf28_1b = 999 and rf28_1bq in (1,2) THEN
    rf28_1b = .A;
IF rf28_1a = 2 AND rf28_1b = 999 and rf28_1bq in (3,4,5) THEN
    rf28_1b = .M;

IF rf28_1a = 9 AND rf28_1b = 999 THEN
    rf28_1b = .M;
```

****

RF28_1bx

Coding after filter question:

Following question: RF28_1b: If yes, at what age?

Coding before task: RF28_1b: n=number of months, 999 = any other response

Coding after task: **RF28_1bx: n=number of years, .A=not applicable,
.M=missing**

Event-table:

Before Task	After Task
RF28_1b	**RF28_1bx**
.M	.M
.A	.A
1-23	1
24-35	2
36-47	3
48-59	4
…	…

SAS-Code:

```
RF28_1Bx=RF28_1B;

IF RF28_1b NE .M  and RF28_1b ne .A  THEN
 RF28_1bx= INT (RF28_1b / 12);
IF RF28_1b EQ .M THEN  RF28_1bx = .M;
IF RF28_1b EQ .A THEN  RF28_1bx = .A;
```

****

RF28_2b

Coding after filter question:

Filter question:	rf28_2a:	Have you made any changes in your home because your child had asthma or allergic problems? Stopped or reduced smoking?
Following question:	rf28_2b:	If yes, at what age of the child?
Coding before task:	rf28_2a:	1=Yes, 2=No, 9=any other response
	rf28_2b:	n=number of months, 999 = any other response
Coding after task:	rf28_2a:	1=Yes, 2=No, 9=any other response
	rf28_2b:	**n=number of months, .A=not applicable, .M=missing**

Event-table:

	Before Task	After Task
RF28_2a	**RF28_2b**	**RF28_2b**
1	999	.M
1	n	n
2	999	.A
2	n	n
9	999	.M
9	n	n

SAS-Code:

IF rf28_2a = 1 AND rf28_2b = 999 THEN
    rf28_2b = .M;

IF rf28_2a = **2** AND rf28_2b = **999** and rf28_2bq in (**1**,**2**) THEN
    rf28_2b = **.A**;
IF rf28_2a = **2** AND rf28_2b = **999** and rf28_2bq in (**3**,**4**,**5**) THEN
    rf28_2b = **.M**;

IF rf28_2a = 9 AND rf28_2b = 999 THEN
    rf28_2b = .M;

```
****************************************************************************
```
RF28_2bx

Coding after filter question:

Following question: RF28_2b: If yes, at what age?

Coding before task: RF28_2b: n=number of months, 999 = any other response

Coding after task: **RF28_2bx: n=number of years, .A=not applicable,**
                                 .M=missing

Event-table:

Before Task	After Task
RF28_2b	**RF28_2bx**
.M	.M
.A	.A
1-23	1
24-35	2
36-47	3
48-59	4
…	…

SAS-Code:

RF28_2bx=RF28_2b;

IF RF28_2b NE **.M** and RF28_2b ne **.A** THEN
 RF28_2bx= INT (RF28_2b / **12**);
IF RF28_2b EQ **.M** THEN RF28_2bx = **.M**;
IF RF28_2b EQ **.A** THEN RF28_2bx = **.A**;


```
****************************************************************************
```

****

RF28_3b

Coding after filter question:

Filter question:	rf28_3a:	Have you made any changes in your home because your child had asthma or allergic problems? Changed pillows?
Following question:	rf28_3b:	If yes, at what age of the child?
Coding before task:	rf28_3a:	1=Yes, 2=No, 9=any other response
	rf28_3b:	n=number of months, 999 = any other response
Coding after task:	rf28_3a:	1=Yes, 2=No, 9=any other response
	rf28_3b:	**n=number of months, .A=not applicable, .M=missing**

Event-table:

	Before Task	After Task
RF28_3a	**RF28_3b**	**RF28_3b**
1	999	.M
1	n	n
2	999	.A
2	n	n
9	999	.M
9	n	n

SAS-Code:

```
IF rf28_3a = 1 AND rf28_3b = 999 THEN
    rf28_3b = .M;

IF rf28_3a = 2 AND rf28_3b = 999 and rf28_3bq in (1,2) THEN
    rf28_3b = .A;
IF rf28_3a = 2 AND rf28_3b = 999 and rf28_3bq in (3,4,5) THEN
    rf28_3b = .M;

IF rf28_3a = 9 AND rf28_3b = 999 THEN
    rf28_3b = .M;
```

****

RF28_3bx

Coding after filter question:

Following question: RF28_3b: If yes, at what age?

Coding before task: RF28_3b: n=number of months, 999 = any other response

Coding after task: **RF28_3bx: n=number of years, .A=not applicable,**
                                          .M=missing

Event-table:

Before Task	After Task
RF28_3b	**RF28_3bx**
.M	.M
.A	.A
1-23	1
24-35	2
36-47	3
48-59	4
…	…

SAS-Code:

```
IF RF28_3b NE .M and RF28_3b ne .A THEN
 RF28_3bx= INT (RF28_3b / 12);
IF RF28_3b EQ .M THEN  RF28_3bx = .M;
IF RF28_3b EQ .A THEN  RF28_3bx = .A;
```

****

RF28_4b

Coding after filter question:

Filter question:	rf28_4a:	Have you made any changes in your home because your child had asthma or allergic problems? Changed bedding?
Following question:	rf28_4b:	If yes, at what age of the child?
Coding before task:	rf28_4a:	1=Yes, 2=No, 9=any other response
	rf28_4b:	n=number of months, 999 = any other response
Coding after task:	rf28_4a:	1=Yes, 2=No, 9=any other response
	rf28_4b:	**n=number of months, .A=not applicable, .M=missing**

Event-table:

	Before Task	After Task
RF28_4a	**RF28_4b**	**RF28_4b**
1	999	.M
1	n	n
2	999	.A
2	n	n
9	999	.M
9	n	n

SAS-Code:

IF rf28_4a = **1** AND rf28_4b = **999** THEN
   rf28_4b = **.M**;

IF rf28_4a = **2** AND rf28_4b = **999** and rf28_4bq in (**1**,**2**) THEN
   rf28_4b = **.A**;
IF rf28_4a = **2** AND rf28_4b = **999** and rf28_4bq in (**3**,**4**,**5**) THEN
   rf28_4b = **.M**;

IF rf28_4a = **9** AND rf28_4b = **999** THEN
   rf28_4b = **.M**;

****

RF28_4bx

Coding after filter question:

Following question: RF28_4b: If yes, at what age?

Coding before task: RF28_4b: n=number of months, 999 = any other response

Coding after task: **RF28_4bx: n=number of years, .A=not applicable,
                                             .M=missing**

Event-table:

Before Task	After Task
RF28_4b	**RF28_4bx**
.M	.M
.A	.A
1-23	1
24-35	2
36-47	3
48-59	4
…	…

SAS-Code:

```
RF28_4bx=RF28_4b;

IF RF28_4b NE .M and RF28_4b ne .A THEN
 RF28_4bx= INT (RF28_4b / 12);
IF RF28_4b EQ .M THEN  RF28_4bx = .M;
IF RF28_4b EQ .A THEN  RF28_4bx = .A;
```

****

RF28_5b

Coding after filter question:

Filter question:	rf28_5a:	Have you made any changes in your home because your child had asthma or allergic problems? Changed floor covering?
Following question:	rf28_5b:	If yes, at what age of the child?
Coding before task:	rf28_5a:	1=Yes, 2=No, 9=any other response
	rf28_5b:	n=number of months, 999 = any other response
Coding after task:	rf28_5a:	1=Yes, 2=No, 9=any other response
	rf28_5b:	**n=number of months, .A=not applicable, .M=missing**

Event-table:

	Before Task	After Task
RF28_5a	**RF28_5b**	**RF28_5b**
1	999	.M
1	n	n
2	999	.A
2	n	n
9	999	.M
9	n	n

SAS-Code:

```
IF rf28_5a = 1 AND rf28_5b = 999 THEN
    rf28_5b = .M;

IF rf28_5a = 2 AND rf28_5b = 999 and rf28_5bq in (1,2) THEN
    rf28_5b = .A;
IF rf28_5a = 2 AND rf28_5b = 999 and rf28_5bq in (3,4,5) THEN
    rf28_5b = .M;

IF rf28_5a = 9 AND rf28_5b = 999 THEN
    rf28_5b = .M;
```

****
RF28_5bx

Coding after filter question:

Following question: RF28_5b: If yes, at what age?

Coding before task: RF28_5b: n=number of months, 999 = any other response

Coding after task: **RF28_5bx: n=number of years, .A=not applicable,**
                                   .M=missing

Event-table:

Before Task	After Task
RF28_5b	**RF28_5bx**
.M	.M
.A	.A
1-23	1
24-35	2
36-47	3
48-59	4
…	…

SAS-Code:

IF RF28_5b NE .M and RF28_5b ne .A THEN
 RF28_5bx= INT (RF28_5b / 12);
IF RF28_5b EQ .M THEN RF28_5bx = .M;
IF RF28_5b EQ .A THEN RF28_5bx = .A;

****

RF28_6b

Coding after filter question:

Filter question:	rf28_6a:	Have you made any changes in your home because your child had asthma or allergic problems? Other changes?
Following question:	rf28_6b:	If yes, at what age of the child?
Coding before task:	rf28_6a:	1=Yes, 2=No, 9=any other response
	rf28_6b:	n=number of months, 999 = any other response
Coding after task:	rf28_6a:	1=Yes, 2=No, 9=any other response
	rf28_6b:	**n=number of months, .A=not applicable, .M=missing**

Event-table:

	Before Task	After Task
RF28_6a	**RF28_6b**	**RF28_6b**
1	999	.M
1	n	n
2	999	.A
2	n	n
9	999	.M
9	n	n

SAS-Code:

IF rf28_6a = 1 AND rf28_6b = 999 THEN
    rf28_6b = .M;

IF rf28_6a = **2** AND rf28_6b = **999** and rf28_6bq in (**1**,**2**) THEN
    rf28_6b = **.A**;
IF rf28_6a = **2** AND rf28_6b = **999** and rf28_6bq in (**3**,**4**,**5**) THEN
    rf28_6b = **.M**;

IF rf28_6a = 9 AND rf28_6b = 999 THEN
    rf28_6b = .M;

****

RF28_6bx

Coding after filter question:

Following question: RF28_6b: If yes, at what age?

Coding before task: RF28_6b: n=number of months, 999 = any other response

Coding after task: **RF28_6bx: n=number of years, .A=not applicable,
                                      .M=missing**

Event-table:

Before Task	After Task
RF28_6b	**RF28_6bx**
.M	.M
.A	.A
1-23	1
24-35	2
36-47	3
48-59	4
…	…

SAS-Code:

```
IF RF28_6b NE .M and RF28_6b ne .A THEN
 RF28_6bx= INT (RF28_6b / 12);
IF RF28_6b EQ .M THEN  RF28_6bx = .M;
IF RF28_6b EQ .A THEN  RF28_6bx = .A;
```

```
******************************************************************************
```
RF30x

Meaning:	Name of the child's street of residence available at the I2CDC
Derived from :	RF30 What is the name of your child's street of residence?

Coding:	RF30: max. 50 char, 9 = any other response
	RF30x = 1 (address available), = 0 (no address available)

Event-table:

Before Task	After Task
RF30	**RF30x**
not 9	1
9	2

```
******************************************************************************
```
RF31x

Meaning:	Postal code of the child's street of residence available at the I2CDC
Derived from :	RF31: What is the postal code of your child's home?

Coding:	RF31: max. 15 char, 9 = any other response
	RF31x = 1 (postal code available), = 0 (no postal code available)

Event-table:

Before Task	After Task
RF31	**RF31x**
not 9	1
9	2

Examination for flexural dermatitis (ED)

****
ED

Meaning: **Individual has answered the ED Module or not.**

Derived Variable: ed
Derived from: ed01 to ed05

Coding: **1 = Individual has answered at least one question in ed**
2 = Individual has answered no question in ed

SAS-Code:

ed=**2**;

IF ED01 ne **9** or ED02 ne **9** or ED03 ne **9** or ED04 ne **9** or ED05 ne **9** THEN ed=**1**;

****

ED01x

Meaning: **Has the child flexural dermatitis at any of the following places:**
around the eyes, around the sides or front of the neck,
fronts of elbows, behind the knees or fronts of ankle

Derived Variable: ed01x
Derived from: ed01, ed02, ed03,
ed04, ed05: **Has the child flexural dermatitis around**
the eyes (ed01), around the sides or front of
the neck (ed02), fronts of elbows (ed03),
behind the knees or fronts of ankle (ed04)
Coding: ed01, ed02, ed03,
ed04, ed05: before Task: 1=Yes, 2=No, 9=any other response
after Task: 1=Yes, 2=No, .M=missing
ed01x: **1=Yes, 2=No, .M=missing**

Event-table:

| Before Task | | | | | After Task |
ED01	ED02	ED03	ED04	ED05	Derived Variable ED01x
1	*	*	*	*	1
*	1	*	*	*	1
*	*	1	*	*	1
*	*	*	1	*	1
*	*	*	*	1	1
2	2	2	2	2	2
9	9	9	9	9	.M

* = Wildcards for 1, 2, or 9

SAS-Code:

* any sign of flexural dermatitis;
ed01x = 0;
IF ed01 = 1 OR ed02 = 1 OR ed03 = 1 OR ed04 = 1 OR ed05 = 1 THEN

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```
  ed01x = 1;
ELSE IF ed01 = 9 AND ed02 = 9 AND ed03 = 9 AND ed04 = 9 AND ed05 = 9 THEN
  ed01x = .M;
ELSE
  ed01x = 2;

IF ed01 = 9 THEN ed01 = .M;
IF ed02 = 9 THEN ed02 = .M;
IF ed03 = 9 THEN ed03 = .M;
IF ed04 = 9 THEN ed04 = .M;
IF ed05 = 9 THEN ed05 = .M;
```

Skin prick test for atopy (SP)

****
SP

Meaning:	**Individual has answered the SP Module or not.**

Derived Variable:	sp
Derived from:	sp01_01d to sp08_02d

Coding:	**1 = Individual has answered at least one question in sp**
	2 = Individual has answered no question in sp

SAS-Code:

sp=**2**;

IF SP01_01d ne **99** OR SP01_02d ne **99** OR SP02_01d ne **99** OR SP02_02d ne **99** OR SP03_01d ne **99**
OR SP03_02d ne **99** OR SP04_01d ne **99** OR SP04_02d ne **99** OR SP05_01d ne **99** OR SP05_02d ne **99**
OR SP06_01d ne **99** OR SP06_02d ne **99** OR SP07_01d ne **99** OR SP07_02d ne **99** OR SP08_01d ne **99**
OR SP08_02d ne **99**
THEN sp=**1**;

****
SP01_01x/SP01_02x/SP02_01x/SP02_01x/SP02_02x/ -- SP08_01x/SP08_02x

Meaning:	**Skin prick tests for atopy:**
	Diameters of skin prick test (99 recoded to 0).

Derived Variable:	sp01_01x, sp01_02x – sp08_01x, sp08_02x	
Derived from:	sp01_01:	Negative control (max diam)
	-- sp08_02:	
Coding:	**sp01_01x:**	**Diameters of skin prick test, 99 was recoded as 0.**
	-- sp08_02x	

****

SAS-code:

```
%macro miss_n (var);
if sp = 1 and &centrep not in (15, 29, 45, 42) then do;
  &var.x = &var;
  if &var.x eq 99 and &var.q in (1,2) then &var.x = 0;
  if &var.x eq 99 and &var.q in (3,4,5) then &var.x = .M;
end;
%mend miss_n;

%miss_n(sp01_01);
%miss_n(sp01_02);
%miss_n(sp02_01);
%miss_n(sp02_02);
%miss_n(sp03_01);
%miss_n(sp03_02);
%miss_n(sp04_01);
%miss_n(sp04_02);
%miss_n(sp05_01);
%miss_n(sp05_02);
%miss_n(sp06_01);
%miss_n(sp06_02);
%miss_n(sp07_01);
```

%*miss_n*(sp07_02);
%*miss_n*(sp08_01);
%*miss_n*(sp08_02);

****

SP01_01xf/SP01_02xf/SP02_01xf/SP02_01xf/SP02_02xf/ -- SP08_01xf/SP08_02xf

Meaning:	**Skin prick tests for atopy:**
	Diameters of skin prick test
	(these variables are created for the centres ec45, nl29, al15: ec45 and
	nl29 had recorded only the mean diameters and al15 only values ≥ 2
	mm, and therefore had a qualification code of 3)
Derived Variable:	sp01_01xf, sp01_02xf – sp08_01xf, sp08_02xf
Derived from:	sp01_01d: Negative control (max diam)
	-- sp08_02d:
Coding:	**sp01_01xf: Diameters of skin prick test, 99 was recoded as 0.**
	-- sp08_02xf

****

SAS-code:

```
%macro miss_n (var);
if sp = 1 and &centrep in (15, 29, 45) then do;
 &var.xf = &var.d;
 if &var.xf eq 99 then &var.xf = 0;
%mend;
```

%*miss_n*(sp01_01);
%*miss_n*(sp01_02);
%*miss_n*(sp02_01);
%*miss_n*(sp02_02);
%*miss_n*(sp03_01);
%*miss_n*(sp03_02);
%*miss_n*(sp04_01);
%*miss_n*(sp04_02);
%*miss_n*(sp05_01);
%*miss_n*(sp05_02);
%*miss_n*(sp06_01);
%*miss_n*(sp06_02);
%*miss_n*(sp07_01);
%*miss_n*(sp07_02);
%*miss_n*(sp08_01);
%*miss_n*(sp08_02);

```
********************************************************************************
```
SP02x

Meaning: **Skin prick tests for atopy:**
                            Skin prick test reaction to negativ control

Derived Variable: sp02x
Derived from: sp02_01x: Negative control (max diam)
                            sp02_02x: Negative control (min diam)
                            for centre al15
                            sp02_01xf: Negative control (max diam (if > 3 mm))
                            sp02_02xf: Negative control (min diam (if > 3 mm))
                            for centres ec45, nl29
                            sp02_01xf: Negative control (mean diam)

Coding: **sp02x:**   **Mean of the negative control reaction**

```
********************************************************************************
```

SAS-code:

```
 IF sp02_01x NE .M AND sp02_02x NE .M THEN
  sp02x = (sp02_01x + sp02_02x)/2;
 IF sp02_01x EQ .M OR sp02_02x EQ .M then
  sp02x = .M;
end;

for centre al15
 IF sp02_01xf NE .M AND sp02_02xf NE .M THEN
  sp02x = (sp02_01xf + sp02_02xf)/2;
 IF sp02_01xf EQ .M OR sp02_02xf EQ .M then
  sp02x = .M;
end;

for centres ec45, nl29
if &centrep = 45 or &centrep = 29 then do;
 if sp02_01xf ne .M then
  sp02x = sp02_01xf;
 if sp02_01xf = .M  then
  sp02x = .M;
end;
```

****

SP0102x

Meaning:	Skin prick tests for atopy: Difference between skin prick test reaction to positive control and skin prick test reaction to negativ control

Derived Variable:	sp0102x	
Derived from:	sp02x:	Mean of the negative control reaction
	sp01_01x:	Positive control (max diam)
	sp01_02x:	Positive control (min diam)
	for centre al15	
	sp01_01xf:	Positive control (max diam (if > 3mm))
	sp01_02xf:	Positive control (min diam (if > 3mm))
	for centres ec45, nl29	
	sp01_01xf:	Positive control (mean diam)

Coding:	sp01x:	Mean of the positive control reaction
	sp0102hx:	Difference between skin prick test reaction to positive control and skin prick test reaction to negativ control
	sp0102x:	**Difference between skin prick test reaction to positive control and skin prick test reaction to negative control in mm (only positive values)**

SAS-code:

```
IF sp02x NE .M AND sp01_01x NE .M AND sp01_02x NE .M THEN DO;
  sp01x = (sp01_01x + sp01_02x)/2;
  sp0102hx  = sp01x - sp02x;
  sp0102x  = MAX(sp0102hx,0);
 END;
 IF sp01_01x EQ .M OR sp01_02x EQ .M then
  sp01x=.M;
 IF sp02x EQ .M OR sp01x EQ .M then
  sp0102x=.M;
end;


for centre al15
if &centrep eq 15 then do;
 IF sp02x NE .M AND sp01_01xf NE .M AND sp01_02xf NE .M  THEN DO;
  sp01x = (sp01_01xf + sp01_02xf)/2;
  sp0102hx  = sp01x - sp02x;
  sp0102x  = MAX(sp0102hx,0);
 END;
 IF sp01_01xf EQ .M OR sp01_02xf EQ .M
  then sp01x=.M;
 IF sp02x EQ .M OR sp01x EQ .M then
  sp0102x=.M;
end;


for centres ec45, nl29
if &centrep = 45 or &centrep = 29 then do;
 IF sp02x NE .M AND sp01_01xf NE .M THEN DO;
  sp01x = sp01_01xf ;
  sp0102hx = sp01x - sp02x;
  sp0102x  = MAX(sp0102hx,0);
 END;
 IF sp01_01xf EQ .M then sp01x=.M;
 IF sp02x EQ .M OR sp01x EQ .M then sp0102x=.M;
END;
```

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```
****************************************************************************
```
SP0203x

Meaning:	**Skin prick tests for atopy:**
	Difference between skin prick test reaction to D.ptero and skin prick test reaction to negativ control

Derived Variable: sp0203x

Derived from:
sp02x:	Mean of the negative control reaction
sp03_01x:	D. pteronyssinus (max diam)
sp03_02x:	D. pteronyssinus (min diam)
for centre al15	
sp03_01xf:	D. pteronyssinus (max diam (if > 3mm))
sp03_02xf:	D. pteronyssinus (min diam (if > 3mm))
for centres ec45, nl29	
sp03_01xf:	D. pteronyssinus (mean diam)

Coding:
sp03x:	Mean of the D. pteronyssinus reaction
sp0203px:	Difference between skin prick test reaction to D.ptero and skin prick test reaction to negativ control
sp0203x:	**Difference between skin prick test reaction to D.ptero and skin prick test reaction to negativ control in mm (only positive values)**

SAS-code:

```
IF sp02x NE .M AND sp03_01x NE .M AND sp03_02x NE .M THEN DO;
  sp03x = (sp03_01x + sp03_02x)/2;
  sp0203px  = sp03x - sp02x;
  sp0203x  = MAX(sp0203px,0);
 END;
 IF sp03_01x EQ .M OR sp03_02x EQ .M then
   sp03x=.M;
 If sp02x EQ .M OR sp03x EQ .M then
   sp0203x=.M;
end;


for centre al15
if &centrep eq 15 then do;
 IF sp02x NE .M AND sp03_01xf NE .M AND sp03_02xf NE .M THEN DO;
  sp03x = (sp03_01xf + sp03_02xf)/2;
  sp0203px  = sp03x - sp02x;
  sp0203x  = MAX(sp0203px,0);
 END;
 IF sp03_01xf EQ .M OR sp03_02xf EQ .M then
   sp03x=.M;
 IF sp02x EQ .M OR sp03x EQ .M then
  sp0203x=.M;
end;


for centres ec45, nl29
if &centrep eq 29 or &centrep eq 45 then do;
 IF sp02x NE .M AND sp03_01xf NE .M THEN DO;
  sp03x = sp03_01xf;
  sp0203px  = sp03x - sp02x;
  sp0203x  = MAX(sp0203px,0);
 END;
 IF sp03_01xf EQ .M then sp03x=.M;
 If sp02x EQ .M OR sp03x EQ .M then
   sp0203x=.M;
END;
```

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SP0204x

Meaning:	**Skin prick tests for atopy:**
	Difference between skin prick test reaction to D.farinae and
	skin prick test reaction to negativ control

Derived Variable:	sp0204x	
Derived from:	sp02x:	Mean of the negative control reaction
	sp04_01x:	D. farinae (max diam)
	sp04_02x:	D. farinae (min diam)
	<u>for centre al15</u>	
	sp04_01xf:	D. farinae (max diam (if diam > 3mm))
	sp04_02xf:	D. farinae (min diam (if diam > 3mm))
	<u>for centres ec45, nl29</u>	
	sp04_01xf:	D. farinae (mean diam)

Coding:	sp04x:	Mean of the D. farinea reaction
	sp0204fx:	Difference between skin prick test reaction to D.farinae and skin prick test reaction to negativ control
	sp0204x:	**Difference between skin prick test reaction to D.farinae and skin prick test reaction to negativ control in mm (only positive values)**

SAS-code:

```
IF sp02x NE .M AND sp04_01x NE .M AND sp04_02x NE .M THEN DO;
  sp04x = (sp04_01x + sp04_02x)/2;
  sp0204fx   = sp04x - sp02x;
  sp0204x  = MAX(sp0204fx,0);
 END;
 IF sp04_01x EQ .M OR sp04_02x EQ .M then
  sp04x=.M;
 IF sp02x EQ .M OR sp04x EQ .M then
  sp0204x=.M;
end;


for centre al15
if &centrep eq 15 then do;
 IF sp02x NE .M AND sp04_01xf NE .M AND sp04_02xf NE .M THEN DO;
  sp04x = (sp04_01xf + sp04_02xf)/2;
  sp0204fx   = sp04x - sp02x;
  sp0204x  = MAX(sp0204fx,0);
 END;
 IF sp04_01xf EQ .M OR sp04_02xf EQ .M then
  sp04x=.M;
 IF sp02x EQ .M OR sp04x EQ .M then
  sp0204x=.M;
end;


for centres ec45, nl29
if &centrep eq 29 or &centrep eq 45 then do;
 IF sp02x NE .M AND sp04_01xf NE .M THEN DO;
  sp04x = sp04_01xf;
  sp0204fx   = sp04x - sp02x;
  sp0204x  = MAX(sp0204fx,0);
 END;
 IF sp04_01xf EQ .M then sp04x=.M;
 IF sp02x EQ .M OR sp04x EQ .M then
  sp0204x=.M;
END;
```

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```
*****************************************************************************
```

SP0205x

Meaning:	**Skin prick tests for atopy:**
	Difference between skin prick test reaction to cat and
	skin prick test reaction to negativ control

Derived Variable:	sp0205x	
Derived from:	sp02x:	Mean of the negative control reaction
	sp05_01x:	Cat (max diam)
	sp05_02x:	Cat (min diam)
	<u>for centre al15</u>	
	sp05_01xf:	Cat (max diam (if diam > 3mm))
	sp05_02xf:	Cat (min diam (if diam > 3mm))
	<u>for centres ec45, nl29</u>	
	sp05_01xf:	Cat (mean diam)

Coding:	sp05x:	Mean of the cat reaction
	sp0205cx:	Difference between skin prick test reaction to cat and skin prick test reaction to negativ control
	sp0205x:	**Difference between skin prick test reaction to cat and skin prick test reaction to negativ control in mm (only positive values)**

SAS-code:

```
IF sp02x NE .M AND sp05_01x NE .M AND sp05_02x NE .M THEN DO;
  sp05x = (sp05_01x + sp05_02x)/2;
  sp0205cx  = sp05x - sp02x;
  sp0205x  = MAX(sp0205cx,0);
 END;
 IF sp05_01x EQ .M OR sp05_02x EQ .M then
  sp05x =.M;
 IF sp02x EQ .M OR sp05x EQ .M then
  sp0205x =.M;
end;


for centre al15
if &centrep eq 15 then do;
IF sp02x NE .M AND sp05_01xf NE .M AND sp05_02xf NE .M  THEN DO;
  sp05x = (sp05_01xf + sp05_02xf)/2;
  sp0205cx  = sp05x - sp02x;
  sp0205x  = MAX(sp0205cx,0);
 END;
 IF sp05_01xf EQ .M OR sp05_02xf EQ .M then
  sp05x =.M;
 IF sp02x EQ .M OR sp05x EQ .M then
  sp0205x =.M;
end;


for centres ec45, nl29
if &centrep eq 29 or &centrep eq 45 then do;
IF sp02x NE .M AND sp05_01xf NE .M THEN DO;
  sp05x = sp05_01xf;
  sp0205cx  = sp05x - sp02x;
  sp0205x  = MAX(sp0205cx,0);
 END;
 IF sp05_01xf EQ .M then sp05x =.M;
 IF sp02x EQ .M OR sp05x EQ .M then
  sp0205x =.M;
 END;
```

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SP0206x

Meaning: **Skin prick tests for atopy:**
Difference between skin prick test reaction to Alternaria tenius and
skin prick test reaction to negativ control

Derived Variable: sp0206x
Derived from: sp02x: Mean of the negative control reaction
sp06_01x: Alternaria tenuis (max diam)
sp06_02x: Alternaria tenuis (min diam)
<u>for centre al15</u>
sp06_01xf: Alternaria tenuis (max diam (if diam > 3 mm))
sp06_02xf: Alternaria tenuis (min diam (if diam > 3 mm))
<u>for centres ec45, nl29</u>
sp06_01xf: Alternaria tenuis (mean diam)

Coding: sp06x: Mean of the Alternaria tenuis reaction
sp0206ax: Difference between skin prick test reaction to Alternaria
tenius
and skin prick test reaction to negativ control
sp0206x: **Difference between skin prick test reaction to**
Alternaria tenius and skin prick test reaction to
negativ control in mm (only positive values)

SAS-code:

```
IF sp02x NE .M AND sp06_01x NE .M AND sp06_02x NE .M THEN DO;
  sp06x = (sp06_01x + sp06_02x)/2;
  sp0206ax  = sp06x - sp02x;
  sp0206x  = MAX(sp0206ax,0);
 END;
 If sp06_01x EQ .M OR sp06_02x EQ .M  then
  sp06x = .M;
 IF sp02x EQ .M OR sp06x EQ .M then
  sp0206x = .M;
end;


for centre al15
if &centrep eq 15 then do;
 IF sp02x NE .M AND sp06_01xf NE .M AND sp06_02xf NE .M  THEN DO;
  sp06x = (sp06_01xf + sp06_02xf)/2;
  sp0206ax  = sp06x - sp02x;
  sp0206x  = MAX(sp0206ax,0);
 END;
 If sp06_01xf EQ .M OR sp06_02xf EQ .M  then
  sp06x = .M;
 IF sp02x EQ .M OR sp06x EQ .M then
  sp0206x = .M;
end;


for centres ec45, nl29
if &centrep eq 29 or &centrep eq 45 then do;
 IF sp02x NE .M AND sp06_01xf NE .M THEN DO;
  sp06x = sp06_01xf ;
  sp0206ax  = sp06x - sp02x;
  sp0206x  = MAX(sp0206ax,0);
 END;
 If sp06_01xf EQ .M then  sp06x = .M;
 IF sp02x EQ .M OR sp06x EQ .M then
  sp0206x = .M;
end;
```

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```
*************************************************************************
```
SP0207x

Meaning:	**Skin prick tests for atopy:**
	Difference between skin prick test reaction to mixed grasses and
	skin prick test reaction to negativ control

Derived Variable: sp0207x

Derived from:
sp02x: Mean of the negative control reaction
sp07_01x: Mixed grasses (max diam)
sp07_02x: Mixed grasses (min diam)
<u>for centre al15</u>
sp07_01xf: Mixed grasses (max diam (if diam > 3mm))
sp07_02xf: Mixed grasses (min diam (if diam > 3mm))
<u>for centres ec45, nl29</u>
sp07_01xf: Mixed grasses (mean diam)

Coding:
sp07x: Mean of the Mixed grasses reaction
sp0207gx: Difference between skin prick test reaction to mixed
            grasses and skin prick test reaction to negativ control
sp0207x: Difference between skin prick test reaction to
mixed grasses and skin prick test reaction to negativ
control in mm (only positive values)

SAS-code:

```
IF sp02x NE .M AND sp07_01x NE .M AND sp07_02x NE .M
 THEN DO;
  sp07x = (sp07_01x + sp07_02x)/2;
  sp0207gx  = sp07x - sp02x;
  sp0207x  = MAX(sp0207gx,0);
 END;
 IF sp07_01x EQ .M OR sp07_02x EQ .M  then
  sp07x=.M;
 If sp02x EQ .M OR sp07x EQ .M then
  sp0207x=.M;
end;


for centre al15
if &centrep eq 15 then do;
IF sp02x NE .M AND sp07_01xf NE .M AND sp07_02xf NE .M  THEN DO;
  sp07x = (sp07_01xf + sp07_02xf)/2;
  sp0207gx  = sp07x - sp02x;
  sp0207x  = MAX(sp0207gx,0);
 END;
 IF sp07_01xf EQ .M OR sp07_02xf EQ .M  then
  sp07x=.M;
 If sp02x EQ .M OR sp07x EQ .M then
  sp0207x=.M;
end;


for centres ec45, nl29
if &centrep eq 29 or &centrep eq 45 then do;
IF sp02x NE .M AND sp07_01xf NE .M THEN DO;
  sp07x = sp07_01xf;
  sp0207gx = sp07x - sp02x;
  sp0207x  = MAX(sp0207gx,0);
 END;
 IF sp07_01xf EQ .M then sp07x=.M;
 If sp02x EQ .M OR sp07x EQ .M then
  sp0207x=.M;
end;
```

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```
*****************************************************************************
```
SP0208x

Meaning:	**Skin prick tests for atopy:**
	Difference between skin prick test reaction to mixed trees and
	skin prick test reaction to negativ control

Derived Variable: sp0208x

Derived from:
sp02x:	Mean of the negative control reaction
sp08_01x:	Mixes trees (max diam)
sp08_02x:	Mixes trees (min diam)
for centre al15	
sp08_01xf:	Mixes trees (max diam (if diam > 3mm))
sp08_02xf:	Mixes trees (min diam (if diam > 3mm))
for centres ec45, nl29	
sp08_01xf:	Mixes trees (mean diam)

Coding:
sp08x:	Mean of the Mixes trees reaction
sp0208tx:	Difference between skin prick test reaction to mixed trees and
	skin prick test reaction to negativ control
sp0208x:	**Difference between skin prick test reaction to mixed trees and skin prick test reaction to negativ control in mm (only positive values)**

SAS-code:

```
IF sp02x NE .M AND sp08_01x NE .M AND sp08_02x NE .M THEN DO;
  sp08x = (sp08_01x + sp08_02x)/2;
  sp0208tx   = sp08x - sp02x;
  sp0208x  = MAX(sp0208tx,0);
 END;
 IF sp08_01x EQ .M OR sp08_02x EQ .M  then
  sp08x =.M;
 If sp02x EQ .M OR sp08x EQ .M then
  sp0208x =.M;
end;


for centre al15
if &centrep eq 15 then do;
IF sp02x NE .M AND sp08_01xf NE .M AND sp08_02xf NE .M THEN DO;
  sp08x = (sp08_01xf + sp08_02xf)/2;
  sp0208tx   = sp08x - sp02x;
  sp0208x  = MAX(sp0208tx,0);
 END;
 IF sp08_01xf EQ .M OR sp08_02xf EQ .M then sp08x =.M;
 If sp02x EQ .M OR sp08x EQ .M then
  sp0208x =.M;
end;


for centres ec45, nl29
if &centrep eq 29 or &centrep eq 45 then do;
IF sp02x NE .M AND sp08_01xf NE .M THEN DO;
 sp08x = sp08_01xf;
 sp0208tx = sp08x - sp02x;
 sp0208x  = MAX(sp0208tx,0);
 END;
 IF sp08_01xf EQ .M then sp08x =.M;
 If sp02x EQ .M OR sp08x EQ .M then
  sp0208x =.M;
end;
```

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```
*************************************************************************
```

SP09x

Meaning: **Skin prick test result for atopy taking into account all allergens (this variable couldn't be created for cn37, cn38 and cn39, as no min. diametre had been recorded).**

Derived Variable: sp09x

Derived from:

	sp0203x:	Difference between skin prick test reaction to D.ptero and skin prick test reaction to negativ control
	sp0204x:	Difference between skin prick test reaction to D.farinae and skin prick test reaction to negativ control
	sp0205x:	Difference between skin prick test reaction to cat and skin prick test reaction to negativ control
	sp0206x:	Difference between skin prick test reaction to Alternaria tenius and skin prick test reaction to negativ control
	sp0207x:	Difference between skin prick test reaction to mixed grasses and skin prick test reaction to negativ control
	sp0208x:	Difference between skin prick test reaction to mixed trees and skin prick test reaction to negativ control
help variable: quad_mean:		Maximum value of sp0203x, sp0204x, sp0205x, sp0206x, sp0207x, sp0208x

Coding: **sp09x:** **value 1 for all children with positive skin prick test (quaddel> 3 mm); value 2 for all children with negativ skin prick test (quaddel< 3 mm);**

SAS-code:

```
quad_mean=max(sp0203x, sp0204x, sp0205x, sp0206x, sp0207x, sp0208x);

 IF quad_mean LT 3 AND (sp0203x EQ .M OR sp0204x EQ .M OR sp0205x EQ .M OR
          sp0206x EQ .M OR sp0207x EQ .M OR sp0208x EQ .M) THEN
          sp09x = .M;
 IF quad_mean LT 3 AND (sp0203x NE .M AND sp0204x NE .M AND sp0205x NE .M AND
          sp0206x NE .M AND sp0207x NE .M AND sp0208x NE .M) THEN
          sp09x = 2;
 IF quad_mean GE 3 then sp09x=1;
```

```
****************************************************************************
```

SP10x

Meaning:	**Skin prick test result for atopy taking into account all allergens (this variable couldn't be created for ec45 und nl29, as no max. diametre had been recorded)**

Derived Variable: sp10x

Derived from:

sp03_01x - sp02_01x: Difference between max. skin prick test raction to D.ptero and max. reaction to negativ control

sp04_01x - sp02_01x Difference between max. skin prick test reaction to D.farinae and max. reaction to negativ control

sp05_01x - sp02_01x Difference between max. skin prick test reaction to cat and max. reaction to negativ control

sp06_01x - sp02_01x Difference between max. skin prick test reaction to Alternaria tenius and max. reaction to negativ control

sp07_01x - sp02_01x: Difference between max. skin prick test reaction to mixed grasses and max. reaction to negativ control

sp08_01x - sp02_01x Difference between max. skin prick test reaction to mixed trees and max. reaction to negativ control

help variable: quad_max: Maximum value of (sp03_01x - sp02_01x) and (sp04_01x - sp02_01x) and (sp05_01x - sp02_01x) and (sp06_01x - sp02_01x) and (sp07_01x - sp02_01x) and (sp08_01x - sp02_01x)

Coding: sp10x: **value 1 for all children with positive skin prick test (quaddel> 3 mm); value 2 for all children with negativ skin prick test (quaddel< 3 mm);**

for centre al15 derived from

sp03_01xf
sp03_02xf
sp04_01xf
sp04_02xf
sp05_01xf
sp05_02xf
sp06_01xf
sp06_02xf
sp07_01xf
sp07_02xf
sp08_01xf
sp08_02xf

SAS-code:

```
if &centrep not in (45, 29, 15) then do;
 sp0203tx = .M;
 sp0204tx = .M;
 sp0205tx = .M;
 sp0206tx = .M;
 sp0207tx = .M;
 sp0208tx = .M;

 if sp02_01x ne .M then do;
         if sp03_01x ne .M then sp0203tx =(sp03_01x - sp02_01x);
        if sp04_01x ne .M then sp0204tx =(sp04_01x - sp02_01x);
        if sp05_01x ne .M then sp0205tx =(sp05_01x - sp02_01x);
        if sp06_01x ne .M then sp0206tx =(sp06_01x - sp02_01x);
        if sp07_01x ne .M then sp0207tx =(sp07_01x - sp02_01x);
        if sp08_01x ne .M then sp0208tx =(sp08_01x - sp02_01x);
 end;

 quad_max=max(sp0203tx, sp0204tx, sp0205tx, sp0206tx, sp0207tx, sp0208tx);
 quad_max= max(quad_max, 0);
 IF quad_max LT 3 AND (sp0203tx EQ .M OR sp0204tx EQ .M OR sp0205tx EQ .M OR
            sp0206tx EQ .M OR sp0207tx EQ .M OR sp0208tx EQ .M) THEN
            sp10x = .M;
 IF quad_max LT 3 AND sp0203tx NE .M AND sp0204tx NE .M AND sp0205tx NE .M AND
            sp0206tx NE .M AND sp0207tx NE .M AND sp0208tx NE .M THEN
            sp10x = 2;
 IF quad_max GE 3 then sp10x=1;
end;
```

<u>For centre al15</u>
```
if &centrep eq 15 then do;
 sp0203tx = .M;
 sp0204tx = .M;
 sp0205tx = .M;
 sp0206tx = .M;
 sp0207tx = .M;
 sp0208tx = .M;

  if sp02_01xf ne .M then do;
   if sp03_01xf ne .M then sp0203tx =(sp03_01xf - sp02_01xf);
        if sp04_01xf ne .M then sp0204tx =(sp04_01xf - sp02_01xf);
        if sp05_01xf ne .M then sp0205tx =(sp05_01xf - sp02_01xf);
        if sp06_01xf ne .M then sp0206tx =(sp06_01xf - sp02_01xf);
        if sp07_01xf ne .M then sp0207tx =(sp07_01xf - sp02_01xf);
        if sp08_01xf ne .M then sp0208tx =(sp08_01xf - sp02_01xf);
 end;

 quad_max=max(sp0203tx, sp0204tx, sp0205tx, sp0206tx, sp0207tx, sp0208tx);
 quad_max= max(quad_max, 0);
 IF quad_max LT 3 AND (sp0203tx EQ .M OR sp0204tx EQ .M OR sp0205tx EQ .M OR
            sp0206tx EQ .M OR sp0207tx EQ .M OR sp0208tx EQ .M) THEN
            sp10x = .M;
 IF quad_max LT 3 AND sp0203tx NE .M AND sp0204tx NE .M AND sp0205tx NE .M AND
            sp0206tx NE .M AND sp0207tx NE .M AND sp0208tx NE .M THEN
            sp10x = 2;
 IF quad_max GE 3 then sp10x=1;
end;
```

BR

`***************************************************************************`

BRFEVDBx

Meaning: Maximal decrease in FEV1 in % of it's baseline
value

`***************************************************************************`

BRP0FEVx

Meaning: Pre-challenge FEV1 (ml) (corrected)

n = FEV1 in ml (e.g. 2300 = 2300 ml)

.M = Missing

`***************************************************************************`

BRWHATx

Meaning: What has been performed?

Derived Variable: BRWHATx
Derived from:

Coding:
0 = Nothing
1 = Only LUFU has been performed
2 = Excercise-Provokation in px48
3 = Basline-value <75% of reference value, this means
 Child has not been provoked
4 = provoked – negative = no BHR
5 = provoked – positive – decrease >=15%
6 = stop due to complaints - see comments 3, 7 = brbhr_cx = 2
7 = stop due to ohter resons (7) - see comments 6 = brbhr_cx=3
8 = stop due to observer (comment=4) (8) - see comments 4, but decrease
<15%
9 = stop due to unknown reasons (9) – no comments,
time of …. <15.5 min, decrease <15%
10 = regular bronchial challenge but in a stratified
subsample no value for WH02 (wheezing);

SAS-Code:

```
      BRWHATx=0;
      IF .M<brp0fevx<9999 OR .M<brexfev<9999 OR  .M<brp0pp<999.9 THEN
BRWHATx=1;
        DO i=1 TO 10;
          IF (.M<brpcx(i)<9 OR .M<brpfx(i)<9999 OR .M<brptx(i)<9.9)
THEN BRWHATx=.; END;
        DO i=1 TO 10;
          IF (.M<brpcx(i)<9 OR .M<brpfx(i)<9999 OR .M<brptx(i)<9.9)
AND brdurx=15.5 THEN BRWHATx=4; END;
        IF brfevdbx>=15 THEN brwhatx=5;
        IF .M<brdurx<15.5 AND brfevdbx<15 THEN brwhatx=9;
      IF brbhr_cx=2 AND brfevdbx<15 THEN brwhatx=6;
      IF brbhr_cx=3 AND brfevdbx<15 THEN brwhatx=7;
      IF brbhr_cx=1 AND brfevdbx<15 THEN brwhatx=8;
      IF (.M<BRP0PP<75 OR .M<BRP0F75<9999) AND brp01fx IN (.M,.,9999)
AND brp02fx in (.M,.,9999)
        THEN BRWHATx=3;
      IF centre=48 THEN brwhatx=2;
        IF i2cdc_id IN
('al150357','al150855','es110659','es120414','es130174','es130191','es
130231',
```

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```
'es130234','es130319','es130338','es130414','es130487','es130513','es1
30529',
'es130624','es130626','es130628','es130642','es130803','es130848','es1
30982',

'es131003','ge460020','ge460021','ge460138','gh400404','gr250194','gr2
50777',

'gr260462','it271239','it271413','it271506','no303348','no303698','px4
81897',

'px482118','px482242','px482259','px482985','px483209','px483432','se3
31018',
                     'tr340066','tr340098','tr342639','uk350358')
THEN brwhatx=10;
     *Sonderfall NL: nach Angaben von Dieneke wurde in NL  die
Provokation schon bei >=14.5
                               abgrebrochen wegen BHR, nach o.g.
Definitino haben die 9 (da keine Comments),
                               werden hier nun auf 8 gesetzt (betrifft
N=35)!!;
        IF centre=29 AND brwhatx=9 AND brfevdbx>=14.5 THEN brwhatx=8;

        *Sonderfall Spainer, der in keine Klasse einsortiert wird, hat
aber Baseline-Lufu-Werte,
                       also BRwhatx=1;
        IF i2cdc_id = 'es120389' AND BRwhatx IN (.,.M) THEN BRwhatx=1;

        IF BRWHATx=. THEN BRWHATx=.M;

       *Sonderfall I: NZ! bei N=23 Kindern steht in brp01t=0.5min
obwohl nicht provoziert wurde (BRWHATX=3)
           Vorgehen: Umsetzen der brp01tx auf 9.9 und der BRDURX auf
.M;
        IF brwhatx=3 and centre=36 and brp01tx=0.5 and brp02tx=9.9
THEN DO; brp01tx=9.9; brdurx=.M; END;

     *Abgeleitete Variablen werden nochmals überprüft, ob überhaupt
sinnvoll in Abhängigkeit von BRWHATx;
        IF brwhatx in (.,.M,0,1,3) THEN DO; brbhr_cx=.M; brbhr_cynx=.M;
END;
     * in der Inhalierten Menge steht manchmal 0, obwohl nicht
provoziert wurde
         oder bei dt. Kinder mit BHR=7 (Abbruch wegen technischer
Gründe) ein richtiger Wert
         Vorgehen: Abgeleitete Variable BRPANX auf .M;
        IF BRWHATx IN (.,.M,0,1,2,3) THEN BRPANx=.M; IF BRPANx=. THEN
BRPANx=.M;

    IF BRWHATx IN (.,.M,0,1,3) THEN BRFEVDBx=.M;
      *????? sollte hier auch Abbruch wegen
techn./gesundheitl./unbekannter Gründe auf .M gesetzt werden???;
    * z.B.   IF BRWHATx IN (.,.M,0,1,3,6,7,8,9,10) THEN BRFEVDBx=.M ;
```

****
BRBHR_yesnox

Meaning: Result of bronchial challange

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Derived Variable: Brbhr_yesnox
Derived from: brp01f-brp10f

Coding: **1 =**

SAS-Code:

```
IF brfevdbx>=15   AND brwhatx=5 THEN BRBHR_yesnox=1;
  IF .M<brfevdbx<15 AND brwhatx=4 THEN brbhr_yesnox=2;
    IF brbhr_yesnox=. THEN brbhr_yesnox=.M;
```

SE

****

SE

Meaning:	**SE was analysed or not**

Derived Variable:	SE	
Derived from:	se01	Total IgE

Coding:	**1 = IgE was analysed**
	2 = IgE was not analysed
	3 = SE-Variables of tr34 and px48 can not be compared to the other centres

SAS-Code:

```
if se01=. then se=2;
 else se=1;
```

****

SELN01x

Meaning:	**Natural logarithm of total IgE**

Derived Variable:	lnse01x	
Derived from:	se01:	Total IgE

Coding:	**lnse01x:**	**Natural logarithm of total IgE**

****

SAS-code:

```
IF se01 NE .A AND se01 NE 0 AND se01 NE .
  THEN lnSe01x=log(se01);
```

****

SE03x

Meaning:	**Spec. IgE (Phadiatop) greater or equal 0.70 kU/l**

Derived Variable:	se03x	
Derived from:	se03:	Class of specific IgE Phadiatop

Coding:	**se03x:**	**Spec. IgE (Phadiatop) greater or equal 0.70 kU/l**

****

SAS-code:

```
IF (SE02 = 2 AND SE03 = . )THEN SE03 = 0;

IF (SE03 = 2 OR SE03 = 3 OR SE03=4 OR SE03=5 OR SE03=6) AND SE03 NE . THEN se03x = 1;
IF (SE03 = 0 OR SE03 = 1)  AND SE03 NE . THEN se03x = 2;
```

SD

****

SD16x (lrdustam2)

Meaning:	Amout of dust (g), living room sample with correction for non-detectable dust amounts (to calculate mean dust amounts of living room samples)
Derived Variable:	sd16x (lrdustam2)
Derived from:	sd16 (lrdustam)
Coding:	**sd16x: Amount of dust with correction**

****

SAS-code:

```
lrdustam2=lrdustam;
if lrdustam < 0.020 and lrdustam ne . then lrdustam2=0.013;
```

****

SD18x (endolrg)

Meaning:	Amouts of endotoxins per gram of living room dust
Derived Variable:	sd18x (endolrg)
Derived from:	sd18 (lreuml)
	sd19 (lrexvol)
	sd16 (lrdustam)
Coding:	**sd18x: Amount per gram of living room dust**

****

SAS-code:

```
endolrg=(lreuml*lrexvol)/lrdustam;
if lrdustam < 0.020 and lrendond=0 then endolrg=.;
if lrendond=-1 then endolrg=324;
```

****

SDLN18x (lendolrg)

Meaning:	Lognormal value of amouts of endotoxins per gram of living room dust
Derived Variable:	sdln18x (lendolrg)
Derived from:	sd18x (endolrg)
Coding:	**sdln18x: Lognormal value of endotoxins per gram of living room dust**

****

SAS-code:

```
lendolrg=log(endolrg);
```

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```
********************************************************************************
```

SD24x (canmatg)

Meaning: Amout of Can f per gram of mattress dust

Derived Variable: sd24x (canmatg)
Derived from: sd24 (canmat)
sd31 (matexvol)
sd30 (matdustam)
sd25 (cannd)

Coding: sd24x: Amout of Can f per gram of mattress dust

```
********************************************************************************
```

SAS-code:

```
canmatg=(canmat*matexvol)/matdustam;
if matdustam < 0.020 then canmatg=.;
if cannd=-1 then canmatg=20;
```

```
********************************************************************************
```

SDLN24x (lcanmatg)

Meaning: Lognormal value of amout of Can f per gram of mattress dust

Derived Variable: sdln24x (lcanmatg)
Derived from: sd24 (canmatg)

Coding: sdln24x: Lognormal value of amout of Can f per gram of mattress dust

```
********************************************************************************
```

SAS-code:
```
lcanmatg=log(canmatg);
```

```
********************************************************************************
```

SD26x (derfmatg)

Meaning: Amout of der f per gram of mattress dust

Derived Variable: sd26x (derfmatg)
Derived from: sd26 (derfmat)
sd31 (matexvol)
sd30 (matdustam)
sd27 (derfnd)

Coding: sd26x: Amount of der f per gram of mattress dust

```
********************************************************************************
```

SAS-code:
```
derfmatg=(derfmat*matexvol)/matdustam;
if matdustam < 0.020 then derfmatg=.;
if derfnd=-1 then derfmatg=12;
```

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****
SDLN26x (lderfmatg)

Meaning: **Logarithm value of amout of der f per gram of mattress dust**

Derived Variable: sdln26x (lderfmatg)
Derived from: sd26x (derftmatg)

Coding: **sdln26x:**   **Lognormal value of amout of der f per gram of mattress dust**

****

SAS-code:
```
lderfmatg=log(derfmatg);
```

****
SD28x (derpmatg)

Meaning: **Amout of der p per gram of mattress dust**

Derived Variable: sd28x (derpmatg)
Derived from: sd28 (derpmat)
                                 sd31 (matexvol)
                                 sd30 (matdustam)
                                 sd29 (derpnd)

Coding: **sd28x:**   **Amout of der p per gram of mattress dust**

****

SAS-code:
```
derpmatg=(derpmat*matexvol)/matdustam;
if matdustam < 0.020 then derpmatg=.;
if derpnd=-1 then derpmatg=20;
```

****
SDLN28x (lderpmatg)

Meaning: **Logarithm value of amout of der p per gram of mattress dust**

Derived Variable: sdln28x (lderpmatg)
Derived from: sd28x (derpmatg)

Coding: **sdln28x:**   **Lognormal value of amout of der p per gram of mattress dust**

****

SAS-code:
```
lderpmatg=log(derpmatg);
```

```
****************************************************************************
```
SD30x (matdustam2)

Meaning: Amout of dust (g) , mattress sample with correction for non-
                                detectable dust amounts

Derived Variable: sd30x (matdustam2)
Derived from: sd30 (matdustam)

Coding: sd30x: **Amount of dust with correction**

```
****************************************************************************
```

SAS-code:

```
matdustam2=matdustam;
if matdustam < 0.020 and matdustam ne . then matdustam2=0.013;
```

```
****************************************************************************
```
SD32x (felmatg)

Meaning: Amout of fel d per gram of mattress dust

Derived Variable: sd32x (felmatg)
Derived from: sd32 (felmat)
                                sd31 (matexvol)
                                sd30 (matdustam)
                                sd33 (felnd)

Coding: sd32x: **Amout of fel d per gram of mattress dust**

```
****************************************************************************
```

SAS-code:

```
felmatg=(felmat*matexvol)/matdustam;
if matdustam < 0.020 then felmatg=.;
if felnd=-1 then felmatg=3;
```

```
****************************************************************************
```
SDLN32x (lfelmatg)

Meaning: Lognormal value of amout of fel d per gram of mattress dust

Derived Variable: sdln32x (lfelmatg)
Derived from: sd32 (felmatg)

Coding: sdln32x: **Lognormal value of amout of fel d per gram of
                                            mattress dust**

```
****************************************************************************
```

SAS-code:

```
lfelmatg=log(felmatg);
```

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FURTHER DERIVED VARIABLES

```
************************************************************
```

WH03xx

How many attacks of wheezing has your child had

in the last 12 months?

0 = None to three
1 = More than three attacks
.M=Missing

Derived from:

WH03x: How many attacks of wheezing has your child had
            in the last 12 months?
            1 = None
            2 = 1 to 3
            3 = 4 to 12
            4 = More than 12
            .M=Missing

SAS - Program:

```
*Attacks of wheezing;
* 0-3 attacks --> 0;
* >3 attacks --> 1;
if wh03x eq 1 or wh03x eq 2 then wh03xx=0;
if wh03x eq 3 or wh03x eq 4 then wh03xx=1;
if wh03x=.M then wh03xx=.M;
```

```
************************************************************
```

WH04xx

In the last 12 months, how often, on average, has your

child's sleep been disturbed due to wheezing?

0 = < 1 one night per week
1 = >=1 night per week
.M = Missing

Derived from:

WH04x: disturbed nights due to wheezing in the last 12 months
            1 = Never woken
            2 = Less than one night per week
            3 = One or more nights per week
            .M=Missing

SAS - Program:

```
*Disturbed night due to wheezing;
```

```
* <1 disturbed night --> 0;
* >=1 night --> 1;
if wh04x eq 1 or wh04x eq 2 then wh04xx=0;
if wh04x eq 3 then wh04xx=1;
if wh04x=.M then wh04xx=.M;
```

```
****************************************************************
```

RH03xx

Has your child suffered from **rhinoconjunctivits** in the past 12 months?

> 0 = No rhinoconjunctivits
> (No sneezing/runny/blocked nose **or** no itchy water eyes)
> 1 = Rhinoconjuncitivitis
> (Sneezing/runny/blocked nose **and** itchy water eyes)
>
> .M = Missing

Derived from:

RH02x: In the past 12 months, has your child had a problem
with sneezing or a runny or blocked nose, when he/she
DID NOT have a cold or the 'flu?
1 = Yes
2 = No
.M=Missing

RH03x In the past 12 months, has this nose problem been

accompanied by itchy-water eyes?

1 = Yes
2 = No

SAS-Program:

```
RH03xx=0;
IF RH02x=1 AND RH03x=1 THEN RH03xx=1;
IF RH02x=.M OR RH03x=.M THEN RH03xx=.M;
```

```
****************************************************************
```

EC03xx

Has your child had symptoms of flexural dermatitis in the **past 12 months**?

> 0 = No symptoms of flexural dermatitis
> 1 = Symptoms of flexural dermatitis
> .M = Missing

Derived from:

EC02x Has your child had this itchy rash at any time in the

past 12 months?

1 = Yes
2 = No
.M = Missing

EC03x Has this itchy rash at any time affected any of the

following places: folds of the elbows, behind the knees,

in front of the ankles, under the buttocks,

or around the neck, ears or eyes?

1 = Yes
2 = No
.M = Missing

SAS-Program:

```
* Symptoms of flexural dermatitis;
ec03xx=0;
if ec02x=1 and ec03x=1 then ec03xx=1;
if ec02x=.M or ec03x=.M then ec03xx=.M;
```

****

EC03xxx

Symptoms of flexural dermatitis and atopy

0 = No symptoms of flexural dermatitis **or** no atopy
1 = Symptoms of flexural dermatitis and atopy

.M = Missing

Derived from:

EC03xx Symptoms of flexural dermatitis in the past 12 months?
0 = No symptoms of flexural dermatitis
1 = Symptoms of flexural dermatitis

.M = Missing

SP09x Skin prick tests for atopy:
value 1 for all children with positive skin prick test (quaddel> 3 mm);
value 2 for all children with negativskin prick test (quaddel< 3 mm);

SAS-Program:

```
ec03xxx=0;*symptoms of flexural dermatitis and no atopy;
if ec03xx = 1 and sp09x=1  then ec03xxx=1;
if ec03xx = .M and sp09x=.M  then ec03xxx=.M;
```

****

EC04xx

Did itchy rash occurr when child was younger than 2 years?
0 = Itchy rash did **not** occure when child was younger than 2 years
1 = Itchy rash occurred first when child was younger than 2 years

Derived from:

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EC02x Has your child had this itchy rash at any time in the

last 12 months?

1 = Yes
2 = No
.M = Missing

EC04x At what age did this itchy rash first occur?

1 = Under 2 years
2 = Age 2-4 years
3 = Age 5 or more

SAS-Program:

```
ec04xx=0;
if ec02x=1 and ec04x=1 then ec04xx=1;
if ec02x=.M or ec04x=.M then ec04xx=.M;
```

****

EC05xx

Itchy rash cleared in the **past 12 months**?

0 = Itchy rash did not clear
1 = Itchy rash cleared in the past 12 months

Derived from:

EC02x Has your child had this itchy rash at any time in the

past 12 months?

1 = Yes
2 = No
.M = Missing

EC05x Has this rash cleared completely at any time during the

last 12 months?

1 = Yes
2 = No
.M = Missing

SAS-Program:

```
*itchy rash cleared past year;
ec05xx=0;
if ec02x=1 and ec05x=1 then ec05xx=1;
if ec02x=.M or ec05x=.M then ec05xx=.M;
```

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****

EC06xx2

Kept awake at night by itchy rash

    0 = Not kept awake or kept awake less than one night per week

    1 = Kept awake one or more nights per week

.M = Missing

Derived from:

EC02x Has your child had this itchy rash at any time in the

last 12 months?

1 = Yes

2 = No

.M = Missing

EC06x2 In the last 12 months, how often, on average, has your

child been kept awake at night by this itchy rash?

1 = Never in the last 12 months,

2 = Less than one night per week

3 = one or more nights per week,

.M = Missing

SAS-Program:

```
ec06xx2=0;
if ec02x=1 and ec06x2=3 then ec06xx2=1;
if ec02x=.M or ec06x2=.M then ec06xx2=.M;
```

    ****

AM06x

Days admitted to hospital because of wheezing or asthma

    1 = One day or more

    0 = None

    .M = Missing

Derived from:

AM06 In the last 12 months, how many times

has your child been admitted to hospital

because of wheezing or asthma?

1 = None

2 = 1

3 = 2

4 = More than 2

.M = Missing

SAS-Program:

```
* Days admitted to hospital because of wheezing or asthma;
* 0 days --> 0
* >=1 --> 1;
if am06=2 or am06=3 or am06=4 then do; AM06x=1;end;
else if am06=1 then do; AM06x=0;end;
else if am06= .M then do; AM06x=.M; end;
```

****

AM09x

Days of school missed because of wheezing or asthma in the last 12 months

0 = None to 5 days

1 = 6 and more days

Derived from:

AM09   In the last 12 months, how many days

(or part days) of school has your child

missed because of wheezing or asthma?

1 = None

2 = 1 to 5

3 = 6 to 10

4 = More than 10

.M = Missing

SAS-Program:
```
* Days of school missed because of asthma;
* 0-5 days --> 0
* 6 and more --> 1;
if am09=1 or am09=2 then do; AM09x=0;end;
else if am09=3 or am09=4 then do; AM09x=1;end;
else if am09=.M then do; AM09x=.M; end;
```

****

RM05x

Days (or part days) of school missed because of hay fever or nose problems in the past

12   months

0 = 0 to five days

1 = 6 days or more
.M = Missing

Derived from:

RM05   In the past 12 months, how many days

(or part days) of school has your child

missed because of hay fever or nose problems?

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1 = None

2 = 1 to 5

3 = 6 to 10

4 = More than 10

.M = Missing

SAS-Program:

```
* Days of school missed because of hay fever or nose problems;
* 0-5 days --> 0
* 6 and more --> 1;
if rm05=1 or rm05=2 then do; RM05x=0;end;
else if rm05=3 or rm05=4 then do; RM05x=1;end;
else if rm05= .M then do; RM05x= .M; end;
```

```
*************************************************************
```

EM04x

Days (or part days) of school missed because of itchy skin rash

0 = 0 to firve days

1 = 6 days or more
.M = Missing

Derived from:

EM04   In the past 12 months, how many days

(or part days) of school has your child

missed because of an itchy skin rash

or eczema?

1 = None

2 = 1 to 5

3 = 6 to 10

4 = More than 10

.M = Missing

SAS-Program:

```
* Days of school missed because of itchy skin rash;
* 0-5 days --> 0
* 6 and more --> 1;
if em04=1 or em04=2 then do; EM04x=0;end;
else if em04=3 or em04=4 then do; EM04x=1;end;
else if em04=.M then do; EM04x=.M; end;
```

```
*************************************************************
```
RF04_02xx

Duration of breast feeding

0 = Less than 6 months

1 = 6 months or more

.M = Missing

Derived from:

RF04_02x   For how long was your child breast fed?

0 = No months
1 = Less than 6 months
2 = 6-12 months,
3 = More than one year

.M = Missing

SAS-Program:

```
* Breast feeding;
* >=6 months --> 0
* < 6 months --> 1;
if RF04_02x in (0,1) then RF04_02xx = 0;
if RF04_02x > 1 and RF04_02x ne .M then RF04_02xx = 1;
if RF04_02x eq .M then RF04_02xx = .M;

*************************************************************
```
RF04_03xx

Breast feeding without adding other food

0 = Less than 2 months

1 = 2 months or more

.M = Missing

Derived from:

RF04_03x   For how long was your child breast fed without

adding other foods or juices?

0 = No months
1 = Less than 2 months
2 = 2-4 months,
3 = 5-6 months
4 = More than as 6 months

.M = Missing

SAS-Program:

```
* Breast feeding without adding other food;
* >=4 months --> 0
* < 4 months --> 1;
```

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```
if RF04_03x in (0,1) then RF04_03xx = 0;
if RF04_03x > 1 and RF04_03x ne .M then RF04_03xx = 1;
if RF04_03x = .M then RF04_03xx = .M;
```

****

RF05_04xxx

Two ore more older siblings?

> 0 = Less than 2 older siblings
>
> 1 = 2 older siblings or more
>
> .M = Missing

Derived from:

RF05_04xx   Number of <u>older</u> siblings (the number is calculated

> even if one of the variables rf05_02x or rf05_03x is missing)
>
> n = Number of older siblings
>
> .M = Missing

SAS-Program:

```
* Siblings;
* Number of siblings;
if rf05_04xx <2  and rf05_04xx ne .M then rf05_04xxx = 0;
if rf05_04xx >=2 and rf05_04xx ne .M then rf05_04xxx = 1;
if rf05_04xx = .M then rf05_04xxx = .M;
```

****

RF07_02xx

How long did your child go to a child care facility or nursery school?

> 0 = More than two years or no child care facility/nursery school
>
> 1 = Less than two years
>
> .M = Missing

Derived from:

RF07_01   Did your child ever go

> to a child care facility or nursery school?
>
> 1 = Yes
>
> 2 = No
>
> .M = Missing

RF07_02x   If yes, from what age? (in <u>years</u>)

> n = Number of <u>years</u>
>
> .A = Not applicable
>
> .M = Missing

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SAS-Program:

```
*Child care facility/nursery school;
* >2 years or Child care facility/nursery school --> 0;
* 0-2 years --> 1;
if rf07_02x =.M and rf07_01 = .M then rf07_02xx = .M;
if rf07_02x in (0,1,2) then rf07_02xx = 1;
if rf07_02x >= 3 and rf07_02x ne .M or rf07_01 = 2 then rf07_02xx = 0;
if rf07_01 eq 1 and rf07_02x = .M then rf07_02xx = .M;
```

****

RF17_02xx

How many cigarettes in total are smoked per day in child's home?

0 = Less than 10 cigarettes

1 = >= 10 cigarettes

.M = Missing

Derived from:

RF17_02x   How many cigarettes in total are smoked per day

in the child's home?

0 = No cigarettes
1 = Less than 10 cigarettes
2 = 10-20 cigarettes,
3 = more than 20 cigarettes

.M = Missing

SAS-Program:

```
*Cigarettes per day;
* <10 cigarettes --> 0
* >=10 cigarettes --> 1;
if rf17_02x in (0,1) then rf17_02xx = 0;
if rf17_02x in (2,3) then rf17_02xx = 1;
if rf17_02x eq .M then rf17_02xx = .M;
```

****

RF29_1ax

How would you describe the surroundings of your child's home at present?

0 = Suburban, with many parks/gardens or rural

1 = Suburban, with few parks/gardens or urban

.M = Missing

Derived from:

RF29_1a   How would you describe the surroundings of your child's home at

present?

1 = Rural, open spaces or fields nearby

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2 = Suburban, with many parks or gardens

3 = Suburban, with few parks or gardens

4 = Urban with no parks or gardens

.M = Missing

SAS-Program:

```
* Surroundings at present;
* Rural, suburban (many parks) --> 0
* Suburban, urban --> 1;
if rf29_1a in (1,2) then rf29_1ax = 0;
if rf29_1a in (3,4) then rf29_1ax = 1;
if rf29_1a eq .M then rf29_1ax = .M;
```

```
**************************************************************
```

RF29_1bx

How would you describe the surroundings of your child's home during

the child's first year of life?

0 = Suburban, with many parks/gardens or rural

1 = Suburban, with few parks/gardens or urban
.M = Missing

Derived from:

RF29_1b   How would you describe the surroundings of your child's home at

present?

1 = Rural, open spaces or fields nearby

2 = Suburban, with many parks or gardens

3 = Suburban, with few parks or gardens

4 = Urban with no parks or gardens

.M = Missing

SAS-Program:

```
* Surroundings at first year;
* Rural, suburban (many parks) --> 0
* Suburban, urban --> 1;
if rf29_1b in (1,2) then rf29_1bx = 0;
if rf29_1b in (3,4) then rf29_1bx = 1;
if rf29_1b eq .M then rf29_1bx = .M;
```

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```
*************************************************************
```

RF32x

Outside school hours, how often does your child

usually exercise so much that he/she gets out of breath or sweats?

      0 = Rarely or never (once a week – less than once a month)

      1 = Frequently (every day – 2-3 times per week)

      .M = Missing

Derived from:

RF32   Outside school hours, how often does your child

       usually exercise so much that he/she

       gets out of breath or sweats?

       1 = Every day

       2 = 4-6 times a week

       3 = 2-3 times a week

       4 = Once a week

       5 = Once a month

       6 = Less than once a month

       .M = Missing

SAS-Program:

```
*Exercise;
* Every day - 2/3 times per week --> 1
* less than 2-3 times per week -->0;
if rf32 in (1,2,3) then rf32x = 1;
if rf32 in (4,5,6) then rf32x = 0;
if rf32 eq .M then rf32x = .M;
```

****

ED01xx

Signs of flexural dermatitis in clinical examination and skin atopy
1 = Signs of flexural dermatitis (in examination) **and** skin atopy
2 = No signs of flexural dermatitis **and** no skin atopy

Derived from:

SP09x   Skin prick tests for atopy:

Difference between skin prick test reaction to all SP-variables
value 1 for all children with positive skin prick test (quaddel> 3 mm);
value 2 for all children with negativskin prick test (quaddel< 3 mm);

ED01x   Has the child flexural dermatitis at any of the

following places: around the eyes, around the sides

or front of the neck, fronts of elbows, behind the knees

or fronts of ankle

1 = Yes
2 = No
.M = Missing

SAS-Program:

```
ed01xx = 0;
if ed01x=1 and sp09x=1 then ed01xx=1;
if ed01x=.M or sp09x=.M then ed01xx=.M;
```

```
***************************************************************
```

SP0203xx

Skin prick test for D. ptero (corrected for negative control)
0 = D. ptero < 3 mm
1 = D. ptero >= 3 mm

Derived from:

SP0203x   Skin prick tests for atopy:

Difference between skin prick test reaction to D.ptero and skin

prick test reaction to negativ control (in mm)

SAS-Program:

```
* Difference between negative control and D. ptero >= 3 mm;
sp0203xx = 0;
if sp0203x ge 3 then sp0203xx = 1;
if sp0203x = .M then sp0203xx = .M;
```

```
***************************************************************
```

SP0204xx

Skin prick test for D. farinae (corrected for negative control) >= 3mm
0 = D. farinae < 3 mm
1 = D. farinae >= 3 mm

Derived from:

SP0204x   Skin prick tests for atopy:

Difference between skin prick test reaction to D.farinae and skin

prick test reaction to negativ control (in mm)

SAS-Program:

```
* Difference between negative control and D.farinae  >= 3 mm;
sp0204xx = 0;
if sp0204x ge 3 then sp0204xx = 1;
if sp0204x = .M then sp0204xx = .M;
```

```
*************************************************************
```

SP0205xx

Skin prick test for cat (corrected for negative control) >= 3mm

0 = Cat < 3 mm
1 = Cat >= 3 mm

Derived from:

SP0205x   Skin prick tests for atopy:

Difference between skin prick test reaction to cat and skin

prick test reaction to negativ control (in mm)

SAS-Program:

```
* Difference between negative control and cat >= 3 mm;
sp0205xx = 0;
if sp0205x ge 3 then sp0205xx = 1;
if sp0205x = .M then sp0205xx = .M;
```

```
*************************************************************
```

SP0206xx

Skin prick test for Alternaria tenius (corrected for negative control) >= 3mm

0 = Alternaria tenius < 3 mm
1 = Alternaria tenius >= 3 mm

Derived from:

SP0206x   Skin prick tests for atopy:

Difference between skin prick test reaction to Alternaria tenius and skin

prick test reaction to negativ control (in mm)

SAS-Program:

```
* Difference between negative control and Alternaria tenius
 >= 3 mm;
sp0206xx = 0;
if sp0206x ge 3 then sp0206xx = 1;
if sp0206x = .M then sp0206xx = .M;
```

```
***************************************************************
```

SP0207xx

Skin prick test for mixed grasses (corrected for negative control) >= 3mm
0 = Mixed grasses < 3 mm
1 = Mixed grasses >= 3 mm

Derived from:

SP0207x   Skin prick tests for atopy:

Difference between skin prick test reaction to mixed grasses and skin

prick test reaction to negativ control (in mm)

SAS-Program:

```
* Difference between negative control and mixed grasses >= 3 mm;
sp0207xx = 0;
if sp0207x ge 3 then sp0207xx = 1;
if sp0207x = .M then sp0207xx = .M;
```

```
***************************************************************
```

SP0208xx

Skin prick test for mixed trees (corrected for negative control) >= 3mm
0 = Mixed trees < 3 mm
1 = Mixed trees >= 3 mm

Derived from:

SP0208x   Skin prick tests for atopy:

Difference between skin prick test reaction to mixed trees and skin

prick test reaction to negativ control (in mm)

SAS-Program:

```
* Difference between negative control and mixed grasses >= 3 mm;
sp0208xx = 0;
if sp0207x ge 3 then sp0208xx = 1;
if sp0207x = .M then sp0208xx = .M;
```

```
*************************************************************
```

SPout

Outdoor allergens (Alternaria tenitus, mixed grasses or mixed trees)
(corrected for negative control) >= 3 mm
> 0 = reaction to alternaria tenitus, mixed grasses and mixed trees < 3 mm
>
> 1 = reaction to alternaria tenitus, mixed grasses or mixed trees >= 3 mm

Derived from:

SP0206x:	Difference between skin prick test reaction to Alternaria tenius and skin prick test reaction to negativ control (in mm)
SP0207x:	Difference between skin prick test reaction to mixed grasses and skin prick test reaction to negativ control (in mm)
SP0208x:	Difference between skin prick test reaction to mixed trees and skin prick test reaction to negativ control (in mm)

SAS-Program:

```
*Outdoor allegens >=3 mm;
spout = 0;
if (max(sp0206x,sp0207x,sp0208x))ge 3 then  spout = 1;
if sp0206x = .M and sp0207x = .M and sp0208x = .M then spout = .M;
```

```
*************************************************************
```

SPin

Outdoor allergens (D. ptero, D. farinae or cat)
(corrected for negative control) >= 3 mm
> 0 = reaction to D. ptero, D. farinae and cat < 3 mm
>
> 1 = reaction to D. ptero, D. farinae or cat >= 3 mm

Derived from:

SP0203x:	Difference between max. skin prick test reaction to D.ptero and max. skin prick test reaction to negativ control
SP0204x:	Difference between max.skin prick test reaction to D.farinae and max. skin prick test reaction to negativ control
SP0205x:	Difference between max. skin prick test reaction to cat and max. skin prick test reaction to negativ control

SAS-Program:

```
*Indoor allegens >=3 mm;
spin = 0;
if (max(sp0203x,sp0204x,sp0205x))ge 3 then  spin = 1;
if sp0203x = .M and sp0204x = .M and sp0205x = .M then spin = .M;
```

```
*************************************************************
```

SD18xx

Amounts of Endotoxin units (living room) per floor area
n = Amount

.M = Missing

Derived from:
SD18   Endotoxin units (EU) per ml, living room sample
n = Endotoxin units per ml

.M = Missing

SD19   Extraction volume (ml), living room sample
n = Extraction volume per ml

.M = Missing

SD04   Sampled surface area, living room in m^2
n = Number of m^2

.M = Missing

SD17   Detectability of living room sample for endotoxins
-1 = Not detectable
0 = Detectable

.M = Missing

SAS-Program:

```
sd18xx = (sd18*sd19)/sd04;
if sd17=-1 then sd18xx=29;
```

```
*************************************************************
```

SDLN18xx

Logarithm of   Amounts of Endotoxin units (living room) per floor area
n = Amount

.M = Missing

Derived from:
SD18xx Amounts of Endotoxin units (living room) per floor area
n = Amount

.M = Missing

SAS-Program:

```
sdln18xx = log (sd18xx);
```

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****

SD24xx

Amounts of Can f I per mattress area (ng/m^2)
     n = Amount

     .M = Missing

Derived from:
    SD24   Can f I (ng) per ml, mattress sample
            n = Amount of Can f in ng per ml

            .M = Missing

    SD31   Extraction volume (ml), mattress sample
            n = Extraction volume

            .M = Missing

    SD08   Sampled surface area of mattress in m^2
            n = Number of m^2 (exact m^2)

            .M = Missing

    SD25   Detectability of mattress sample for Can f I
            -1=not detectable
            0=detectable

            .M = Missing

SAS-Program:

```
sd24xx =  (sd24*sd31)/sd08;
if sd25=-1 then sd24xx=3;
```

****

SDLN24xx

Logarithm of Can f I per mattress area (ng/m^2)
     .M = Missing

Derived from
    SD24xx Amounts of Can f I per mattress area (ng/m^2)
            n = Amount

            .M = Missing

SAS-Program:

```
sdln24xx = log (sd24xx);
```

```
***************************************************************
```

SD26xx

Amounts of Der f I per mattress area (ng/m^2)
n = Amount

.M = Missing

Derived from:
SD26　Amounts of Der f I (ng) per ml, mattress sample
n = Amount

.M = Missing

SD31　Extraction volume (ml), mattress sample
n = Extraction volume

.M = Missing

SD08　Sampled surface area of mattress in m^2
n = Number of m^2 (exact m^2)

.M = Missing

SD27　Detectability of mattress sample for Der f I
-1=not detectable
0=detectable

.M = Missing

SAS-Program:

```
sd26xx=  (sd26*sd31)/sd08;
if sd27= -1 then sd26xx =3;
```

```
***************************************************************
```

SDLN26xx

Logarithm of Der f I per mattress area (ng/m^2)

.M = Missing

Derived from:
SD26xx Amounts of Der f I per mattress area (ng/m^2)
n = Amount

.M = Missing

SAS-Program:

```
sdln26xx = log (sd26xx);
```

```
*************************************************************
```

SD28xx

Amounts of Der p I per mattress area (ng/m^2)
n = Amount

.M = Missing

Derived from:
SD28   Amounts of Der p I (ng) per ml, mattress sample
n = Amount

.M = Missing

SD31   Extraction volume (ml), mattress sample
n = Extraction volume

.M = Missing

SD08   Sampled surface area of mattress in m^2
n = Number of m^2 (exact m^2)

.M = Missing

SD29   Detectability of mattress sample for Der p I
-1=not detectable
0=detectable

.M = Missing

SAS-Program:

```
sd28xx =   (sd28*sd31)/sd08;
if sd29 = -1 then sd28xx=3;
```

```
*************************************************************
```

SDLN28xx

Logarithm of Der p I per mattress area (ng/m^2)

.M = Missing

Derived from:
SD28xx Amounts of Der p I per mattress area (ng/m^2)
n = Amount

.M = Missing

SAS-Program:

```
sdln28xx = log (sd28xx);
```

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```
*************************************************************
```

SD32xx

Amounts of Fel d I per mattress area (ng/m^2)
   n = Amount

   .M = Missing

Derived from:
   SD32   Fel d I per ml, mattress sample
         n = Amount of Fel d in ng per ml

         .M = Missing

   SD31   Extraction volume (ml), mattress sample
         n = Extraction volume

         .M = Missing

   SD08   Sampled surface area of mattress in m^2
         n = Number of m^2 (exact m^2)

         .M = Missing

   SD33   Detectability of mattress sample for Fel d I
         -1=not detectable
         0=detectable

         .M = Missing

SAS-Program:

```
sd32xx=   (sd32*sd31)/sd08;
if sd33=-1 then sd32xx=0.3;
```

```
*************************************************************
```

SDLN32xx

Logarithm of Fel d I per mattress area (ng/m^2)

   .M = Missing

Derived from:
   SD32xx Amounts of Fel d I per mattress area (ng/m^2)
         n = Amount

         .M = Missing

SAS-Program:

```
Sdln32xx = log (sd32xx);
```

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