APPENDIX 2

Induction of asthma – children.

Detailed data entry instructions

(Project IESAST)

IESASST - STUDY DATABASE					
REF					Usually first 6 letters of first author's name (unless study has other well known title). Block caps
Sex, Group					Enter "–" , 1
Study description	DESCR	1			
Study title	TITLE	8	Character	(15)	Usually first author's name, unless study has other well known title. Initial capital only
Full study title	FTITLE	9	Character	(50)	Summarize date/location/nature of population/studytype. Include other specific focus (eg air pollution). If data unknown use 'date submitted-1' as approx. e.g. Bristol schools CS 1996-98 Southern Norway allergy hospital CC (ca 1995?)
Study sex	sSEX	10	Graded	(system 15)	
	1 (b) both				
	2 (m) male				
	3 (f) female				
Lowest age in study	sAGELO	58	Measured	(0 to 18)	Refers to study as designed
Highest age in study (at baseline)	sAGEHI	59	Measured	(0 to 21)	Upper limit of interest is 18, but study can be allowed if overlaps this slightly
Highest age in study at final followup	sAGEHF	60	Measured	(0 to 25)	Enter "–" for CC or CS. Refers to study as designed
Study race	sRACE	11	Graded	(system 16)	Refers to study as designed.
	1 (a) all (in study area)				
	2 (w) whites (inc hispanic)				
	3 (b)) blacks				
	4 (4) whites and blacks				
	5 (5) whites excluding hispanics				
	6 (c) chinese				
	7 (j) japanese				
Continent	CONT	12	Graded	(system 17)	This GS should be sufficient, but may need to review for multicountry studies
	1 (1) NAmerica				
	2 (2)SCAmerica				include Caribbean
	3 (3)WEurope/Scandinavia				
	4 (4)EEurope/Balkans				include former communist block, Greece, Turkey
	5 (5)Asia				include Middle East
	6 (6)Australasia				
	7 (7)Africa				
Country in N America	NAMER	14	Graded	(system 18)	This GS should be sufficient. Enter "–" if CONT not NAmer
	1 (1) USA				
	2 (2) Canada				
	3 (3) USA and Canada				

US state	USSTAT	15	Graded	(system 19)	This GS should be sufficient. Enter "–" if NAMER not 1 or 3
	1 (1) all				
	2 (2) Cal,Wash,Oreg				
	3 (3) Mont,Id,Wyo				
	4 (4) Nev,Ut,Ariz				
	5 (5) Colo,NMex				
	6 (6) NDak,SDak,Neb				
	7 (7) Kan,Okla				
	8 (8) Tex				
	9 (9) Minn,Ia,Wis,Ill,Mo				
	10 (t) Ark,Miss,La,Al				
	11 (a) Mich,Ind,Oh,Tenn				
	12 (b) Fla,Ga,SC,NC				
	13 (c) Pa,NJ,Md,WVa,Va,Del,WashDC				
	14 (d) Vt,Me,NY,NH,Mass,RI,Conn				
	15 (e) Ak				
	16 (f) Hi				
	17 (g) multi (not all)				
Country in S/C America	SCAMER	16	Graded>0	(system 21)	Extend GS as necessary. Enter "–" if CONT not 2
	1 (1) Costa Rica				
	2 (2) Brazil				
	3 (3) Mexico				
Country in W Europe	WEUR	17	Graded	(system 22)	This GS should be sufficient. Enter "–" if CONT not 3
	1 (1) UK				
	2 (2) Ireland				
	3 (3) Denmark				
	4 (4) Norway				
	5 (5) Sweden				
	6 (6) Finland				
	7 (7) ~~Iceland~~				
	8 (8) Spain				
	9 (9) ~~Portugal~~				
	10 (t) France				
	11 (a) ~~Belgium~~				
	12 (b) Netherlands				
	13 (c) ~~Luxembourg~~				
	14 (d) Switzerland				
	15 (e) Germany		includes E, W and unified		
	16 (f) Austria				
	17 (g) Italy				
	18 (h) Malta				
	19 (i) ~~Multi~~				

Country in E Europe/Balkans	EEUR	18	Graded	(system 23)	Extend GS as necessary. Enter "–" if CONT not 4
	1 (1) ~~Czechoslovakia etc~~		include successor republics		
	2 (2) ~~Greece~~				
	3 (3) ~~Hungary~~				
	4 (4) Poland				
	5 (5) Turkey				
	6 (6) Russia				
Country in Asia	ASIA	20	Graded	(system 25)	Extend GS as necessary. Enter "–" if CONT not 5
	1 (1) Japan				
	2 (2) China				
	3 (3) HongKong				
	4 (4) Malaysia				
	5 (5) India				
	6 (6) Nepal				
	7 (7) Saudi Arabia				
	8 (8) UAE				
	9 (9) Taiwan				
	10 (t) Israel				
	11 (a) Sri Lanka				
	12 (c) Korea				
Country in Australasia	AUSLIA	21	Graded	(system 27)	Extend GS as necessary. Enter "–" if CONT not 6
	1 (1) Australia				
	2 (2) New Zealand				
	3 (3) Fiji				
Country in Africa	AFRICA	22	Graded	(system 31)	Extend GS as necessary. Enter "–" if CONT not 7
	1 (1) Ghana				
	2 (2) Kenya				
	3 (3) Nigeria				
	4 (4) South Africa				
Location within country	LOCAT	61	Character	50	
Start year of study	BEGYR	23	Measured	(1900 to 2002)	
End year of study	ENDYR	24	Measured	(1900 to 2002)	End of baseline (i.e. recruitment) if Prosp (includes Longitudinal)
Final follow up year	FINFYR	25	Measured	(1900 to 2002)	Enter "–" for CC or CS
Principal publication year	PUBYR	26	Measured	(1900 to 2002)	
Reference ID of principal publication	REFID	27	Character	(12)	Block caps
Reference ID of additional publication(s)	ADDREF	48	Character	(50)	Block caps, comma and space separator. If not enough room, continue with thrown comment. Enter "–" if none.
Overlap	OVERL	57	Graded>0	(system 48)	Extend grading system as necessary (add a level for each set of overlapping studies)
	1 (1) none				
Principal/subsidiary	PRINC	99	Graded>0		

	1 principal				use this level for non-overlapping studies
	2 subsidiary				
REF group	REFGP	127	Character	6	Ref of principal study in overlap group (i.e. same as REF except for subsidiary studies)
Phase of study	PHASE		Graded >0		Added 3.11.05 when adding a new batch of studies to the project Intended to allow original analyses to be reproduced if required by adding FOR PHASE 1. Note, if new papers being added change overlap groups or principal study allocation, it may become necessary to add separate copies of PRINC and REFGP fields.
	1 original				
	2 modified Nov 05				
	3 added Nov05				
Comment					Notes on alternatives/duplicates at study level, and why this one chosen. Also notes on overlap
Study design	DESIGN	2			
Study type	STYPE	33	Graded	(system 28)	
	1 (c) case/control		Includes if cases identified by an initial cross-sectional study		
	2 (p) prospective		Includes longitudinal/repeat interviews (of same subjects)		
	3 (x) cross sectional		Includes if only one wave of longitudinal, or only baseline of prospective is actually used. Includes repeated cross-sectional studies at school where same pupils not re-included		
Type of controls (for CC studies)	CONTRL	34	Graded	(system 29)	Enter "–" for P, CS
	1 (1) healthy				
	2 (2) diseased/hospital				
Control diseases/cause of death	CONDIS	35	Character	(50)	Enter "–" unless CONTRL is 2
Type of population	POPUL	36	Graded	(system 42)	Use this to describe eligibility to join study, for CC studies describe cases only. Refers to children within defined study area/age group etc Extend GS as necessary to describe major study **inclusion** criteria (e.g. high allergy risk, athletes) but not for minor exclusion categories (use MEDEXC and OTHEXC to decribe them)
	1 (1) all children				
	2 (2) randomly selected children				
	3 (3) all schoolchildren				
	4 (4) random schoolchildren i.e. randomly selected children from all/random schools, or all children from randomly selected schools				
	5 (5) all in given school(s) i.e. schools not randomly selected				
	6 (6) random in given school(s) i.e. children selected randomly but from non-randomly selected schools				
	7-10 – as 3-6 except for hospital/clinic (both in-and out-patient)				
	11-14 – as 3-6 except GP/primary care unit				
	15 (f) schoolchildren NOS				
	16 (g) primary care NOS				
	17 (h) all children with high allergy risk at given hospital(s)				
	18 (i) families of all newborn infants delivered at given hospital(s)				
	19 (j) random athletes from given school(s)				
	20 (k) all schoolchildren living on farms				
	21 (l) all children receiving primary care at hospital clinic and born at the same hospital				
	22 (m) all preterm infants born at given hospital(s)				
	23 (n) all children from randomly selected households				
	24 (o) all newborn infants at given hospital(s)				

	25 (p) all twins still resident in country of birth				
	26 (q) all children attending routine preschool health check				
	27 (r) random newborn infants at given hospital(s)				
	28 (s) all children from all families with at least one asthma patient				
	29 (t) all travellers' children and all at given school				
	30 (u) unspecified				
	31 (v) random newborns at high risk of SIDS				
	32 (w) hospital NOS				
	33 (x) all at given GP/primary care unit with high allergy risk /cont				
	34 (y) all children of random parent from National Child Development Study				
	35 (z) all children hospitalized for bronchiolitis at given hospital + population controls				
Medical exclusions	MEDEXC	91	Character	50	Include both child's and family medical history. Enter 0 if no exclusions. Describe **ex**clusions; if a major inclusion criteria has already been mentioned in POPUL, repeat this preceded by "restricted to..." No need to mention exclusion of baseline asthma from "onset" analyses, but if this has not been done then must mention in RRDEF comment
Other exclusions	OTHEXC	92	Character	50	Enter 0 if no exclusions. Describe **ex**clusions - if a major inclusion criteria has already been mentioned in POPUL, repeat this preceded by "restricted to..." No need to mention exclusion due to missing data, failure to trace etc, or active smoking by child (use CHISMO for that)
Type of population - controls (if different from cases	POPCON	72	Graded	system 50	Enter "-" if prosp or CS. Enter 0 for CC if controls are same as cases apart from as already defined (e.g. healthy controls). No need to mention if cases are 'all' but controls are randomly selected.
	1 without chest/resp symptoms				
	2 all at given school(s)				
	3 no siblings with allergic disorders				
	4 all newborns				
	5 no atopy				
	6 random children from hospital catchment area				
	7 random at given school(s) and with no respiratory symptoms				
	8 no respiratory symptoms or history of asthma				
	9 no signs of sensitization				
	10 random children from hospital catchment area with no history asthma				
	11 random schoolchildren not taking asthma medication				
	12 no history recurrent wheeze				
	13 no TB or congenital chest/heart problems				
	14 no history asthma				

Respondent	RESPON	38	Graded	(system 44)	Refers to provider of information on smoking information/ETS exposure. Extend GS as necessary. Parent includes primary care giver/guardian
	1 (c) Child				
	2 (p) Parent				
	3 (m) Medical records				
	4 (4) Parent and child				i.e. both (includes if parents answered main questionnaire and children were separately asked about their own active smoking)
	5 (u) Unspecified (parent/child)				i.e. questionnaire but not stated who completed it
	6 (h) Household member				ie may be someone other than parent/primary care giver/guardian
	7 Accompanying adult				e.g. at an ER clinic
	8 Parent or child depending on age				children above given age self-reported instead of parent (give age in comment)
Child smokes	CHISMO	63	Graded	(system 49)	Refers to treatment in the study design of active smoking by the child. If different results available for more than one definition, choose one only (in this order of preference), but do not enter results restricted to children who smoke. See also OTHRES/OTHCSM below. Extend GS as necessary
	1 Not mentioned				
	2 Smokers excluded biochemically				(see also level 11)
	3 Smokers excluded (questionnaire)				
	4 Smokers excluded (unspecified)				
	5 Smokers included but known to be few (by questionnaire or biochemically)				
	6 Smokers included, and child smoking adjusted for				
	7 No smokers found (by questionnaire or biochemically) (but see also level 12)				
	8 Assumed to be no smokers (i.e. original authors say they made this assumption)				
	9 Smokers included (but see also levels 14-15)				
	10 (not used)				
	11 Smokers above given age excluded, below assumed to be non-smokers (give age in comment)				
	12 No smokers found above given age, below assumed to be non-smokers (give age in comment)				
	13 Discussed but no data available (i.e. smokers (if any) included in analysis)				
	14 Smokers included, because active smoking was tested in univariate analysis and found not significant				
	15 Smokers included, because active smoking was rejected from MLR due to lack of significance				
	16 Biochemical exclusion discussed but not used				
	17 No mention in analysis but was asked in questionnaire				
	18 No smokers NOS (i.e. don't know if they were excluded or there were none found)				

Standard questionnaire used	QUEST	125	Graded	system 54	Refers to questionnaire for respiratory symptoms
	1 Non std/NA/NK		Use this when not one of the standard published questionnaires. Includes if questionnaire used was taken from another study. Includes when based on medical records/diagnosis.		
	2 ISAAC				Include if questionnaire was 'based on' or 'modified version of'
	3 ATS/NHLI/ESP		(Ferris)		
	4 MRC				
	5 IUATLD				
	8 WHO		(Florey & Leeder)		
	9 ICHPPC				
Comment					Other important design features or comments on data entered in DESCR or DESIGN. No need to particularly mention study weaknesses
Asthma	ASTHMA				
Lifetime asthma available	LIFAST	103	presence		Include if near-equivalent available, or if timing is unspecified. Include incident asthma from prospective studies. If different results available for more than one source, or more than one timing, or more than one disease definition, choose one only, and record availability of other in OTHRES/OTHAST. As new definitions found, extend 'rules' below.
Source of lifetime asthma diagnosis	DIAGLS	104	Graded	(system 43)	see note on LIFAST. Enter "-" if LIFAST 0.
	1 (1) Medical records				"medical records" includes diagnosis for current admission/visit in hospital/GP study, or current test (e.g. FEV or exercise challenge). "parent" includes primary care giver/guardian. "mixed" includes if physician ever diagnosed but symptoms are parent report.
	2 (2) Parent report (physician diag)				
	3 (3) Parent report (other/unspec/mixed)				
	4 (4) Child report (physician diag)				
	5 (5) Child report (other/unspec/mixed)				
	6 (6) Medical records or parent report (physician diag)				
	7 (7) Parent or child report (physician diag)				
	8 (8) Parent or child report (other/unspec/mixed)				
	9 (9) Unspecified				
	10 (a) Medical records or parent report (other/unspec/mixed)				

Timing of lifetime asthma	TIMLAS	105	graded>0	system 52	see note on LIFAST. Enter "-" if LIFAST 0. Extend GS as necessary
	1 Lifetime				
	2 NA (incidence only)				Use this for prospective study which has only onset RRs in RRDB
	3 from age 1				
	4 unspecified				
	5 from age 2				
	6 from age 3				
	7 up to baseline				
Timing of incident asthma (onset analyses from prospective studies)	INCAST	126	graded>0	system 52	Enter "-" if LIFAST 0.
	1 since baseline (earlier excl)				enrolment is at age >0 and pre-existing cases excluded
	2 lifetime (recruit at birth)				
	3 lifetime (retrospective)				enrolment is at age >0 and pre-existing cases included using age at onset
	4 NA (only prevalence analysis)				use this for any study which does not have any onset RRs in RRDB
Description of lifetime asthma	DESLAS	106	Character	(50)	usually no need to mention timing or source. Enter "-" if LIFAST 0.
Current asthma available	CURAST	107	Presence		Same notes as LIFAST (except use LIFAST if timing unspecified)
Current asthma is first occurrence	FIRAST	108	Presence		Enter "-" if CURAST 0.
Repeat measures for current asthma	REPCAS	109	Presence		Enter "-" if CURAST 0.
Source of current asthma diagnosis	DIAGCS	110	Graded	(system 43)	see note on LIFAST. Enter "-" if CURAST 0.
	levels same as for DIAGLS				see notes on DIAGLS
Timing of current asthma	TIMCAS	111	graded>0	system 53	see note on LIFAST. Enter "-" if CURAST 0. Extend GS as necessary
	1 Current diagnosis				
	2 in last n months (n <6)				
	3 in last n months (6<=n<12)				
	4 in last n months (12<=n<24)				
	5 in last n years (2<=n<5)				
	6 current NOS				
	7 ~~Since baseline~~				
Description of current asthma	DESCAS	112	Character	(50)	usually no need to mention timing or source. Enter "-" if CURAST 0.
Number of lifetime asthma cases	NLAST	113	Measured	(1 to 32765)	If possible, number actually in analysis Enter "-" if type not available
Number of current asthma cases	NCAST	114	Measured	(1 to 32765)	
Total number of subjects	NTOT	115	Measured	(1 to 32765)	If possible, number actually in analysis
Comment					Other important features of definition of asthma or of numbers 12=number of cases based on %

Matching factors	MATCH	5			
Cases and controls matched on sex	MATSEX	76	Presence	(system 6)	Enter "–" for CS and prosp
Cases and controls matched on age	MATAGE	77	Presence	(system 6)	
Cases and controls matched on race	MATRAC	78	Presence	(system 6)	
matched on location	MATLOC	79			
matched on SES	MATSES	80			
matched on hospital (ward/date of admission)	MATHOS				
					Add extra fields as necessary for other matching factors, and back fill. (No need to change validation cmd files)
Confounders considered	CONFND	4			Refers to variables used in adjustment, and to matching factors if used in matched analysis ("conditional logistic regression" means it is matched)
Total number of adjustment factors used	TOTCO	44	Measured	(0 to 99)	
Results presented adjusted for sex	COSEX	45	Presence	(system 6)	Enter 0 for single sex study, and for both sex study if only single sex results
age	COAGE	46	Measured	(0 to 10)	
race	CORACE	47	Measured	(0 to 10)	does not include nationality
location	COLOC	65			to include urban/rural, and districts chosen on basis of air pollution, dust etc
type of respondent	CORESP	83			
interview setting	COIVST	86			
year of diagnosis	COYRDG	121			
family medical history	COFMED	66			to include parents and siblings
parent's age	COPAGE	93			
SES	COSES	67			to include parental education
Household composition	COHOCO	68			to include number of children, household size, single parent, number of siblings, position in sibship (birth order)
day care	CODAYC	95			
Air conditioning	COAIRC	69			to include dehumidifier, air cleaner. Ventilation/draft proofing (added Nov05)
Cooking/heating	COCOHE	90			to include burning of incense or mosquito coils
damp/mould	CODAMP	94			
Housing quality	COHOUS	117			to include housing quality, age, size, crowding, own/shared bedroom, own/rent
Pets	COPETS	88			to include close contact with animals (incl farm animals)
Exposure to food/housedust allergens	COALGN	89			to include presence of carpets, type of bedding, washing of bedding, houseplants. Roaches (added Nov05)
Farming	COFARM	96			to include family's occupation, child's participation (but see also PETS)
Religion	CORELI	97			
Mobility	COMOB	120			to include born in different town/country from currently(parent or child), moved house, nationality, time of residence at current address, language spoken at home
Child's medical history/symptoms	COCMED	87			to include breastfeeding, nutrition/diet, SPT results
obesity/BMI	COOBES	70			

exercise	COEXER	122			
diet/alcohol	CODIET	123			
child's active smoking	COCHSM	71			
maternal smoking in pregnancy	COMSMP	84			
parental smoking	COPSMC	85			to include current/since birth
household smoking	COHSM	118			
Other ETS	COOETS	142			
Other confouders considered but rejected	COREJE	119	Presence		i.e. found to be non-significant in stepwise MLR or similar and therefore not actually used in any final model; or formally tested (e.g. univariate) and therefore not entered into MLR. Use comment to list the rejected fields
Comment					Include rejected fields
Other results (not current db)	OTHRES	5			Other information in the paper but not currently being entered
Other definitions of asthma available	OTHAST	53	Presence	(system 6)	i.e. other definition which would qualify for the study (i.e. asthma qualifies, but we have chosen another qualifying, or this one does not qualify because it is past asthma, exacerbation or other reason)
Results for wheezing or wheezy bronchitis also available	WHEEZE	54	Presence	(system 6)	includes "asthma or wheezy bronchitis", "asthmatic bronchitis"
Other exposures available	OTHEXP	55	Presence	(system 6)	Refers only to smoking exposures (e.g. during travel)
Other results for "child smoker" available	OTHCSM	64	Presence	(system 6)	Refers to results using different treatment of active smoking by the child (including results restricted to active smoking children – see also DESIGN/CHISMO above)
Results stratified by other factors, or for particular subset also available	OTHSTR	82	Presence		
Comment					More details of what is available, using thrown comment to relevant field
Derived 1	DER1				No need to enter, done by validcmd\SDER1.cmd

IESAST Experiment :	RRDB				
REF, SEX, GROUP - as in studydb					
ADTOT (STI variable)			No need to enter, is calculated by RRVALID		
RR Description	RRDEF	1	NB - do not enter * (missing) for any field in this card		
Number of RR within study	NRR	8	Measured+v	(1 to 440)	must be unique, must have a number 1
Sex	RSEX	9	Graded>0	(system 36)	
	1 (b) both				
	2 (m) male				
	3 (f) female				
Lowest age in RR	rAGELO	10	Measured	(0 to 99)	enter 99 if whole study
Highest age in RR	rAGEHI	11	Measured	(0 to 99)	
Race	rRACE	12	Graded	(system 15)	enter 0 if whole study. Extend GS as necessary
	1 (1) NOT USED				
	2 (w) white				
	3 (b) black				
	4 (4) white exc hispanic				
	5 (5) hispanic white				
	8 (8) white + black				
	9 (9) jewish				
	10 (t) arab				
Asthma time	rASTIM	58	graded >0	system 38	
	1 (l) lifetime			Do not extend - refers to the two possible definitions in STUDYDB/ASTHMA card	
	2 (c) current				
Onset - analysis type	ONSET	59	presence	This variable is used in %RR and in set META2 to determine correct calculation of variance, enter 0 for ● any analysis of CC study, ● prevalence analysis of a CS (O.R.), ● repeat measure of prevalence in a prospective, or enter 1 for onset in a prospective study. Onset implies "at risk" refers to baseline numbers, Relative Risk rather than Odds Ratio.	
Odds Ratio used for Onset	ODDSON	62	presence	Enter '-' if ONSET=0. Enter 0 if result is a relative risk (including if calculated from baseline numbers at risk). Enter 1 if relative risk not available so Odds Ratio entered instead (usually from Multiple Logistic Regression)	
Exposure type	EXPOS	40	Graded>0	(system 29)	If any others found (e.g. Not home) do not enter them, but record their existence in STUDYDB-OTHRES.
	1 (p) Parents			Refers to Active smoking by parent - give details in WHOPAR and WHESMO. Use this even if smoking is limited to parents smoking at home - no need to mention this. NB if it is a factorial combination of mother in pregnancy Hmother current/since birth, use EXPOS=6 in preference to using WHESMO and UNEXTI with EXPOS=1		

	2 (2) Parents - ETS			Refers to ETS exposure of non-smoking parent only - give details in WHOPAR and WHESMO (If not restricted to non-smokers do not enter, but mention in OTHRES)	
	3 (h) Household			Refers to active smoking by household members (+/-parents but not parents only), or to general ETS exposure (to child) at home. No need to mention if smoking by household members is limited to in house/in presence of child Give details in WHOHOU and WHESMO	
	4 (t) Total			Refers to questionnaire-based or other "total" involving exposure outside the home (but not to biochemically measured even though that is total too). Also to "passive smoking" if there is no other description Give details in WHOTOT and WHESMO If various locations available, choose only the most combined, others to be noted in OTHRES.	
	5 (b) Biochemical			Give details in BIOMEA and BIOMAR	
	6 in utero H parent			Use these for factorial combinations where base is "neither exposure" Use other fields as specified above (under levels 1,3,4,5) to describe the second exposure in the usual way (these will have the same values for all, even for the combination which does not have the second exposure), and see FCOMB for how to specify combination.. Consult PNL if we find other factorial combinations	
	7 in utero H household				
	8 ~~in utero H total~~				
	9 in utero H biochem				
Parents - who smoked (or who exposed [EXPOS=2])	WHOPAR	36	Graded	(system 25)	Enter "–" if expos not parent or parent ETS. 7 levels entered, should be all that are ever needed so do not extend GS See also rules (below) about what extras to construct
	1 (1) Mum (and not dad)				
	2 (2) Mum (dad unspecified)				
	3 (3) Dad (and not mum)				
	4 (4) Dad (mum unspecified)				
	5 (5) Parents (both)				
	6 (6) Parents (unspecified) (i.e. Mum and/or Dad)				
	7 (7) Mum or Dad (not both)				
Household - who smoked	WHOHOU	41	Graded>0	(system 30)	Enter "–" if expos not household. Extend GS as necessary to allow for whatever persons/combinations are found. Construct "all" if possible, but do not construct any other combinations - will decide at the end which ones should be done. Relationship refers to the child.
	1 (a) all			no need to mention whether visitors included or only residents	
	2 (2) other than parents (+/- parents)			ie any household member other than parents (irrespective of parents' smoking)	
	3 (s) siblings				
	4 (g) grandparents				
	5 (5) other than mother (+/- mother)			ie any household member other than mother (irrespective of mother's smoking)	
	6 (6) other than parents (-parents)			ie any household member other than parents (and neither parent smokes)	
	7 (7) other than mother (-mother)			ie any household member other than mother (and mother does not smoke)	
	8 (8) grandfather				
Total - who smoked	WHOTOT	42	Graded>0	(system 31)	Enter "–" if expos not total. Extend GS as necessary
	1 (1) total (unspecified)				

	2 (2) ~~home and leisure~~				
	3 (3) home and peers				
	4 (4) home and daycare				
Exposure - when smoked	WHESMO	37	Graded	(system 26)	Extend GS as necessary Enter "–" for expos = biochemical
	1 (1) Pre conception				
	2 (p) During pregnancy				
	3 (3) Since birth			i.e. in child's lifetime	
	4 (4) ~~Before birth (1and/or 2)~~			(not actually used)	
	5 (5) After conception (2 and/or 3)				
	6 (e) Ever (1and/or 2 and/or 3)				
	7 (u) Unspecified				
	8 (c) Current			includes "in last year"	
	9 (x) Ex			e.g. parent is an ex-smoker	
	10 (a) ~~Last 5 years~~			(not actually used)	
	11 (a) Age <3				
	12 (2) Ever up to 1 yr ago				
	13 (d) Age <2				
	14 (6) Age <1				
	15 (f) at time of birth/ up to 1 month				
	16 (g) since birth but not current				
	17 (h) Age <7				
	18 (i) ever but not during pregnancy				
	19 (j) Age <6 months				
	20 (k) at age 18 months				
	21 (l) since conception but not current				
	22 (m) Age 13-15				
	23 (n) Age <6 years				
	24 (o) Age <5				
	25 (q) Age 9-16				
	26 (r)				
	27 (s) at age 2				
Biochemical measure - where taken from	BIOMEA	39	Graded	(system 28)	Enter "–" if expos not biochemical. Extend GS as necessary (levels for multiple sources may be needed)
	1 (1) saliva				
	2 (2) blood			to include serum, plasma	
	3 (3) ~~exhaled air~~				
	4 (4) urine				
	5 (5) hair				

Biochemical marker	BIOMAR	43	Graded>0	(system 32)	Enter "–" if expos not biochem. Extend GS as necessary
	1 (1) cotinine				
	2 (2) ~~thiocyanate~~			(not actually used)	
	3 (3) ~~CO~~			(not actually used)	
	4 (4) ~~COHb~~			(not actually used)	
	5 (5) ~~Nicotine~~			(not actually used)	
	6 (6) cotinine/creatinine ratio				
Dose response	DOSER	44	Graded >0	(System 35)	For dose-response categories, number sequentially starting from 2.
	1 (1) all			i.e. it is <u>not</u> part of a dose-response	
	2 (2) level 1 ... 10 (a) level 9			For dose-response categories, number sequentially starting from 2.	
	11 (b) per unit dose regression				
	12 (c) dose response other				
	13 (d) dose response partila			use this if high vs none (with no info about middle available)	
Measure of exposure	MEASEX	51	Graded>0	(system 33)	Must enter a value if it has a "low" unexposed, or is part of a dose-response sequence or model, otherwise enter 1 Extend GS as necessary
	1 (1) yes/no				includes smoker/nonsmoker
	2 (n) cigarettes/day				
	3 (y) ~~years~~				(not actually used)
	4 (4) ~~pack-years~~				(not actually used)
	5 (m) minutes/day				
	6 (l) level (semi-quantitative)				Use level 6 if just says e.g. low/med/high. Also if it is a scheme based on more than one biochemical measure
	7 (p) persons				Use this for number of persons in household, not for number of parents (see also rules below)
	8 (8) ng/ml				
	9 (9) mmol/l				
	10 (a) cigarettes/day (smkr only)				see rules (below) on dose response
	11 (b) ng/mg				
	12 (c) ng/ml/mg				
	13 (d) days/month				also use this if originally for days/week
Exposed - low value	EXPLO	52	Real	(0.00 to 999.00)	Enter "–" if DOSER is 1 or b or c, or if FCOMB is 10 or 20 etc. Within the dose-response sequence, enter RRs in ascending order. Enter each level vs lowest level. See also rules below about combining. Use units as described in MEASEX Within each set, levels must be non-overlapping (i.e. must have $HI_{i+1} > LO_i$) but can have $HI_i = LO_i$, Enter HI = 999 for open-ended. Enter both as successive integers if MEASEX is 6 and put details in comment
Exposed - high value	EXPHI	53	Real	(0.00 to 999.00)	

Unexposed - time	UNEXTI	54	Graded	(system 27)	Enter "-" if expos is bio
	1 (1) non			i.e. not at the time defined by WHESMO, but do not use with 'ever'	
	2 (2) never			i.e. in the conventional sense from current/ex/never smokers. Refers to the smoker's lifetime, unrelated to the child's lifetime	
	3 (3) non+other			i.e. not at the time defined by WHESMO, and other times are also excluded (but not so much excluded as to qualify as never). Requires explanation in comment.	
Unexposed - source	UNEXSO	55	Graded	(system 37)	Use the lowest relevant level (e.g. if WHOPAR=both, then use 4 not 5, because they mean the same)
	1 (1) none (or low)			use this level if expos=total or biochem; do not use it for parent/household exposure unless exposure outside the home has also been excluded	
	2 (2) none in household			i.e. no household member smokes	
	3 (3) not specified household member			i.e. person(s) specified in WHOHOU do not smoke (but use 2 instead if WHOHOU=all)	
	4 (4) neither parent			i.e. no parent smokes	
	5 (5) not specified parent			i.e. person specified in WHOPAR does not smoke (but use 4 instead if WHOPAR=5 or 6)	
Unexposed - high value	UNEXHI	57	Real	(0.00 to 100.00)	Enter "–" if MEASEX =1 or if DOSER =b or c
Factorial combination	FCOMB	60	Graded >0 (system 39)	Enter "-" if EXPOS <6 For factorial combination, first digit represents first exposure (e.g. in utero), second digit represents second exposure (e.g. household), with 0=unexposed and 1=exposed . Thus for a 2H2 combination, enter 0-1 (i.e. 1) for not in utero but in hh; 1-0 for in utero not in hh, 1-1 for both.. (The base would be 00 although this doesn't actually get entered). Enter each of the three levels of the 2H2 vs base, do main combinations (first exposure ignoring second, first adjusting for second and vice versa), but do not do other combinations. If the second exposure is "mother smoked since birth/currently", then also enter the combination of all exposed vs base, as parental exposure (EXPOS=1) since conception. If the second exposure is a dose-response, collapse into a 2H2 and enter as above, and also enter as dose-response with the second digit numbering sequentially starting at 2, each level vs base, EXPLO and EXPHI will vary. [Only case where this occurred was study NHANE3 with doser d - decided to enter explo and exphi for FCOMB level '1-0' (even though refers to the second exposure so not really relevant). May need to change this decision, and amend validation. BAF 4.1.06]		
Source	SOURCE	46	character	50	Table number, page number, REFID. For an adjusted RR, no need to give source of numbers of cases if these have already been used in an unadjusted
Comment				Any further information refining RR definition. Include if there is an upper limit on a biochemical exposure. Include lower limit if it is a highest vs lowest comparison (but not part of a dose-response because mid-levels not available)	

RR Adjustment	RRADJ	3	NB - do not enter * (missing) for any field in this card		
Adjusted for sex	ADSEX	17	Presence	(system 6)	Enter 0 if single sex study or single sex RR
Adjusted for Age	ADAGE	18	Presence	(system 6)	
Adjusted for Race	ADRACE	19	Presence	(system 6)	
Adjusted for other sources of ETS	ADOETS	61	Graded	(system 23)	
Adjusted for other confounders	ADOTHR	20	Graded	(system 23)	including child active smoking
	1 (1) 1				
	2 (2) 2		etc		
	19 (j) 19+				
	20 (k) ~~+ive but unknown~~				
Comment					What the 'other ETS' or 'other' confounders are, but only if different from full set(s).
RR data	RRDATA	4			
Cases exposed	CA1	25	Measured	(0 to 9999)	Enter * if unknown NB Enter numbers of cases whether unadjusted or adjusted.
Cases, unexposed	CA0	26	Measured	(0 to 9999)	
Controls, exposed	CO1	28	Measured	(0 to 32765)	Controls for CC study, otherwise at risk for onset analysis, disease-free for prevalence analysis. Enter "–" if adjusted, * if unknown.
Controls, unexposed	CO0	29	Measured	(0 to 32765)	
Relative risk	RR	31	Real	(0.00 to 999.00)	For unadjusted, if both numbers and RR/CI given in paper, enter RR/CI (rounding to two decimal places if more given) with DERIVE code 1, then use META (in Analysis) to check; if different, then change RR/CI to values as calculated and change DERIVE code to 3 (except if RR/CI was originally given to <2 decimal places and it is correct so far as given, use code 2). If RR/CI not given but numbers available, use CALC with %RR and "onset". For onset analysis (adjusted or if numbers not available), prefer RR but accept OR/MLR if RR not available (see ODDSON in card RRDEF)
RR lower 95% CL	RRL	32	Real	(0.00 to 999.00)	
RR upper 95% CL	RRU	33	Real	(0.00 to 999.00)	
Derived RR	DERIVE	34	Graded	(system 21)	The order represents roughly the order of preference in which they should be used.
	1 (1) original				
	2 (2) RR/CI from numbers				Includes if numbers from % distribution (mention in comments -12) Includes if exposed and total given, unexposed by simple subtraction. Includes if adjustment for numbers (mention in comment - 13; %14) Includes if RR but no CI originally. Includes if <2 dec pl given originally (and agrees so far as given)
	3 (3) RR/CI recalc from numbers				i.e. discrepancy from RR/CI as given originally. Only use this if numbers and RR/CI are from same paper and definitely on same basis. Otherwise choose one here and mention other in DISCREP
	4 (4) combined smoking levels/sum				
	5 (5) combined disease levels/sum				
	6 (6) other combined/sum				
	7 (7) RR/CI calc using 0.5 for 0				Use this when there is <u>one</u> zero cell; do not calculate (and probably do not even enter) if two zero cells.
	8 (8) ~~CI converted to 95%~~				
	9 (9) ~~inverted from diff denom~~				
	10 (t) non-significant				Use these only if CI missing (and cannot be estimated as under code 20) or if RR&CI are missing. Base on P<0.05 if

	11 (b) significant			possible (otherwise give P in comment). Comm 45=not in MLR due to lack of significance
	12 (c) read from graph/chart			i.e. measured from graph
	13 (d) RR original, CI from P-value			see template_CIfromRR&P.xls
	14 (e) combined smoking levels/F&L			F&L =Fry&Lee, this is what used to be called RLCI and done in QP. Now done in Excel. Template is T:\jan\RREst\rrest7.xls
	15 (f) combined disease levels/F&L			
	16 (g) ~~other combined/F&L~~			
	17 (h) adj from orig RRs/mini-meta			
	18 (i) combined F&L then adj minimeta			
	19 (j) other			other method, or combination of methods, but not involving adjusted CI from crude numbers, and not involving 0.5 for zero cell.
	20 (k) RR orig CI est from numbers			These are only relevant to using crude numbers with adjusteds
	21 (l) other (CIestnums)			
Comment				Further description of derivation method Must be entered for DERIVE = 19, 25 and 26. For 6, 16, 23, 24 say what is being combined For 10, 11 give significance level if other than P<0.05 For DOSER=b, use comment 126 for regression coeff and SE Otherwise only if some unusual feature.
DISCR Discrepancy (Extra card added just to record any discrepancy information)				
Comment				Description of any alternative discrepant results. (Do not enter anything if it is just inadequate decimal places or if recalculation from numbers has already been described in RRDATA) Also mention if alternative adjustment available (but by same number of adjusters)
Derived	DER2, DER3			No need to enter, calculated as part of RRVALID (incl RRVCHK)

Other rules

Only one lifetime and/or one current definition of asthma per study. Choose near-equivalent(s) to "current" and "lifetime". Keep note here of other preferences as they become necessary. Keep record in field OTHAST if others available, mention but do not enter exacerbation of asthma. If the paper calls it asthma, then it qualifies! Prefer (1) medical records (2) report of physician diagnosis (3) self report. For current asthma, prefer (1) diagnosis (2) symptoms (3) taking medication (4) visit to emergency room.. Prefer "at least one medical consultation " to "at least 2 medical consultations".

Only one definition of "active smoking by the child" per study (see notes on field CHISMO above for how to choose). Keep record in field OTHCSM if others available. Also mention there but do not enter results restricted to smoking children.

Prospective studies - usually enter all follow-ups because they will relate to different ages.

A study in STUDYDB may have no RRs in RRDB, but this is unlikely (e.g. stratified results which cannot be combined), would probably have at least something with a DERIVE code 10 or 11 .

Within a study, each RR must have a unique combination of values for fields in cards RRDEF (excl nrr, source) and RRADJ. These cards should not have any missing (*) data.

Within each dose-response set of RRs, only the fields DOSER, EXPLO and EXPHI should differ.

Adjustment: For CC and CS enter "least adjusted" and "most adjusted" only (except do both with and without adjustment for other ETS).
For Prospective, enter "age-adjusted" and "most adjusted"; enter unadjusted only if age-adjusted not available. Mention alternative 'equal to most' .

Timing: If smoking status (e.g. smoking by a parent) is given as current, ex, never, then construct current vs never, current vs non, ex vs never and ever vs never. If it is other sorts of timing (e.g. if exposure is before and after age 5) do not do any combining - this will be decided at the end.

Dose-response data (including biochem, and total if given as semi-quantitative): If given 3 or more levels, enter as a dose-response sequence (i.e. 2 vs 1, 3 vs 1 , 4 vs 1 etc), and also construct "all others" vs "lowest" (which will have DOSER = 1, and "–" in EXPLO/EXPHI)
If available in both forms, then enter both categories (DOSER=2...) and as regression model (DOSER=b).
If dose response is within smokers (e.g. high categories vs low omitting non) use separate level of MEASEX (not very satisfactory - any better ideas?)

Stratified data: If results available by sex, enter sex-separate data only; enter sexes-combined only if sexes-separately not available. If age-specific, race-specific or age- and race-specific results available, enter all of these, and also construct and enter overall data. Use to construct age- and race- adjusted results if appropriate. Record other stratifying fields in OTHRES/OTHSTR, and use to construct overall/adjusted results if appropriate.

Parents: construct all possible combinations as defined by GS 25 (7 levels). But do not do "both parents" vs "one or none parents" unless this is all that is available. (0,1,2 parents may eventually be interpreted as a dose response, but we will enter these individually now, and identify them as a dose response later.) Also do mother adjusted for father, and vice versa. See example 4 and TEMPLATE-PARENTS.xls.

Household: Enter RRs for any individual persons/combinations as given, as non-dose-response. Also construct "all persons" if possible, but do not construct any other combinations. In addition, numbers of persons should be treated as a dose-response variable if possible. (I do not think this should involve any duplication of data entry, but it doesn't matter if it does). Other combinations may be identified later. Prefer (1) household members smoke in home; (2) household members smoke (anywhere); (3) household members smoke in same room as child.

Abbreviations

These can be used in text fields or comments without explanation:

phys diag = physician diagnosed
MLR = multiple logistic regression
SPT = spin prick test
SOB = shortness of breath
URTI = upper respiratory tract infection

Examples

Example 1

If the exposure groups are A = “mother smoked during pregnancy”, B = “mother did not smoke during pregnancy” (and we have no info about smoking at other times before or after), then enter with EXPOS = parent, WHOPAR = mother (+/-dad), WHESMO = pregnancy, and the unexposed codes would be UNEXTI= “non” and UNEXSO=“parent/spec person” ie mother non-smoker at the time in question.

Example 2

2a. If exposure groups are mother :

A	did not smoke during pregnancy or since birth
B	did not smoke during pregnancy but smoked after birth
C	smoked during pregnancy but not since
D	smoked during pregnancy and since birth

then we would enter with UNEXSO = not specified parent throughout, and:

	EXPOS	WHOPAR	WHESMO	UNEXPTI	FCOMB	ADJ
1) B vs A	6	mum (+/-dad)	since birth	non	0-1 = 1	
2) C vs A	6	mum (+/-dad)	since birth	non	1-0 = a	
3) D vs A	6	mum (+/-dad)	since birth	non	1-1 = b	
4) B+D vs A+C	p	mum (+/-dad)	since birth	non	-	
5) C+D vs A+B	p	mum (+/-dad)	pregnancy	non	-	
6) DvsC & BvsA	p	mum (+/-dad)	since birth	non	-	pregnancy
7) DvsB & CvsA	p	mum (+/-dad)	pregnancy	non	-	since birth
8) B+C+D vs A	p	mum (+/-dad)	since conception	non	-	

Note that values of WHESMO etc for 1) 2) and 3) are identical, even though in 3), there actually is no "mother since birth" exposure.

Note that although e.g. C+D vs A could be entered as "during pregnancy" vs "non+other", we do not enter this.

2b Same as Example 2a, except the smoking since birth refers to either parent. Note that 8) is omitted.

	EXPOS	WHOPAR	WHESMO	UNEXPTI	FCOMB	ADJ
1) D vs A	6	either	since birth	non	1-1 = b	
2) B vs A	6	either	since birth	non	0-1 = 1	
3) C vs A	6	either	since birth	non	1-0 = a	
4) C+D vs A+B	p	mum (+/-dad)	pregnancy	non	-	
5) B+D vs A+C	p	either	since birth	non	-	
6) DvsC & BvsA	p	either	since birth	non	-	pregnancy
7) DvsB & CvsA	p	mum (+/-dad)	pregnancy	non	-	since birth

See also TEMPLATE-FACTORIAL.xls

Example 3

If exposure groups are mother :

A	ex smoker, gave up before child was born
B	ex smoker who gave up since child was born, or current smoker
C	never smoker

then we would enter (with EXPOS = parent and WHOPAR=mother (+/-dad) throughout):

	WHESMO	UNEXTI	UNEXSO
B vs C	since birth	never	not specified parent
A+B vs C	ever	never	not specified parent
B vs A+C	since birth	non	not specified parent

Note that A vs C is not worth having - does not represent “smoked before birth” because some of group B also smoked before birth, and we don't want to add a level "smoked before birth but not since" because it is of too little interest.

Example 4

Suppose a paper gave results for current smoking parents:

A	none
B	mother (not father)
C	father (not mother)
D	both parents

you would enter the following (with EXPOS = parent, WHESMO = current and UNEXTI = non throughout)

	WHOPAR	UNEXSO	ADJ
B vs A	mother only	neither parent	
C vs A	father only	neither parent	
D vs A	both	neither parent	
B+C vs A	one (not both)	neither parent	
B+D vs A	mother (+/-dad)	neither parent	
C+D vs A	father (+/-mum)	neither parent	
B+C+D vs A	any	neither parent	
B vs A+C	mother only	not specified parent	
C vs A+B	father only	not specified parent	
B+D vs A+C	mother (+/- dad)	not specified parent	
C+D vs A+B	father (+/-mum)	not specified parent	
BvsA & DvsC	mother (+/- dad)	not specified parent	father
CvsA & DvsB	father (+/-mum)	not specified parent	mother

See also TEMPLATE-PARENTS.xls

Example 5

Suppose a paper gave results for current smokers in the household:

A	none
B	any parent
C	other (but not parent)

you would enter the following (with WHESMO = current and UNEXTI = non throughout)

	EXPOS	WHOPAR	WHOHOU	UNEXSO
B vs A	parent	any	–	none in household
B vs A+C	parent	any	–	neither parent
C vs A	household	–	other than parent (and parent not smoker)	none in household
B+C vs A	household	–	any	none in household

Note that C vs A+B is possible (with UNEXSO = household/specified person) but does not get entered because of the “do not make other combinations” rule.