APPENDIX 10

Meta-analysis tables – description of layout of detailed tables, and list of tables.

For each meta-analysis, summary results Tables of key analyses are presented at the end of the relevant chapter, while the full detailed versions of all the analyses are available as Appendix Tables at www.pnlee.co.uk/etsast.htm. Selected analyses are also presented as Figures. The layouts of the summary Tables and Figures have been described in §7.10.3 of the book, and the Appendix Tables are described here.

Each detailed table comes in eight sections preceded by a cover page. All the pages for the meta-analysis are given the same main table number and main heading (describing the analysis), with the section number blank for the cover page and 1 to 8 for the specific section (e.g. Table C3-5 is section 5 within Table C3). The content of each section is as follows:

Cover page: This shows

- (i) restrictions on the data included,
- (ii) the order of preference for selecting RRs to be included, and
- (iii) a short description of the contents of the table

 Note that Sections 1 to 3 concern "adjusted data," with RRs
 adjusted for the most potential confounders chosen from a study,
 while Sections 4 to 6 concern "unadjusted data," with RRs
 adjusted for the least potential confounders chosen from a study.

Section 1:

For each adjusted RR selected, a listing of their relevant characteristics. This includes the values of certain variables used to select the RR and used as "factors" in Section 3, as well as the two key identifiers of the RR: the study 6-character reference (REF) and the number of the RR within that study (NRR). It also may indicate where RRs differ from those in another table – for example, if table C1 presented lifetime asthma analyses not restricted by age and table C35 presented lifetime asthma analyses restricted to age below 10 years, a character "x" in a column headed "Comp C1" in the output for table C35-1 would indicate

those studies where the RR estimates in tables C1 and C35 actually differ.

Section 2:

For each adjusted RR selected, the output shows in the first part of the section the sex, the number of potential confounding variables adjusted for, the 2×2 table of results (where available), the RR with its 95% CI, and in the second part of the section Y_s, W_s, Q_s and P_s (the logarithm of the RR, the weight, heterogeneity contribution and P value, as defined in §7.10.2). Where multiple independent estimates are available for a study (typically different sexes or age groups), combined results are also shown for the study. Note that the 2×2 table is headed "exposed/non-exposed" × "case/control". Exposed and non-exposed are as defined in the cover page and include any comparison (e.g. mother smoked vs mother did not smoke). Control refers to numbers at risk or person-years for prospective studies, indicated by an asterisk (*) in the left-hand margin, and to disease-free subjects in crosssectional studies. RRs calculated by adding 0.5 to each cell (where a zero is present) are indicated by a tilde (~). Section 2 ends with the results of a meta-analysis of the overall data, identical to that shown at the start of section 3 and described below.

Section 3:

This gives the results of fixed effects and random effects metaanalyses of the adjusted data. The section starts with an analysis of the data overall, followed by analyses for the data subdivided be sex and by various other factors. The output indicates (again as defined in §7.10.2) the number of estimates combined (N), the number of studies from which these estimates come (NS), the weight for the studies combined (Wt), the heterogeneity chisquared (Het Chi) and its P value, as well as the RRs and CIs themselves (RR, RRl, RRu) and their P values from both the Fixed and Random effects models. The overall analysis also shows the P value for Egger's test of publication bias (Asymm P, Egger et al., 1997), while the analyses subdivided by factor level include, at the bottom of the "Total" column, the chisquared value for the difference between the fixed effects RR estimates for the factor levels (Between Chi) and its P value.

P values are coded as +++, --- or *** p<0.001; ++, -- or ** p<0.01; +, - or * p<0.05; (+), (-) or (*) p<0.1 and N.S. p>0.1, with plus signs indicating significant positive differences or RRs greater than 1, minus signs indicating significant negative differences or RRs less than 1, and asterisks indicating significant non-directional heterogeneity.

Sections 4 to 6: As for Sections 1 to 3 but for unadjusted data. A column headed X indicates, in the section 4 output, by entries of X against specific RRs, those that differ from the corresponding adjusted RRs. Typically, an X will not be entered where a study only has one relevant RR available, adjusted or unadjusted but not both. Generally a shorter set of factors is used in section 6 than in section 3.

Section 7: This lists the studies excluded from consideration, together with information on the stage at which they were excluded. The stage refers back to the various restriction and selection stages described in the cover page. A study is excluded when no RR can be found to satisfy the criteria required.

Section 8¹: This lists potentially overlapping studies for which data have been included, and also any results which would have been included in preference except that they had incomplete data (typically an RR without a CI).

Note that the main results are given in Sections 3 and 6 while Sections 1, 2, 4, 5, 7 and 8 mainly provide detailed information only required when one wants to see the individual estimates or to check precisely which studies and RRs have been selected. Only selected parts of the Section 2 results are given in the Figures, and of

-

¹ Section 8 is incorporated in section 7 for the adult analyses

the Section 3 results in the Tables included in the book, and the full output is made available as Appendix Tables at www.pnlee.co.uk/etsast.htm.

A list of all the analyses carried out is given below. Only certain key tables are included in the book, as indicated by an entries in the "Page (Table)" and "Page (Figure)" columns. The numbering of the Tables and their corresponding Appendix Tables is always consistent, so that the numbering of Tables in the book is not consecutive. Terms used here to describe the outcome, exposure (source, time, dose) and non-exposure are defined in §7.10.5. The factors considered are described in §7.10.6 (their levels only being shown in abbreviated form in the tables). The factors actually used varies between the various analyses, and generally a shorter set of factors is used in the non-key tables than in the key tables.

<u>Table A and Appendix Table A</u> Adults, any exposure

| | Outcome | Exposure | Exposure | Ex- | Page | Page | Page |
|-----|------------------|--|-------------|----------|---------|----------|------------------|
| | (asthma) | (source) | (time) | smokers | (Table) | (Figure) | (Appendix Table) |
| A1 | lifetime/current | total (or nearest) | earliest | included | 208 | 182 | A1 |
| A2 | lifetime/current | total (or nearest) | earliest | excluded | 210 | | A22 |
| A3 | lifetime/current | total (or nearest) | most recent | included | 211 | | A32 |
| A4 | lifetime/current | total (or nearest), preferring maternal | childhood | included | 212 | | A45 |
| A5 | lifetime/current | total (or nearest), preferring paternal | childhood | included | 213 | | A57 |
| A6 | current/lifetime | total (or nearest) | earliest | included | 214 | | A69 |
| A7 | lifetime/current | household | earliest | included | 215 | | A82 |
| A8 | lifetime/current | household | most recent | included | 216 | | A94 |
| A9 | lifetime/current | workplace | earliest | included | 217 | 187 | A106 |
| A10 | lifetime/current | workplace | most recent | included | 218 | | A118 |

<u>Table B and Appendix Table B</u> Adults, by amount of exposure

| | Exposure (source) | Dose | Measure of dose | Page | Page | Page |
|-----|--------------------|------|------------------|---------|----------|-----------|
| | | | | (Table) | (Figure) | (Appendix |
| | | | | | | Table) |
| B1 | total (or nearest) | low | cigs/hours | 219 | 188 | B1 |
| B2 | total (or nearest) | high | cigs/hours | 219 | 188 | B11 |
| В3 | household | low | cigs/hours | 219 | | B21 |
| B4 | household | high | cigs/hours | 219 | | B26 |
| B5 | workplace | low | cigs/hours | 220 | | B31 |
| B6 | workplace | high | cigs/hours | 220 | | B36 |
| B7 | total (or nearest) | low | pkyrs/cigs/hours | 221 | | B41 |
| B8 | total (or nearest) | high | pkyrs/cigs/hours | 221 | | B51 |
| B9 | household | low | pkyrs/cigs/hours | 221 | | B61 |
| B10 | household | high | pkyrs/cigs/hours | 221 | | B66 |
| B11 | workplace | low | pkyrs/cigs/hours | 222 | | B71 |
| B12 | workplace | high | pkyrs/cigs/hours | 222 | | B76 |

Table C and Appendix Table C
Children, any exposure during the child's lifetime

| | Outcome (asthma) | Exposure | Exposure | Non- | Page | Page | Page |
|------------|-----------------------------|--------------------|--------------------|---------------|---------|-----------|--------------|
| | Outcome (astima) | (source) | (time) | exposure | (Table) | (Figure) | (Appendix |
| | | (source) | (time) | caposure | (Table) | (1 iguic) | Table) |
| C1 | lifetime | total | general | most | 353 | 268 | C1 |
| C2 | lifetime | total | general | least | | | C33 |
| C3 | current | total | general | most | 356 | 274 | C43 |
| C4 | current | total | general | least | | | C71 |
| C5 | lifetime | parent | general | most | 360 | | C80 |
| C6 | lifetime | parent | general | least | 261 | | C109 |
| C7 | current | parent | general | most | 364 | | C118 |
| C8 | current | parent | general | least | | | C142 |
| C9 C10 | lifetime lifetime | total total | recent | most least | | | C149 C159 |
| C10 | current | total | recent | most | | | C159 |
| C12 | current | total | recent | least | | | C107 |
| C13 | lifetime | parent | recent | most | | | C176 |
| C14 | lifetime | parent | recent | least | | | C196 |
| C15 | current | parent | recent | most | | | C205 |
| C16 | current | parent | recent | least | | | C212 |
| C17 | lifetime | total | earliest | most | | | C219 |
| C18 | lifetime | total | earliest | least | | | C229 |
| C19 | current | total | earliest | most | | | C239 |
| C20 | current | total | earliest | least | | | C248 |
| C21 | lifetime | parent | earliest | most | | | C257 |
| C22 | lifetime | parent | earliest | least | | | C266 |
| C23 | current | parent | earliest | most | | | C275 |
| C24 | current | parent | earliest | least | | | C282 |
| C25 | lifetime/ current | total | general | most | 368 | | C289 |
| C26 | lifetime/ current | parent | general | most | 372 | | C329 |
| C27 | current/ lifetime | total | general | most | | | C360 |
| C28 | current/ lifetime | parent | general | most | | | C374 |
| C29 | onset | total | general | most | | | C384 |
| C30 C31 | onset lifetime-physician | parent total | general | most | 376 | | C390 C396 |
| C31 | lifetime-physician | parent | general general | most most | 370 | | C423 |
| C32 | current-physician | total | general | most | 380 | | C423 |
| C34 | current-physician | parent | general | most | 300 | | C454 |
| C35 | lifetime age<10 | total | general | most | | | C460 |
| C36 | lifetime age inc 10 | total | general | most | | | C467 |
| C37 | lifetime age > 10 | total | general | most | | | C476 |
| C38 | lifetime age<10 | parent | general | most | | | C482 |
| C39 | lifetime age inc 10 | parent | general | most | | | C488 |
| C40 | lifetime age > 10 | parent | general | most | | | C496 |
| C41 | lifetime | both parents | general | most | 384 | | C501 |
| C42 | lifetime | both parents | general | least | | | C522 |
| C43 | current | both parents | general | most | 388 | | C527 |
| C44 | current | both parents | general | least | | | C549 |
| C45 | lifetime | mother/mother only | general | most | 392 | | C555 |
| C46 | lifetime | mother/mother only | general | least | 20.6 | | C582 |
| C47 | current | mother/mother only | general | most | 396 | | C590 |
| C48 | current | mother/mother only | general | least | | | C614 |
| C49 C50 | lifetime | mother only | general | most | | | C621 C626 |
| C50 | lifetime current | mother only | general general | least most | | | C626 |
| C51 | current | mother only | general | least | | | C637 |
| C53 | lifetime | father/father only | general | most | 400 | | C643 |
| C54 | lifetime | father/father only | general | least | 700 | | C668 |
| C55 | current | father/father only | general | most | 404 | | C675 |
| C56 | current | father/father only | general | least | | | C699 |
| C57 | lifetime | father only | general | most | | | C706 |
| C58 | lifetime | father only | general | least | | | C711 |
| C59 | current | father only | general | most | | | C716 |
| C60 | current | father only | general | least | | | C722 |
| | | | | | | | |

| | Outcome (asthma) | Exposure | Exposure | Non- | Page | Page | Page |
|-----|------------------|----------------------|--------------|----------|---------|----------|-----------|
| | | (source) | (time) | exposure | (Table) | (Figure) | (Appendix |
| | | | | | | | Table) |
| C61 | lifetime | Hh other than parent | general | most | | | C728 |
| C62 | lifetime | Hh other than parent | general | least | | | C733 |
| C63 | current | Hh other than parent | general | most | | | C738 |
| C64 | current | Hh other than parent | general | least | | | C744 |
| C65 | lifetime | not mother | general | most | 408 | | C750 |
| C66 | lifetime | not mother | general | least | | | C773 |
| C67 | current | not mother | general | most | 412 | | C779 |
| C68 | current | not mother | general | least | | | C801 |
| C69 | lifetime | total | discontinued | most | 416 | | C807 |
| C70 | current | total | discontinued | most | 420 | | C830 |

Hh = household member

Table D and Appendix Table D

Children, by amount of exposure during lifetime

| | Outcome (asthma) | Dose | Exposure (source) | Exposure (time) | Non- exposure | Page (Table) | Page (Figure) | Page (Appendix Table) |
|----|------------------|------|-------------------|-----------------|------------------|-----------------|------------------|-----------------------------|
| D1 | lifetime | low | total | general | most | 424 | 286 | D1 |
| D2 | lifetime | high | total | general | most | 424 | 286 | D10 |
| D3 | current | low | total | general | most | 425 | 288 | D19 |
| D4 | current | high | total | general | most | 425 | 288 | D28 |
| D5 | lifetime/current | low | total | general | most | 426 | | D37 |
| D6 | lifetime/current | high | total | general | most | 426 | | D48 |

Table E and Appendix Table E

Children, any exposure in utero

| | Outcome (asthma) | Exposure | Exposure | Non- | Page | Page | Page |
|----|------------------|------------------|----------|----------|---------|----------|-----------|
| | | (source) | (time) | exposure | (Table) | (Figure) | (Appendix |
| | | | | | | | Table) |
| E1 | lifetime/current | mother | in utero | most | 427 | 291 | E1 |
| E2 | current/lifetime | mother | in utero | most | | | E24 |
| E3 | lifetime/current | motherETS/father | in utero | most | | | E31 |

Table F and Appendix Table F

Children, by amount of exposure in utero

| | Outcome (asthma) | Dose | Exposure (source) | Exposure (time) | Non- exposure | Page (Table) | Page (Figure) | Page (Appendix Table) |
|----|------------------|------|-------------------|-----------------|------------------|-----------------|------------------|-----------------------------|
| F1 | lifetime/current | low | total | in utero | most | 430 | 294 | F1 |
| F2 | lifetime/current | high | total | in utero | most | 430 | 294 | F10 |

<u>Table G and Appendix Table G</u> Children, joint effects of *in utero* and in life exposure

| | Outcome (asthma) | Exposure (source) | Exposure (time) | Non- exposure | Page (Table) | Page (Figure) | Page (Appendix Table) |
|----|------------------|-------------------|----------------------|------------------|-----------------|------------------|-----------------------------|
| G1 | lifetime/current | mother | in utero only | neither | 431 | | G1 |
| G2 | lifetime/current | total | in life only | neither | 431 | | G10 |
| G3 | lifetime/current | total and mother | in life and in utero | neither | 431 | | G19 |
| G4 | current/lifetime | mother | in utero only | neither | | | G28 |
| G5 | current/lifetime | total | in life only | neither | | | G34 |
| G6 | current/lifetime | total and mother | in life and in utero | neither | | | G40 |