

## Supplementary Online Content

Jones L, Hassanin A, Cook DG, Britton J, Leonardi-Bee J. Parental smoking and the risk of middle ear disease in children: a systematic review and meta-analysis. *Arch Pediatr Adolesc Med*. doi:10.1001/archpediatrics.2011.158.

**eTable.** Summary of studies included in the meta-analysis.

**eReferences.** Studies included in the meta-analysis.

This supplementary material has been provided by the authors to give readers additional information about their work.

**eTable 1. Summary of studies included in the meta-analysis**

Study	Year of Publication*	Study Design	Study Location	Approx no of children in study	Ascertainment	Exposure	Outcome	Methodological Quality <sup>†</sup>
Adair-Bischoff <sup>1</sup>	1998	Case control	Canada	625 (227 cases)	Biochemical and self-report	Maternal post-natal, paternal, household	Middle ear disease	8
Alho <sup>2</sup>	1993	Cohort	Finland	2512	Biochemical	Household	Acute otitis media	8
Apostolopoulos <sup>3</sup>	1998	Cross sectional	Greece	5121	Self-report	Household	Otitis media with effusion	6
Barr <sup>4</sup>	1991	Case control	United Kingdom	230 (115 cases)	Self-report	Maternal pre-natal, household	Otitis media with effusion	5
Bener <sup>5</sup>	2005	Cohort	Qatar	2277	Self-report	Maternal pre-natal	Hearing loss	7
Bennett <sup>6</sup>	1998	Cohort	United Kingdom	~10000	Self-report	Maternal post-natal	Middle ear disease	6
Bentdal <sup>7</sup>	2007	Cohort	Norway	2549	Self-report	Household	Acute otitis media	7
Collet <sup>8</sup>	1995	Cohort	Canada	918	Self-report	Household	Recurrent otitis media	6
da Costa <sup>9</sup>	2004	Case control	Mozambique	750 (307 cases)	Self-report	Household	Otitis media	8
Daigler <sup>10</sup>	1991	Case control	United States	371 (125 cases)	Self-report	Maternal post-natal, paternal	Recurrent otitis media	8
Daly <sup>11</sup>	2007	Cohort	United States	330	Self-report	Maternal post-natal, household	Otitis media	6
Engel <sup>12</sup>	1999	Cohort	Netherlands	192	Self-report	Household	Otitis media with effusion	7
Etzel <sup>13</sup>	1992	Cohort	United States	132	Biochemical	Household	Otitis media with effusion	8
Ey <sup>14</sup>	1995	Cohort	United States	1013	Biochemical	Maternal post-natal	Recurrent Otitis media	8

Study	Year of Publication*	Study Design	Study Location	Approx no of children in study	Ascertainment	Exposure	Outcome	Methodological Quality <sup>†</sup>
Froom <sup>15</sup>	2001	Cross sectional	United States, Canada, United Kingdom, Netherlands	2165	Self-report	Household	Acute otitis media	4
Gliddon <sup>16</sup>	2001	Cohort	United Kingdom	199	Self-report	Maternal post-natal, household	Otitis media with effusion	3
Green <sup>17</sup>	1991	Case control	Germany	328 (164 cases)	Self-report	Maternal post-natal, paternal	Otitis media with effusion	5
Gryczynska <sup>18</sup>	1999	Cross sectional	Poland	1000	Self-report	Household	Suppurative otitis media	2
Gultekin <sup>19</sup>	2010	Case control	Turkey	1740 (152 cases)	Self-report	Maternal post-natal, paternal, household	Otitis media with effusion	6
Haberg <sup>20</sup>	2010	Cohort	Norway	32077	Self-report	Maternal pre-natal, maternal post-natal, household	Acute otitis media	4
Haggard <sup>21</sup>	2002	Case control	United Kingdom	548 (347 cases)	Self-report	Maternal post-natal	Glue ear	6
Hammarén-Malmi <sup>22</sup>	2005	Cross sectional	Finland	202	Self-report	Maternal post-natal, paternal	Otitis media with effusion	4
Hammarén-Malmi <sup>23</sup>	2007	Cohort	Finland	198	Self-report	Maternal post-natal, paternal	Recurrent otitis media	8
Hinton <sup>24</sup>	1988	Case control	United Kingdom	70 (34 cases)	Self-report	Household	Otitis media with effusion	4
Hinton <sup>25</sup>	1989	Case control	United Kingdom	151 (79 cases)	Self-report	Household	Surgery (otitis media with effusion)	2

Study	Year of Publication*	Study Design	Study Location	Approx no of children in study	Ascertainment	Exposure	Outcome	Methodological Quality†
Hinton <sup>26</sup>	1993	Case control	United Kingdom	120 (60 cases)	Self-report	Maternal post-natal, paternal, household	Surgery (tonsils)	6
Homoe <sup>27</sup>	1999	Cross sectional	Greenland	591	Self-report	Household	Acute otitis media	4
Ilicali <sup>28</sup>	1999	Case control	Turkey	332 (166 cases)	Self-report	Maternal post-natal, paternal, household	Surgery (otitis media)	3
Ilicali <sup>29</sup>	2001	Case control	Turkey	154 (114)	Biochemical and self-report	Household	Surgery (otitis media)	5
Iversen <sup>30</sup>	1985	Cohort	Denmark	337	Self-report	Household	Otitis media with effusion	6
Jacoby <sup>31</sup>	2008	Cohort	United States	239 (82 Aboriginal)	Self-report	Household	Otitis media	8
Kitchens <sup>32</sup>	1995	Case control	United States	350 (175 cases)	Self-report	Maternal post-natal, paternal, household	Surgery (otitis media with effusion)	5
Kraemer <sup>33</sup>	1983	Case control	United States	152 (76 cases)	Self-report	Household	Surgery (otitis media with effusion)	6
Lasisi <sup>34</sup>	2007	Case control	Nigeria	289 (189 cases)	Self-report	Household	Chronic suppurative otitis media	6
Lee <sup>35</sup>	2003	Cohort	United States	785	Self-report	Household	Earache	4
Lieu <sup>36</sup>	2002	Cross sectional	United States	11728	Biochemical and self-report	Maternal pre-natal, maternal post-natal, household	Otitis media	7

Study	Year of Publication*	Study Design	Study Location	Approx no of children in study	Ascertainment	Exposure	Outcome	Methodological Quality†
Lister <sup>37</sup>	1998	Cross sectional	Australia	4281	Self-report	Maternal post-natal	Surgery (otitis media)	4
Lubianca Neto <sup>38</sup>	1999	Cross sectional	Brazil	192	Self-report	Household	Acute otitis media	4
MacIntyre <sup>39</sup>	2010	Cohort	Canada	50474	Self-report	Maternal pre-natal	Acute otitis media	7
Noakes <sup>40</sup>	2007	Cohort	Australia	82	Biochemical	Maternal pre-natal	Acute infection and serious otitis media	4
Paradise <sup>41</sup>	1997	Cohort	United States	2253	Self-report	Household	Otitis media with effusion	6
Pukander <sup>42</sup>	1985	Case control	Finland	471 (264 cases)	Self-report	Household	Recurrent otitis media	5
Rasmussen <sup>43</sup>	1993	Cohort	Sweden	1306	Biochemical	Household	Surgery (otitis media with effusion)	7
Rowe-Jones <sup>44</sup>	1992	Case control	United Kingdom	163 (63 cases)	Self-report	Household	Surgery (otitis media with effusion)	3
Rylander <sup>45</sup>	2000	Cross sectional	Switzerland	304 (204 cases)	Self-report	Household	Otitis media	4
Safavi Naini <sup>46</sup>	2002	Cross sectional	Iran	3833	Self-report	Household	Otitis media with effusion	4
Said <sup>47</sup>	1978	Cross sectional	France	3920	Self-report	Maternal post-natal, paternal, household	Surgery (adenoids/tonsils)	3
Saim <sup>48</sup>	1997	Cross sectional	Malaysia	1097	Self-report	Household	Otitis media with effusion	4
Salazar <sup>49</sup>	1997	Cohort	United States	605	Self-report	Household	Acute otitis media	7
Shiva <sup>50</sup>	2003	Cross sectional	Iran	595	Self-report	Household	Otitis media	3

Study	Year of Publication*	Study Design	Study Location	Approx no of children in study	Ascertainment	Exposure	Outcome	Methodological Quality†
Sophia <sup>51</sup>	2010	Case control	India	138 (69 cases)	Self-report	Household	Otitis media with effusion	7
Ståhlberg <sup>52</sup>	1986	Case control	Finland	438 (115 cases)	Self-report	Household	Surgery (recurrent otitis media)	4
Stathis <sup>53</sup>	1999	Cohort	Australia	5627	Self-report	Maternal pre-natal, household	Acute otitis media	7
Stenstrom <sup>54</sup>	1993	Case control	Canada	170 (85 cases)	Self-report	Household	Recurrent otitis media	6
Stenstrom <sup>55</sup>	1997	Case control	Sweden	461 (171 cases)	Self-report	Maternal post-natal, paternal	Otitis prone	5
Strachan <sup>56</sup>	1990	Cross sectional	United Kingdom	892	Self-report	Household	Otitis media with effusion	6
Tainio <sup>57</sup>	1988	Cohort	Finland	183	Biochemical	Household	Recurrent otitis media	8
Teele <sup>58</sup>	1989	Cohort	United States	877	Biochemical	Household	Recurrent otitis media	7
Willatt <sup>59</sup>	1986	Case control	United Kingdom	247 (93 cases)	Self-report	Household	Surgery (tonsils)	6
Xenellis <sup>60</sup>	2005	Cross sectional	Greece	250	Self-report	Household	Otitis media with effusion	2
Zielhuis <sup>61</sup>	1989	Cohort	Netherlands	1439	Biochemical	Household	Otitis media with effusion	6

\*Studies published prior to 1996 from previous Strachan and Cook review<sup>62</sup>

†Methodological quality of the studies are based on the Newcastle-Ottawa Quality Assessment Scale<sup>63</sup>

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