Table 1: Summary of IPF case-control studies investigating occupational exposures.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Reference  Author year  (n cases) | OR; 95% CI | | | | | | PAF | | | | | IPF Case Definition Criteria | | Exposure Measure |
|  | vgdf\* | metal | wood | ag | silica | vgdf\* | | metal | wood | ag | silica |  |  | |
| Scott 1990  (40)\* | 1.3; 0.8, 2.0 | 11.0; 2.3, 52 | 2.9; 0.9, 9.9 | 10.9; 1.2, 96 | 1.6;  0.5,  4.8 | 17 | | 12 | 10 | 12 | 15 | clinical assessment, CXR, pulmonary function | questionnaire | |
| Iwai 1994  (86) |  | 1.3;  1.1,  1.6 |  | 3.0;  1.3,  7.4 |  |  | |  |  |  |  | clinical assessment, CXR or CT, pulmonary function | questionnaire | |
| Iwai 1994  (615) | 2.0; 1.2, 3.1 |  |  |  |  |  | |  |  |  |  | autopsy | job group | |
| Hubbard 1996  (218) |  | 1.7;  1.1,  2.7 | 1.7;  1.0,  2.9 |  | 1.8;  1.0,  3.1 |  | | 10 | 6 |  |  | clinical assessment, CXR or CT, pulmonary function | questionnaire and telephone interview | |
| Mullen 1998  (15) | 2.4;  0.7,8.4 |  | 3.3;  0.4,  25.8 |  | 11;  1.1,  115 | 23 | |  | 7 |  | 20 | clinical assessment, lung biopsy or CT | questionnaire | |
| Baumgartner 2000  (248) |  | 2.0;  1.0,  4.0 | 1.6;  0.8,  3.3 | 1.6;  1.0,  2.5 | 3.9;  1.2,  12.7 |  | | 5 | 3 | 7 | 3 | clinical assessment, lung biopsy or BAL, CT | telephone interview | |
| Hubbard 2000  (22) |  | 1.1;  0.4,  2.7 |  |  |  |  | | 5 |  |  |  | death certificate diagnosis | job group | |
| Miyake 2005  (102) |  | 9.6;  1.7,  181.1 | 6.0;  0.3,  112.4 |  | 1.8;  0.5,  7.0 | 26 | | 11 | 4 |  | 11 | clinical assessment, lung biopsy or BAL, CT | questionnaire | |
| Gustafson 2007  (140) | 1.1;  0.7,  1.7 | 0.9;  0.5,  1.6 | 1.2;  0.7,  2.2 |  | 1.4;  0.7,  2.7 | 6 | |  | 3 |  | 10 | pulmonary fibrosis of unknown aetiology + requiring LTOT | questionnaire | |
| Garcia-Sancho Figueroa 2010  (97) | 1.2;  0.8,  1.9 |  |  |  |  | 9 | |  |  |  |  | clinical assessment, CT +/- lung biopsy | questionnaire | |
| Garcia-Sancho 2011  (100) | 2.8;  1.5,  5.5 |  |  |  |  | 5 | |  |  |  |  | clinical assessment, CT +/- lung biopsy | questionnaire | |
| Awadalla 2012  (201) |  | 1.6;  0.7,  3.6 | 2.7;  1.1  6.8 | 1.3;  0.7,  2.0 | 1.1;  0.5,  2.7 |  | | 6 | 7 | 7 | 13 | clinical assessment, CT, pulmonary function | questionnaire | |
| Paolocci 2013 (abstract only)  (65) |  | 2.8;  1.1,  7.2 |  |  | 2.0;  0.9,  4.4 |  | | 9 | 2 |  | 22 | clinical assessment and CT | questionnaire | |
| Koo 2017  (78) | 2.7;  0.7,  10.9 | 5.0;  1.4,  18.2 | 2.5;  0.5,  12.3 |  | 1.2;  0.4,  3.8 | 35 | | 22 | 5 |  | 27 | clinical assessment, CT +/- lung biopsy | interview | |

\*vapors, gases, dust, fumes.

Table 2: Pooled estimates of occupational contributions to IPF. CI = confidence

interval; OR = odds ratio; PAF% = population attributable fraction, expressed as a

percentage.

|  |  |  |  |
| --- | --- | --- | --- |
| Exposure | Risk estimates (n) | Pooled OR (95% CI) | Pooled PAF (95% CI) |
| VGDF\* | 8 | 1.7 (1.3-2.4) | 14 (12-17) |
| Metal dust | 10 | 1.7 (1.3-2.4) | 8 (6-10) |
| Wood dust | 11 | 1.7 (1.3-2.2) | 4 (3-5) |
| Agricultural dust | 6 | 1.8 (1.0-3.1) | 8 (5-10) |
| Silica dust | 9 | 1.7 (1.3-2.3) | 7 (5-9) |

\*vapors, gases, dust, fumes.