Table Supplemental Digital Content 1.Characteristics at last spirometry test of 266 microwave popcorn workers and 251 flavoring manufacturing workers with 2 or more spirometry tests. Unadjusted comparisons between the four worker groups are given.

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| Characteristic | MPF (n = 83) | MPCF (n = 32) | MPC (n = 151) | FM (n = 251) |
| Age years: mean (SD) | 39.5 AB (11.2) |  41.1 AB (12.3) | 36.5 B (13.2) | 40.4 A (11.6) |
| Males % | 37.4 B |  46.9 B | 52.3 B | 78.5 A |
| Tenure years: mean (SD) | 1.9 C (2.3) |  3.8 BC (4.5) | 4.9 B (5.0) | 7.4 A (6.5) |
| Cumulative diacetyl exposure: mean (SD) ppm.years | 5.4 A (8.9) |  7.6 A (11.7) | 7.0 A (10.5) |  N/A |
| Race/ethnicity % |  |  |  |  |
|  White | 95.2 C |  96.9 C | 76.8 B | 19.1 A |
|  Black | 0 | 0 | 0 |  3.6 |
|  Hispanic | 2.4 C |  3.1 BC | 21.9 B |  59.0 A |
|  Asian | 0 | 0 | 0 |  15.5 |
|  Other | 2.4 | 0 | 1.3 |  2.8 |
| Smoke ever % | 55.4**B** |  50.0 AB | 55.6 B |  37.7 A |
| BMI mean (SD) | 29.6 A (6.8) |  29.6 A (7.6) | 28.0 A (7.3) |  28.2 A (5.4) |
| Borderline obstruction % | 7.2 A |  6.3 A | 8.6 A |  2.8 A |
| Obstruction % | 10.8 B |  9.4 B | 7.9 B |  0.8 A |
| Restrictive pattern % | 8.4 A | 9.4 A | 11.3 A | 14.4 A |
| Mixed pattern % | 16.9 B | 15.6 B | 3.3 A | 0.4 A |
| Any spirometric abnormality % | 43.4 B | 40.6 B | 31.1 B  | 18.4 A |
| High severity abnormality % | 16.9 B |  18.8 B | 4.0 A |  0.4 A |
| ppFEV1: mean (SD) | 81.0 B (24.7) | 83.3 B (25.0) | 92.4 A (17.4) | 95.1 A (12.4) |
| ppFVC: mean (SD) | 88.7 B (17.6) | 91.4 AB (20.1) | 96.8 A (14.2) | 95.5 A (12.0) |
| FEV1/FVC: mean (SD) | 72.7 B (14.6) | 72.9 B (13.5) | 78.2 A (10.2) | 80.6 A (5.8) |
| Obese (BMI > 30) % | 42.2 A |  37.5 A | 31.1 A |  31.8 A |
| Months ending work to first test: mean (min-max) | 32.5 (2.0-138.1) | 6.8 (1.0-24.2) | -- | -- |
| Number tests: mean (min-max) | 4.1 A (2-8) | 4.6 A (2-8) | 4.3 A (2-8) | 3.1 B (2-8) |
| Months follow-up: mean (min-max) | 22.2 A (5.5-33.3) | 23.8 A (7.7-33.2) | 18.9 AB (3.4-33.4) | 17.8 B (0.3-56.9) |
| Cumulative diacetyl exposureMean (SD) ppm-years | 5.4 A (8.9) | 7.6 A (11.7) | 7.0 A (10.5) | -- |
| Compounder/mixer N (%) | 5 (6.0) |  2 (6.3) | 13 (8.6) | 32 (14.7) |

Note: Notes: SD = standard deviation, BMI = body mass index, ppm = parts per million, ppFEV1 = percent of predicted FEV1, ppFVC = percent of predicted FVC, MPF = former microwave popcorn workers, MPCF = current to former microwave popcorn workers, MPC = current microwave popcorn workers, FM = flavoring manufacturing workers (current). Tenure, compounder/mixer, smoking, and BMI information was available for 212, 217, 215, and 223 FM workers respectively. Across columns, values containing the same letters are not statistically different at p< 0.05 (using Tukey-Kramer multiple comparison procedure).