

**COMMITTEE ON CARCINOGENICITY OF CHEMICALS IN FOOD,  
CONSUMER PRODUCTS AND THE ENVIRONMENT**

**TABLE 10. REFERENCES REPORTING PARA-OCCUPATIONAL EXPOSURE INFORMATION ALONE (JULY 2009)**

1. (1999) *Occupational hazards of pesticide exposure: sampling, monitoring, measuring* Taylor & Francis Ltd; London; UK.
2. Acquavella, J. F., Alexander, B. H., Mandel, J. S., Gustin, C., Baker, B., Chapman, P., and Bleeke, M. (2004) Glyphosate biomonitoring for farmers and their families: results from the Farm Family Exposure Study, *Environ. Health Perspect.* 112, 321-326.
3. Acquavella, J. F., Gustin, C., Alexander, B. H., and Mandel, J. S. (2005) Implications for epidemiologic research on variation by pesticide in studies of farmers and their families, *Scand. J. Work Environ. Health* 31 Suppl 1, 105-109.
4. Adgate, J. L., Clayton, C. A., Quackenboss, J. J., Thomas, K. W., Whitmore, R. W., Pellizzari, E. D., Lioy, P. J., Shubat, P., Stroebel, C., Freeman, N. C., and Sexton, K. (2000) Measurement of multi-pollutant and multi-pathway exposures in a probability-based sample of children: practical strategies for effective field studies, *J. Expo. Anal. Environ. Epidemiol.* 10, 650-661.
5. Adgate, J. L., Kukowski, A., Stroebel, C., Shubat, P. J., Morrell, S., Quackenboss, J. J., Whitmore, R. W., and Sexton, K. (2000) Pesticide storage and use patterns in Minnesota households with children, *J. Expo. Anal. Environ. Epidemiol.* 10, 159-167.
6. Adgate, J. L., Barr, D. B., Clayton, C. A., Eberly, L. E., Freeman, N. C., Lioy, P. J., Needham, L. L., Pellizzari, E. D., Quackenboss, J. J., Roy, A., and Sexton, K. (2001) Measurement of children's exposure to pesticides: analysis of urinary metabolite levels in a probability-based sample, *Environ. Health Perspect.* 109, 583-590.
7. Alavanja, M. C., Sandler, D. P., McMaster, S. B., Zahm, S. H., McDonnell, C. J., Lynch, C. F., Pennybacker, M., Rothman, N., Dosemeci, M., Bond, A. E., and Blair, A. (1996) The Agricultural Health Study, *Environ. Health Perspect.* 104, 362-369.
8. Alexander, B. H., Burns, C. J., Bartels, M. J., Acquavella, J. F., Mandel, J. S., Gustin, C., and Baker, B. A. (2006) Chlorpyrifos exposure in farm families: results from the farm family exposure study, *J. Expo. Sci. Environ. Epidemiol.* 16, 447-456.
9. Alexander, B. H., Mandel, J. S., Baker, B. A., Burns, C. J., Bartels, M. J., Acquavella, J. F., and Gustin, C. (2007) Biomonitoring of 2,4-dichlorophenoxyacetic acid exposure and dose in farm families, *Environ. Health Perspect.* 115, 370-376.
10. Andrew, C. C., Pellizzari, E. D., Whitmore, R. W., Quackenboss, J. J., Adgate, J., and Sefton, K. (2003) Distributions, associations, and partial aggregate exposure of pesticides and polynuclear aromatic hydrocarbons in the Minnesota Children's Pesticide Exposure Study (MNCPEs), *J. Expo. Anal. Environ. Epidemiol.* 13, 100-111.
11. Aprea, C., Strambi, M., Novelli, M. T., Lunghini, L., and Bozzi, N. (2000) Biologic monitoring of exposure to organophosphorus pesticides in 195 Italian children, *Environ. Health Perspect.* 108, 521-525.
12. Arbuckle, T. E., Cole, D. C., Ritter, L., and Ripley, B. D. (2004) Farm children's exposure to herbicides: comparison of biomonitoring and questionnaire data, *Epidemiology* 15, 187-194.
13. Arbuckle, T. E. and Ritter, L. (2005) Phenoxyacetic acid herbicide exposure for women on Ontario farms, *J. Toxicol. Environ. Health A* 68, 1359-1370.

**THIS IS A DRAFT PAPER FOR DISCUSSION. IT SHOULD NOT BE QUOTED, CITED OR REPRODUCED.**

14. Arbuckle, T. E., Bruce, D., Ritter, L., and Hall, J. C. (2006) Indirect sources of herbicide exposure for families on Ontario farms, *J. Expo. Sci. Environ. Epidemiol.* 16, 98-104.
15. Arcury, T. A., Quandt, S. A., Rao, P., Doran, A. M., Snively, B. M., Barr, D. B., and Davis, S. W. (2005) Organophosphate pesticide exposure in farmworker family members in Western North Carolina and Virginia: Case comparisons, *Human Organization* 64, 40-51.
16. Arcury, T. A., Grzywacz, J. G., Davis, S. W., Barr, D. B., and Quandt, S. A. (2006) Organophosphorus pesticide urinary metabolite levels of children in farmworker households in eastern North Carolina, *Am. J. Ind. Med.* 49, 751-760.
17. Arcury, T. A., Quandt, S. A., Barr, D. B., Hoppin, J. A., McCauley, L., Grzywacz, J. G., and Robson, M. G. (2006) Farmworker exposure to pesticides: methodologic issues for the collection of comparable data, *Environ. Health Perspect.* 114, 923-928.
18. Arcury, T. A., Grzywacz, J. G., Barr, D. B., Tapia, J., Chen, H., and Quandt, S. A. (2007) Pesticide urinary metabolite levels of children in eastern north Carolina farmworker households, *Environ. Health Perspect.* 115, 1254-1260.
19. Baker, B. A., Alexander, B. H., Mandel, J. S., Acquavella, J. F., Honeycutt, R., and Chapman, P. (2005) Farm Family Exposure Study: methods and recruitment practices for a biomonitoring study of pesticide exposure, *J. Expo. Anal. Environ. Epidemiol.* 15, 491-499.
20. Baker, L., Fitzell, D., Seiber, J., Parker, T., Shibamoto, T., Poore, M., Longley, K., Tomlin, R., Propper, R., and Duncan, D. (1996) Ambient air concentrations of pesticides in California, *Environmental Science & Technology* 30.
21. Barr, D. B., Bravo, R., Weerasekera, G., Caltabiano, L. M., Whitehead, R. D., Jr., Olsson, A. O., Caudill, S. P., Schober, S. E., Pirkle, J. L., Sampson, E. J., Jackson, R. J., and Needham, L. L. (2004) Concentrations of dialkyl phosphate metabolites of organophosphorus pesticides in the U.S. population, *Environ. Health Perspect.* 112, 186-200.
22. Barr, D. B., Thomas, K., Curwin, B., Landsittel, D., Raymer, J., Lu, C., Donnelly, K. C., and Acquavella, J. (2006) Biomonitoring of exposure in farmworker studies, *Environ. Health Perspect.* 114, 936-942.
23. Barr, D. B. and Angerer, J. (2006) Potential uses of biomonitoring data: a case study using the organophosphorus pesticides chlorpyrifos and malathion, *Environ Health Perspect.* 114, 1763-1769.
24. Beamer, P., Key, M. E., Ferguson, A. C., Canales, R. A., Auyeung, W., and Leckie, J. O. (2008) Quantified activity pattern data from 6 to 27-month-old farmworker children for use in exposure assessment, *Environ Res.* 108, 239-246.
25. Becker, K., Seiwert, M., Angerer, J., Kolossa-Gehring, M., Hoppe, H. W., Ball, M., Schulz, C., Thumulla, J., and Seifert, B. (2006) GerES IV pilot study: assessment of the exposure of German children to organophosphorus and pyrethroid pesticides, *Int. J. Hyg. Environ. Health* 209, 221-233.
26. Berkowitz, G. S., Obel, J., Deych, E., Lapinski, R., Godbold, J., Liu, Z. S., Landrigan, P. J., and Wolff, M. S. (2003) Exposure to indoor pesticides during pregnancy in a multiethnic, urban cohort, *Environmental Health Perspectives* 111, 79-84.
27. Bernard, C. E., Nuygen, H., Truong, D., and Krieger, R. I. (2001) Environmental residues and biomonitoring estimates of human insecticide exposure from treated residential turf, *Arch. Environ. Contam Toxicol.* 41, 237-240.
28. Bird, S. L., Esterly, D. M., and Perry, S. G. (1996) Off-target deposition of pesticides from agricultural aerial spray applications, *Journal of Environmental Quality.* Vol. 25(5)(pp 1095-1104), 1996. 1095-1104.
29. Black, K. G. and Fenske, R. A. (1996) Dislodgeability of chlorpyrifos and fluorescent tracer residues on turf: comparison of wipe and foliar wash sampling techniques, *Arch. Environ. Contam Toxicol.* 31, 563-570.

**THIS IS A DRAFT PAPER FOR DISCUSSION. IT SHOULD NOT BE QUOTED, CITED OR REPRODUCED.**

30. Boone, J. S., Tyler, J. W., and Chambers, J. E. (2001) Transferable residues from dog fur and plasma cholinesterase inhibition in dogs treated with a flea control dip containing chlorpyrifos, *Environ. Health Perspect.* 109, 1109-1114.
31. Bouvier, G., Seta, N., Vigouroux-Villard, A., Blanchard, O., and Momas, I. (2005) Insecticide urinary metabolites in nonoccupationally exposed populations, *J. Toxicol. Environ. Health B Crit Rev.* 8, 485-512.
32. Bouvier, G., Blanchard, O., Momas, I., and Seta, N. (2006) Environmental and biological monitoring of exposure to organophosphorus pesticides: application to occupationally and non-occupationally exposed adult populations, *J. Expo. Sci. Environ. Epidemiol.* 16, 417-426.
33. Bouvier, G., Blanchard, O., Momas, I., and Seta, N. (2006) Pesticide exposure of non-occupationally exposed subjects compared to some occupational exposure: a French pilot study, *Sci. Total Environ.* 366, 74-91.
34. Bradman, A. and Whyatt, R. M. (2005) Characterizing exposures to nonpersistent pesticides during pregnancy and early childhood in the National Children's Study: a review of monitoring and measurement methodologies, *Environ. Health Perspect.* 113, 1092-1099.
35. Bradman, A., Eskenazi, B., Barr, D. B., Bravo, R., Castorina, R., Chevrier, J., Kogut, K., Harnly, M. E., and McKone, T. E. (2005) Organophosphate urinary metabolite levels during pregnancy and after delivery in women living in an agricultural community, *Environ. Health Perspect.* 113, 1802-1807.
36. Bradman, A., Whitaker, D., Quiros, L., Castorina, R., Henn, B. C., Nishioka, M., Morgan, J., Barr, D. B., Harnly, M., Brisbin, J. A., Sheldon, L. S., McKone, T. E., and Eskenazi, B. (2006) Pesticides and their Metabolites in the Homes and Urine of Farmworker Children Living in the Salinas Valley, CA, *J. Expo. Sci. Environ. Epidemiol.*
37. Bradman, A., Salvatore, A. L., Boeniger, M., Castorina, R., Snyder, J., Barr, D. B., Jewell, N. P., Kavanagh-Baird, G., Striley, C., and Eskenazi, B. (2008) Community-based intervention to reduce pesticide exposure to farmworkers and potential take-home exposure to their families, *J. Expo. Sci. Environ. Epidemiol.*
38. Bradman, M. A., Harnly, M. E., Draper, W., Seidel, S., Teran, S., Wakeham, D., and Neutra, R. (1997) Pesticide exposures to children from California's Central Valley: results of a pilot study, *J. Expo. Anal. Environ. Epidemiol.* 7, 217-234.
39. Brody, J. G., Vorhees, D. J., Melly, S. J., Swedis, S. R., Drivas, P. J., and Rudel, R. A. (2002) Using GIS and historical records to reconstruct residential exposure to large-scale pesticide application, *J. Expo. Anal. Environ. Epidemiol.* 12, 64-80.
40. Bryden, P. A., McKnight, R. H., and Westneat, S. C. (2005) Using U.S. Poison Control Center records to identify bystander pesticide exposures: a one-year surveillance of four southeastern states, *J. Agric. Saf Health* 11, 159-166.
41. Buck, R. J., Ozkaynak, H., Xue, J., Zartarian, V. G., and Hammerstrom, K. (2001) Modeled estimates of chlorpyrifos exposure and dose for the Minnesota and Arizona NHEXAS populations, *J. Expo. Anal. Environ. Epidemiol.* 11, 253-268.
42. BUCKLEY, T. J., LIDDLE, J., Ashley, D. L., PASCHAL, D. C., Burse, V. W., Needham, L. L., and KLAND, G. (1997) Environmental and biomarker measurements in nine homes in the Lower Rio Grande Valley: Multimedia results for pesticides, metals, PAHs, and VOCs, *Environment International* 23, 705-732.
43. Bukowski, J., Robson, M., Buckley, B., Russell, D., and Meyer, L. (1996) Air levels of volatile organic compounds following indoor application of an emulsifiable concentrate insecticide, *Environmental Science & Technology* 30.
44. Butte, W. and Heinzow, B. (2002) Pollutants in house dust as indicators of indoor contamination, *Rev. Environ. Contam Toxicol.* 175, 1-46.
45. Bylemans, D. (2001) The importance of application technique and drift reduction for ecotoxicological risk assessment and risk management in fruit growing, *Parasitica* 57.

**THIS IS A DRAFT PAPER FOR DISCUSSION. IT SHOULD NOT BE QUOTED, CITED OR REPRODUCED.**

46. Byrne, S. L., Shurdut, B. A., and Saunders, D. G. (1998) Potential chlorpyrifos exposure to residents following standard crack and crevice treatment, *Environ. Health Perspect.* 106, 725-731.
47. Camann, D. E., Majumdar, T. K., and Geno, P. W. (2000) Evaluation of Saliva and Artificial Salivary Fluids for Removal of Pesticide Residues from Human Skin, *Govt Reports Announcements & Index (GRA&I), Issue 17, 2000 [NTIS]*.
48. Cantor, A. and Goldman, L. R. (2002) International impacts of pesticides on children, *Int. J Occup. Environ. Health* 8, 60-62.
49. Castorina, R., Bradman, A., McKone, T. E., Barr, D. B., Harnly, M. E., and Eskenazi, B. (2003) Cumulative organophosphate pesticide exposure and risk assessment among pregnant women living in an agricultural community: a case study from the CHAMACOS cohort, *Environ. Health Perspect.* 111, 1640-1648.
50. Chambers, J. E., Boone, J. S., Davis, M. K., Moran, J. E., and Tyler, J. W. (2007) Assessing transferable residues from intermittent exposure to flea control collars containing the organophosphate insecticide chlorpyrifos, *J. Expo. Sci. Environ. Epidemiol.*
51. Clothier, J. M. (2000) Dermal Transfer Efficiency of Pesticides from New, Vinyl Sheet Flooring to Dry and Wetted Palms, *Govt Reports Announcements & Index (GRA&I), Issue 21, 2000*.
52. Clothier, K. M. (2000) Dermal Transfer Efficiency of Pesticides from Turf Grass to Dry and Wetted Palms, *Govt Reports Announcements & Index (GRA&I), Issue 17, 2000*.
53. Cochran, R. C. (2002) Appraisal of risks from nonoccupational exposure to chlorpyrifos, *Regul. Toxicol. Pharmacol.* 35, 105-121.
54. Coggon, D. (2006) Bystander exposure: does the current regulatory approach provide adequate protection?, *Outlooks on Pest Management* 17.
55. Cohen Hubal, E. A., Egeghy, P. P., Leovic, K. W., and Akland, G. G. (2006) Measuring potential dermal transfer of a pesticide to children in a child care center, *Environ. Health Perspect.* 114, 264-269.
56. Colt, J. S., Lubin, J., Camann, D., Davis, S., Cerhan, J., Severson, R. K., Cozen, W., and Hartge, P. (2004) Comparison of pesticide levels in carpet dust and self-reported pest treatment practices in four US sites, *J. Expo. Anal. Environ. Epidemiol.* 14, 74-83.
57. Cooper, S. P., Darragh, A. R., Vernon, S. W., Stallones, L., MacNaughton, N., Robison, T., Hanis, C., and Zahm, S. H. (2001) Ascertainment of pesticide exposures of migrant and seasonal farmworker children: findings from focus groups, *Am. J. Ind. Med.* 40, 531-537.
58. Coronado, G. D., Thompson, B., Strong, L., Griffith, W. C., and Islas, I. (2004) Agricultural task and exposure to organophosphate pesticides among farmworkers, *Environ. Health Perspect.* 112, 142-147.
59. Coronado, G. D., Vigoren, E. M., Thompson, B., Griffith, W. C., and Faustman, E. M. (2006) Organophosphate pesticide exposure and work in pome fruit: evidence for the take-home pesticide pathway, *Environ. Health Perspect.* 114, 999-1006.
60. Couture, C., Fortin, M. C., Carrier, G., Dumas, P., Tremblay, C., and Bouchard, M. (2009) Assessment of exposure to pyrethroids and pyrethrins in a rural population of the Monteregie area, Quebec, Canada, *J Occup. Environ Hyg.* 6, 341-352.
61. Curl, C. L., Fenske, R. A., Kissel, J. C., Shirai, J. H., Moate, T. F., Griffith, W., Coronado, G., and Thompson, B. (2002) Evaluation of take-home organophosphorus pesticide exposure among agricultural workers and their children, *Environ. Health Perspect.* 110, A787-A792.
62. Curl, C. L., Fenske, R. A., and Elgethun, K. (2003) Organophosphorus pesticide exposure of urban and suburban preschool children with organic and conventional diets, *Environmental Health Perspectives* 111, 377-382.

**THIS IS A DRAFT PAPER FOR DISCUSSION. IT SHOULD NOT BE QUOTED, CITED OR REPRODUCED.**

63. Curwin, B., Sanderson, W., Reynolds, S., Hein, M., and Alavanja, M. (2002) Pesticide use and practices in an Iowa farm family pesticide exposure study, *J. Agric. Saf Health* 8, 423-433.
64. Curwin, B. D., Hein, M. J., Sanderson, W. T., Nishioka, M. G., Reynolds, S. J., Ward, E. M., and Alavanja, M. C. (2005) Pesticide contamination inside farm and nonfarm homes, *J. Occup. Environ. Hyg.* 2, 357-367.
65. Curwin, B. D., Hein, M. J., Sanderson, W. T., Barr, D. B., Heederik, D., Reynolds, S. J., Ward, E. M., and Alavanja, M. C. (2005) Urinary and hand wipe pesticide levels among farmers and nonfarmers in Iowa, *J. Expo. Anal. Environ. Epidemiol.* 15, 500-508.
66. Curwin, B. D., Hein, M. J., Sanderson, W. T., Striley, C., Heederik, D., Kromhout, H., Reynolds, S. J., and Alavanja, M. C. (2007) Urinary pesticide concentrations among children, mothers and fathers living in farm and non-farm households in Iowa, *Ann. Occup. Hyg.* 51, 53-65.
67. Curwin, B. D., Hein, M. J., Sanderson, W. T., Striley, C., Heederik, D., Kromhout, H., Reynolds, S. J., and Alavanja, M. C. (2007) Pesticide dose estimates for children of Iowa farmers and non-farmers, *Environ. Res.* 105, 307-315.
68. Davies, J. E. and Peterson, J. C. (1997) Surveillance of occupational, accidental, and incidental exposure to organophosphate pesticides using urine alkyl phosphate and phenolic metabolite measurements, *Ann. N. Y Acad. Sci.* 837, 257-268.
69. Davis, D. L. and Ahmed, A. K. (1998) Exposures from indoor spraying of chlorpyrifos pose greater health risks to children than currently estimated, *Environ. Health Perspect.* 106, 299-301.
70. De Silva, H. J., Samarawickrema, N. A., and Wickremasinghe, A. R. (2006) Toxicity due to organophosphorus compounds: what about chronic exposure?, *Trans. R. Soc. Trop. Med. Hyg.* 100, 803-806.
71. de, C. J., Heederik, D., Kromhout, H., Boleij, J. S., Hoek, F., Wegh, H., and Tjoe, N. E. (1998) Exposure to captan in fruit growing, *Am. Ind. Hyg. Assoc. J.* 59, 158-165.
72. Dosemeci, M., Alavanja, M. C., Rowland, A. S., Mage, D., Zahm, S. H., Rothman, N., Lubin, J. H., Hoppin, J. A., Sandler, D. P., and Blair, A. (2002) A quantitative approach for estimating exposure to pesticides in the Agricultural Health Study, *Ann. Occup. Hyg.* 46, 245-260.
73. Dowling, K. C. and Seiber, J. N. (2002) Importance of respiratory exposure to pesticides among agricultural populations, *Int. J. Toxicol.* 21, 371-381.
74. Dowling, K. C., Blanco, L. E., Martinez, I., Aragon, A., Bernard, C. E., and Krieger, R. I. (2005) Urinary 3,5,6-trichloro-2-pyridinol levels of chlorpyrifos in Nicaraguan applicators and small farm families, *Bull. Environ. Contam Toxicol.* 74, 380-387.
75. Downs, G. (2006) Pesticide exposures for people in agricultural areas, *Outlooks on Pest Management* 17.
76. Driver, J. H. and Whitmyre, G. K. (1996) Assessment of residential exposure to pesticides and other chemicals, *Pesticide Outlook* 7, 6-10.
77. Duggan, A., Charnley, G., Chen, W., Chukwudebe, A., Hawk, R., Krieger, R. I., Ross, J., and Yarborough, C. (2003) Di-alkyl phosphate biomonitoring data: assessing cumulative exposure to organophosphate pesticides, *Regul. Toxicol. Pharmacol.* 37, 382-395.
78. Echols, S. L., Macintosh, D. L., and Ryan, P. B. (2001) Temporal patterns of activities potentially related to pesticide exposure, *J. Expo. Anal. Environ. Epidemiol.* 11, 389-397.
79. Edwards, J. W., Lee, S.-G., Heath, L. M., and Pisaniello, D. L. (2007) Worker exposure and a risk assessment of Malathion and Fenthion used in the control of Mediterranean fruit fly in South Australia, *Environmental Research.* 103(1)(pp 38-45), 2007. Date of Publication: Jan 2007. 38-45.
80. Ellis, C. (2007) New research into bystander and resident exposure, *Pesticides News*.

**THIS IS A DRAFT PAPER FOR DISCUSSION. IT SHOULD NOT BE QUOTED, CITED OR REPRODUCED.**

81. Ellis, M. and Miller, P. (2008) Progress in the development of a bystander and resident exposure assessment model, *International Advances in Pesticide Application, Robinson College, Cambridge, UK, 9-11 January 2008*.
82. Erdtmann-Vourliotis, M., Klein, M., and Hohgardt, K. (2007) Assuring health protection for bystanders and residents: thought starter for a mathematical model for estimating short-term and long-term exposure events with plant protection products and a proposal for a step-by-step procedure, *Journal fur Verbraucherschutz und Lebensmittelsicherheit 2*.
83. Eskenazi, B., Bradman, A., and Castorina, R. (1999) Exposures of children to organophosphate pesticides and their potential adverse health effects, *Environ. Health Perspect. 107 Suppl 3*, 409-419.
84. Esteban, E., Rubin, C., Hill, R., Olson, D., and Pearce, K. (1996) Association between indoor residential contamination with methyl parathion and urinary para-nitrophenol, *J. Expo. Anal. Environ. Epidemiol. 6*, 375-387.
85. Fenske, R. A. (1997) Pesticide exposure assessment of workers and their families, *Occup. Med. State of the Art Reviews Vol. 12, No. 2*, 221-237.
86. Fenske, R. A., Lu, C., Simcox, N. J., Loewenherz, C., Touchstone, J., Moate, T. F., Allen, E. H., and Kissel, J. C. (2000) Strategies for assessing children's organophosphorus pesticide exposures in agricultural communities, *J. Expo. Anal. Environ. Epidemiol. 10*, 662-671.
87. Fenske, R. A., Kissel, J. C., Lu, C., Kalman, D. A., Simcox, N. J., Allen, E. H., and Keifer, M. C. (2000) Biologically based pesticide dose estimates for children in an agricultural community, *Environ. Health Perspect. 108*, 515-520.
88. Fenske, R. A., Lu, C., Barr, D., and Needham, L. (2002) Children's exposure to chlorpyrifos and parathion in an agricultural community in central Washington State, *Environ. Health Perspect. 110*, 549-553.
89. Fenske, R. A., Kissel, J. C., Shirai, J. H., Curl, C. L., and Galvin, K. (2004) Agricultural task not predictive of children's exposure to OP pesticides, *Environ. Health Perspect. 112*, A865-A866.
90. Fenske, R. A., Lu, C., Curl, C. L., Shirai, J. H., and Kissel, J. C. (2005) Biologic monitoring to characterize organophosphorus pesticide exposure among children and workers: an analysis of recent studies in Washington State, *Environ. Health Perspect. 113*, 1651-1657.
91. Fenske, R. A., Bradman, A., Whyatt, R. M., Wolff, M. S., and Barr, D. B. (2005) Lessons learned for the assessment of children's pesticide exposure: critical sampling and analytical issues for future studies, *Environ. Health Perspect. 113*, 1455-1462.
92. Fenske, R. A. (2005) State-of-the-art measurement of agricultural pesticide exposures, *Scand. J. Work Environ. Health 31 Suppl 1*, 67-73.
93. Fortin, M. C., Bouchard, M., Carrier, G., and Dumas, P. (2008) Biological monitoring of exposure to pyrethrins and pyrethroids in a metropolitan population of the Province of Quebec, Canada, *Environ Res. 107*, 343-350.
94. Fortin, M. C., Carrier, G., and Bouchard, M. (2008) Concentrations versus amounts of biomarkers in urine: a comparison of approaches to assess pyrethroid exposure 24, *Environmental Health 7*.
95. Freeman, N. C., Jimenez, M., Reed, K. J., Gurunathan, S., Edwards, R. D., Roy, A., Adgate, J. L., Pellizzari, E. D., Quackenboss, J., Sexton, K., and Liroy, P. J. (2001) Quantitative analysis of children's microactivity patterns: The Minnesota Children's Pesticide Exposure Study, *J. Expo. Anal. Environ. Epidemiol. 11*, 501-509.
96. Freeman, N. C., Hore, P., Black, K., Jimenez, M., Sheldon, L., Tolve, N., and Liroy, P. J. (2005) Contributions of children's activities to pesticide hand loadings following residential pesticide application, *J. Expo. Anal. Environ. Epidemiol. 15*, 81-88.

**THIS IS A DRAFT PAPER FOR DISCUSSION. IT SHOULD NOT BE QUOTED, CITED OR REPRODUCED.**

97. Freeman, N. C. G., Shalat, S. L., Black, K., Jimenez, M., Donnelly, K. C., Calvin, A., and Ramirez, J. (2004) Seasonal pesticide use in a rural community on the US/Mexico border, *Journal of Exposure Analysis and Environmental Epidemiology* 14, 473-478.
98. Gladen, B. C., Sandler, D. P., Zahm, S. H., Kamel, F., Rowland, A. S., and Alavanja, M. C. (1998) Exposure opportunities of families of farmer pesticide applicators, *Am. J. Ind. Med.* 34, 581-587.
99. Glass, C. R. (2006) Field study methods for the determination of bystander exposure to pesticides, in *Pesticide protocols 2006 ed.*, pp 165-177, Humana Press Totowa USA.
100. Gordon, S. M., Callahan, P. J., Nishioka, M. G., Brinkman, M. C., O'Rourke, M. K., Lebowitz, M. D., and Moschandreas, D. J. (1999) Residential environmental measurements in the national human exposure assessment survey (NHEXAS) pilot study in Arizona: preliminary results for pesticides and VOCs, *J. Expo. Anal. Environ. Epidemiol.* 9, 456-470.
101. Gray, G. M., Goldstein, B. D., Bailar, J., Davis, D. L., Delzell, E., Dost, F., Greenberg, R. S., Hatch, M., Hodgson, E., Ibrahim, M. A., Lamb, J., Lavy, T., Mandel, J., Monson, R., Robson, M., Shore, R., and Graham, J. S. (2000) The federal government's Agricultural Health Study: A critical review with suggested improvements, *Human and Ecological Risk Assessment* 6, 47-71.
102. Gurunathan, S., Robson, M., Freeman, N., Buckley, B., Roy, A., Meyer, R., Bukowski, J., and Lioy, P. J. (1998) Accumulation of chlorpyrifos on residential surfaces and toys accessible to children, *Environ. Health Perspect.* 106, 9-16.
103. Harnly, M., McLaughlin, R., Bradman, A., Anderson, M., and Gunier, R. (2005) Correlating agricultural use of organophosphates with outdoor air concentrations: A particular concern for children, *Environmental Health Perspectives* 113, 1184-1189.
104. Heudorf, U. and Angerer, J. (2001) Metabolites of organophosphorous insecticides in urine specimens from inhabitants of a residential area, *Environ. Res.* 86, 80-87.
105. Heudorf, U. and Angerer, J. (2001) Metabolites of pyrethroid insecticides in urine specimens: current exposure in an urban population in Germany, *Environ. Health Perspect.* 109, 213-217.
106. Heudorf, U., Angerer, J., and Drexler, H. (2004) Current internal exposure to pesticides in children and adolescents in Germany: urinary levels of metabolites of pyrethroid and organophosphorus insecticides, *International Archives of Occupational and Environmental Health* 77, 67-72.
107. Heudorf, U., Butte, W., Schulz, C., and Angerer, J. (2006) Reference values for metabolites of pyrethroid and organophosphorous insecticides in urine for human biomonitoring in environmental medicine, *Int. J Hyg. Environ Health* 209, 293-299.
108. Higgins, G. M., Muniz, J. F., and McCauley, L. A. (2001) Monitoring acetylcholinesterase levels in migrant agricultural workers and their children using a portable test kit, *J. Agric. Saf Health* 7, 35-49.
109. Hogenkamp, A., Vaal, M., and Heederik, D. (2004) Pesticide exposure in dwellings near bulb growing fields in The Netherlands: an explorative study, *Ann. Agric. Environ. Med.* 11, 149-153.
110. Hoppin, J. A., Adgate, J. L., Eberhart, M., Nishioka, M., and Ryan, P. B. (2006) Environmental exposure assessment of pesticides in farmworker homes, *Environ. Health Perspect.* 114, 929-935.
111. Hore, P., Robson, M., Freeman, N., Zhang, J., Wartenberg, D., Ozkaynak, H., Tulve, N., Sheldon, L., Needham, L., Barr, D., and Lioy, P. J. (2005) Chlorpyrifos accumulation patterns for child-accessible surfaces and objects and urinary metabolite excretion by children for 2 weeks after crack-and-crevice application, *Environ. Health Perspect.* 113, 211-219.
112. Hore, P., Zartarian, V., Xue, J., Ozkaynak, H., Wang, S. W., Yang, Y. C., Chu, P. L., Sheldon, L., Robson, M., Needham, L., Barr, D., Freeman, N., Georgopoulos, P., and Lioy, P. J. (2006) Children's residential exposure to chlorpyrifos: application of CPPAES field measurements of chlorpyrifos and TCPy within MENTOR/SHEDS-Pesticides model, *Sci. Total Environ.* 366, 525-537.

**THIS IS A DRAFT PAPER FOR DISCUSSION. IT SHOULD NOT BE QUOTED, CITED OR REPRODUCED.**

113. Hryhorczuk, D. O., Moomey, M., Burton, A., Runkle, K., Chen, E., Saxer, T., Slightom, J., Dimos, J., McCann, K., and Barr, D. (2002) Urinary p-nitrophenol as a biomarker of household exposure to methyl parathion, *Environ. Health Perspect.* 110 Suppl 6, 1041-1046.
114. Hubal, E. A., Sheldon, L. S., Zufall, M. J., Burke, J. M., and Thomas, K. W. (2000) The challenge of assessing children's residential exposure to pesticides, *J. Expo. Anal. Environ. Epidemiol.* 10, 638-649.
115. Hubal, E. A. C., Egeghy, P. P., Leovic, K. W., and Akland, G. G. (2006) Measuring potential dermal transfer of a pesticide to children in a child care center, *Environmental Health Perspectives* 114, 264-269.
116. Hubal, E. C., Burke, J., Zufall, M. J., Ozkaynak, H., and Sheldon, L. S. (1999) Important pathways and factors for assessing children residential exposure to pesticides, *Epidemiology* 10, S111.
117. Imtiaz, R. and Haugh, G. (2002) Analysis of environmental and biologic methyl parathion data to improve future data collection, *Environ. Health Perspect.* 110 Suppl 6, 1071-1074.
118. Julien, R., Adamkiewicz, G., Levy, J. I., Bennett, D., Nishioka, M., and Spengler, J. D. (2008) Pesticide loadings of select organophosphate and pyrethroid pesticides in urban public housing, *Journal of Exposure Science and Environmental Epidemiology.* 18(2)(pp 167-174), 2008. Date of Publication: Mar 2008. 167-174.
119. Kawahara, J., Horikoshi, R., Yamaguchi, T., Kumagai, K., and Yanagisawa, Y. (2005) Air pollution and young children's inhalation exposure to organophosphorus pesticide in an agricultural community in Japan, *Environ. Int.* 31, 1123-1132.
120. Kirrane, E. F., Hoppin, J. A., Umbach, D. M., Samanic, C., and Sandler, D. P. (2004) Patterns of pesticide use and their determinants among wives of farmer pesticide applicators in the Agricultural Health Study, *J. Occup. Environ. Med.* 46, 856-865.
121. Kissel, J. C., Curl, C. L., Kedan, G., Lu, C., Griffith, W., Barr, D. B., Needham, L. L., and Fenske, R. A. (2005) Comparison of organophosphorus pesticide metabolite levels in single and multiple daily urine samples collected from preschool children in Washington State, *J. Expo. Anal. Environ. Epidemiol.* 15, 164-171.
122. Koch, D., Lu, C., Fisker-Andersen, J., Jolley, L., and Fenske, R. A. (2002) Temporal association of children's pesticide exposure and agricultural spraying: report of a longitudinal biological monitoring study, *Environ. Health Perspect.* 110, 829-833.
123. Krieger, R. I., Bernard, C. E., Dinoff, T. M., Ross, J. H., and Williams, R. L. (2001) Biomonitoring of persons exposed to insecticides used in residences, *Ann. Occup. Hyg.* 45 Suppl 1, S143-S153.
124. Krol, W. J., Arsenault, T., and Mattina, M. J. (2005) Assessment of dermal exposure to pesticides under "pick your own" harvesting conditions, *Bull. Environ. Contam Toxicol.* 75, 211-218.
125. Lambert, W. E., Lasarev, M., Muniz, J., Scherer, J., Rothlein, J., Santana, J., and McCauley, L. (2005) Variation in organophosphate pesticide metabolites in urine of children living in agricultural communities, *Environ. Health Perspect.* 113, 504-508.
126. Lee, S., McLaughlin, R., Harnly, M., Gunier, R., and Kreutzer, R. (2002) Community exposures to airborne agricultural pesticides in California: Ranking of inhalation risks, *Environmental Health Perspectives* 110, 1175-1184.
127. Lemley, A. T., Hedge, A., Obendorf, S. K., Hong, S., Kim, J., Muss, T. M., and Varner, C. J. (2002) Selected pesticide residues in house dust from farmers' homes in central New York State, USA, *Bull. Environ. Contam Toxicol.* 69, 155-163.
128. Lemus, R. and Abdelghani, A. (2000) Chlorpyrifos: an unwelcome pesticide in our homes, *Rev. Environ. Health* 15, 421-433.

**THIS IS A DRAFT PAPER FOR DISCUSSION. IT SHOULD NOT BE QUOTED, CITED OR REPRODUCED.**

129. Leverton, K., Cox, V., Battershill, J., and Coggon, D. (2007) Hospital admission for accidental pesticide poisoning among adults of working age in England, 1998-2003, *Clinical Toxicology* 45, 594-597.
130. Lewis, R. G., Fortune, C. R., Willis, R. D., Camann, D. E., and Antley, J. T. (1999) Distribution of pesticides and polycyclic aromatic hydrocarbons in house dust as a function of particle size, *Environ. Health Perspect.* 107, 721-726.
131. Lewis, R. G. and Nishhioka, M. G. (1999) Residential Indoor Exposures of Children to Pesticides Following Lawn Applications, *Govt Reports Announcements & Index (GRA&I), Issue 26, 1999.*
132. Lewis, R. G., Fortune, C. R., Blanchard, F. T., and Camann, D. E. (2000) Movement and Deposition of Pesticides within Residences after Interior and Exterior Applications, *Govt Reports Announcements & Index (GRA&I), Issue 20, 2000.*
133. Lewis, R. G., Fortune, C. R., Blanchard, F. T., and Camann, D. E. (2001) Movement and deposition of two organophosphorus pesticides within a residence after interior and exterior applications, *J. Air Waste Manag. Assoc.* 51, 339-351.
134. Liroy, P. J., Edwards, R. D., Freeman, N., Gurunathan, S., Pellizzari, E., Adgate, J. L., Quackenboss, J., and Sexton, K. (2000) House dust levels of selected insecticides and a herbicide measured by the EL and LWW samplers and comparisons to hand rinses and urine metabolites, *J. Expo. Anal. Environ. Epidemiol.* 10, 327-340.
135. Loewenherz, C., Fenske, R. A., Simcox, N. J., Bellamy, G., and Kalman, D. (1997) Biological monitoring of organophosphorus pesticide exposure among children of agricultural workers in central Washington State, *Environ. Health Perspect.* 105, 1344-1353.
136. Lu ChenSheng and Fenske, R. A. (1998) Air and surface chlorpyrifos residues following residential broadcast and aerosol pesticide applications, *Environ. Sci. Technol.* 32, 1386-1390.
137. Lu, C., Fenske, R. A., Simcox, N. J., and Kalman, D. (2000) Pesticide exposure of children in an agricultural community: evidence of household proximity to farmland and take home exposure pathways, *Environ. Res.* 84, 290-302.
138. Lu, C., Knutson, D. E., Fisker-Andersen, J., and Fenske, R. A. (2001) Biological monitoring survey of organophosphorus pesticide exposure among pre-school children in the Seattle metropolitan area, *Environ. Health Perspect.* 109, 299-303.
139. Lu, C., Kedan, G., Fisker-Andersen, J., Kissel, J. C., and Fenske, R. A. (2004) Multipathway organophosphorus pesticide exposures of preschool children living in agricultural and nonagricultural communities, *Environ. Res.* 96, 283-289.
140. Lu, C., Bravo, R., Caltabiano, L. M., Irish, R. M., Weerasekera, G., and Barr, D. B. (2005) The presence of dialkylphosphates in fresh fruit juices: implication for organophosphorus pesticide exposure and risk assessments, *J. Toxicol. Environ. Health A* 68, 209-227.
141. Lu, C., Barr, D. B., Pearson, M., Bartell, S., and Bravo, R. (2006) A longitudinal approach to assessing urban and suburban children's exposure to pyrethroid pesticides, *Environ. Health Perspect.* 114, 1419-1423.
142. Lu, C., Barr, D. B., Pearson, M. A., Walker, L. A., and Bravo, R. (2009) The attribution of urban and suburban children's exposure to synthetic pyrethroid insecticides: a longitudinal assessment 22, *J. Expo. Sci. Environ. Epidemiol.* 19, 69-78.
143. Lu, C. S. and Fenske, R. A. (1999) Dermal transfer of chlorpyrifos residues from residential surfaces: Comparison of hand press, hand drag, wipe, and polyurethane foam roller measurements after broadcast and aerosol pesticide applications, *Environmental Health Perspectives* 107, 463-467.
144. Mandel, J. S., Alexander, B. H., Baker, B. A., Acquavella, J. F., Chapman, P., and Honeycutt, R. (2005) Biomonitoring for farm families in the farm family exposure study, *Scand. J. Work Environ. Health* 31 Suppl 1, 98-104.

**THIS IS A DRAFT PAPER FOR DISCUSSION. IT SHOULD NOT BE QUOTED, CITED OR REPRODUCED.**

145. Martin, S., Westphal, D., Erdtmann-Vourliotis, M., Dechet, F., Schulze-Rosario, C., Stauber, F., Wicke, H., and Chester, G. (2008) Guidance for exposure and risk evaluation for bystanders and residents exposed to plant protection products during and after application 18, *Journal für Verbraucherschutz und Lebensmittelsicherheit* 3.
146. Mathers, J. J., Glass, C. R., Harrington, P., and Smith, S. (2006) Techniques for the estimation of bystander exposure, *Aspects of Applied Biology* 77, 253-257.
147. Matthews, G. A. and Hamey, P. Y. (2003) Exposure of bystanders to pesticides, *Pesticide Outlook* 14, 210-212.
148. Mazzi, F., Capri, E., Trevisan, M., Glass, C., and Wild, S. (1999) Potential operator, bystander and environmental exposure in sloped vineyards, pp 731-745, La Goliardica Pavese s.r.l.; Pavia.
149. McCauley, L. A., Lasarev, M. R., Higgins, G., Rothlein, J., Muniz, J., Ebbert, C., and Phillips, J. (2001) Work characteristics and pesticide exposures among migrant agricultural families: a community-based research approach, *Environ. Health Perspect.* 109, 533-538.
150. McCauley, L. A., Michaels, S., Rothlein, J., Muniz, J., Lasarev, M., and Ebbert, C. (2003) Pesticide exposure and self reported home hygiene: practices in agricultural families, *AAOHN. J.* 51, 113-119.
151. McCauley, L. A., Travers, R., Lasarev, M., Muniz, J., and Nailon, R. (2006) Effectiveness of cleaning practices in removing pesticides from home environments, *J. Agromedicine.* 11, 81-88.
152. McKone, T. E., Castorina, R., Harnly, M. E., Kuwabara, Y., Eskenazi, B., and Bradman, A. (2007) Merging models and biomonitoring data to characterize sources and pathways of human exposure to organophosphorus pesticides in the Salinas Valley of California, *Environ. Sci. Technol.* 41, 3233-3240.
153. Mills, P. K. and Zahm, S. H. (2001) Organophosphate pesticide residues in urine of farmworkers and their children in Fresno County, California, *Am. J. Ind. Med.* 40, 571-577.
154. Monge, P., Partanen, T., Wesseling, C., Bravo, V., Ruepert, C., and Burstyn, I. (2005) Assessment of pesticide exposure in the agricultural population of Costa Rica, *Ann. Occup. Hyg.* 49, 375-384.
155. Moreira, J., Santos, J., Glass, C., Wild, S., and Sykes, D. (1999) Measurement of spray drift with hand held orchard spray applications, La Goliardica Pavese s.r.l.; Pavia; Italy.
156. Morgan, M. K., Stout, D. M., and Wilson, N. K. (2001) Feasibility study of the potential for human exposure to pet-borne diazinon residues following lawn applications, *Bull. Environ. Contam Toxicol.* 66, 295-300.
157. Morgan, M. K., Sheldon, L. S., Croghan, C. W., Jones, P. A., Robertson, G. L., Chuang, J. C., Wilson, N. K., and Lyu, C. W. (2005) Exposures of preschool children to chlorpyrifos and its degradation product 3,5,6-trichloro-2-pyridinol in their everyday environments, *J. Expo. Anal. Environ. Epidemiol.* 15, 297-309.
158. Morgan, M. K., Sheldon, L. S., Croghan, C. W., Jones, P. A., Chuang, J. C., and Wilson, N. K. (2007) An observational study of 127 preschool children at their homes and daycare centers in Ohio: environmental pathways to cis- and trans-permethrin exposure, *Environ. Res.* 104, 266-274.
159. Morgan, M. K., Sheldon, L. S., Thomas, K. W., Egeghy, P. P., Croghan, C. W., Jones, P. A., Chuang, J. C., and Wilson, N. K. (2008) Adult and children's exposure to 2,4-D from multiple sources and pathways 21, *J. Expo. Sci. Environ. Epidemiol.* 18, 486-494.
160. Moschandreas, D. J., Karuchit, S., Kim, Y., Ari, H., Lebowitz, M. D., O' Rourke, M. K., Gordon, S., and Robertson, G. (2001) On predicting multi-route and multimedia residential exposure to chlorpyrifos and diazinon, *J. Expo. Anal. Environ. Epidemiol.* 11, 56-65.

**THIS IS A DRAFT PAPER FOR DISCUSSION. IT SHOULD NOT BE QUOTED, CITED OR REPRODUCED.**

161. Nishioka, M. G., Burkholder, H. M., Brinkman, M. C., and Lewis, R. G. (1999) Distribution of 2,4-dichlorophenoxyacetic acid in floor dust throughout homes following homeowner and commercial lawn applications: quantitative effects of children, pets, and shoes, *Environ. Sci. Technol.* 33, 1359-1365.
162. Nishioka, M. G., Burkholder, H. M., Brinkman, M. C., Gordon, S. M., and Lewis, R. G. (1996) Measuring transport of lawn-applied herbicide acids from turf to home: Correlation of dislodgeable 2,4-D turf residues with carpet dust and carpet surface residues, *Environmental Science & Technology* 30, 3313-3320.
163. Nishioka, M. G., Lewis, R. G., Brinkman, M. C., Burkholder, H. M., Hines, C. E., and Menkedick, J. R. (2001) Distribution of 2,4-D in air and on surfaces inside residences after lawn applications: comparing exposure estimates from various media for young children, *Environ. Health Perspect.* 109, 1185-1191.
164. O'Rourke, M. K., Lizardi, P. S., Rogan, S. P., Freeman, N. C., Aguirre, A., and Saint, C. G. (2000) Pesticide exposure and creatinine variation among young children, *J. Expo. Anal. Environ. Epidemiol.* 10, 672-681.
165. Obendorf, S. K., Lemley, A. T., Hedge, A., Kline, A. A., Tan, K., and Dokuchayeva, T. (2006) Distribution of pesticide residues within homes in central new York State, *Archives of Environmental Contamination and Toxicology* 50, 31-44.
166. Ortiz-Perez, M. D., Torres-Dosal, A., Batres, L. E., Lopez-Guzman, O. D., Grimaldo, M., Carranza, C., Perez-Maldonado, I. N., Martinez, F., Perez-Urizar, J., and az-Barriga, F. (2005) Environmental health assessment of deltamethrin in a malarious area of Mexico: environmental persistence, toxicokinetics, and genotoxicity in exposed children, *Environ. Health Perspect.* 113, 782-786.
167. Panuwet, P., Prapamontol, T., Chantara, S., and Barr, D. B. (2008) Urinary pesticide metabolites in school students from northern Thailand 3, *Int. J Hyg. Environ Health.*
168. Pentamwa, P. and Oanh, T. K. (2008) Levels of Pesticides and Polychlorinated Biphenyls in Selected Homes in the Bangkok Metropolitan Region, Thailand 19, *Environmental Challenges in the Pacific Basin* 1140, 91-112.
169. Petchuay, C., Visuthismajarn, P., Vitayavirasak, B., Hore, P., and Robson, M. G. (2006) Biological monitoring of organophosphate pesticides in preschool children in an agricultural community in Thailand, *International Journal of Occupational and Environmental Health* 12, 134-141.
170. Petchuay, C., Thoumsang, S., Visuthismajarn, P., Vitayavirasak, B., Buckley, B., Hore, P., Borjan, M., and Robson, M. (2008) Analytical method developed for measurement of dialkylphosphate metabolites in urine collected from children non-occupationally exposed to organophosphate pesticides in an agricultural community in Thailand 4, *Bull. Environ Contam Toxicol.* 81, 401-405.
171. Putnam, R. A., Doherty, J. J., and Clark, J. M. (2008) Golfer exposure to chlorpyrifos and carbaryl following application to turfgrass 16, *J Agric. Food Chem.* 56, 6616-6622.
172. Quackenboss, J. J., Pellizzari, E. D., Shubat, P., Whitmore, R. W., Adgate, J. L., Thomas, K. W., Freeman, N. C., Stroebel, C., Liroy, P. J., Clayton, A. C., and Sexton, K. (2000) Design strategy for assessing multi-pathway exposure for children: the Minnesota Children's Pesticide Exposure Study (MNCPEs), *J. Expo. Anal. Environ. Epidemiol.* 10, 145-158.
173. Quandt, S. A., Arcury, T. A., Rao, P., Snively, B. M., Camann, D. E., Doran, A. M., Yau, A. Y., Hoppin, J. A., and Jackson, D. S. (2004) Agricultural and residential pesticides in wipe samples from farmworker family residences in North Carolina and Virginia, *Environ. Health Perspect.* 112, 382-387.
174. Quandt, S. A., Hernandez-Valero, M. A., Grzywacz, J. G., Hovey, J. D., Gonzales, M., and Arcury, T. A. (2006) Workplace, household, and personal predictors of pesticide exposure for farmworkers, *Environ. Health Perspect.* 114, 943-952.

**THIS IS A DRAFT PAPER FOR DISCUSSION. IT SHOULD NOT BE QUOTED, CITED OR REPRODUCED.**

175. Ramaprasad, J., Tsai, M., Elgethun, K., Hebert, V., Felsot, A., Yost, M., and Fenske, R. (2004) The Washington aerial spray drift study: assessment of off-target organophosphorus insecticide atmospheric movement by plant surface volatilization, *Atmospheric Environment* 38.
176. Ramaprasad, J., Tsai, M. G., Fenske, R. A., Faustman, E. M., Griffith, W. C., Felsot, A. S., Elgethun, K., Weppner, S., and Yost, M. G. (2008) Children's inhalation exposure to methamidophos from sprayed potato fields in Washington State: Exploring the use of probabilistic modeling of meteorological data in exposure assessment 5, *J Expo. Sci. Environ Epidemiol.*
177. Rao, P., Quandt, S. A., Doran, A. M., Snively, B. M., and Arcury, T. A. (2006) Pesticides in the Homes of Farmworkers: Latino Mothers' Perceptions of Risk to Their Children's Health, *Health Educ. Behav.*
178. Rao, P., Gentry, A. L., Quandt, S. A., Davis, S. W., Snively, B. M., and Arcury, T. A. (2006) Pesticide safety behaviors in Latino farmworker family households, *Am. J. Ind. Med.* 49, 271-280.
179. Richter, E. D. and Safi, J. (1997) Pesticide use, exposure, and risk: A joint Israeli-Palestinian perspective, *Environ. Res.* 73, 211-218.
180. Riederer, A. M., Bartell, S. M., Barr, D. B., and Ryan, P. B. (2008) Diet and nondiet predictors of urinary 3-phenoxybenzoic acid in NHANES 1999-2002 6, *Environ Health Perspect.* 116, 1015-1022.
181. Rigas, M. L., Okino, M. S., and Quackenboss, J. J. (2001) Use of a pharmacokinetic model to assess chlorpyrifos exposure and dose in children, based on urinary biomarker measurements, *Toxicol. Sci.* 61, 374-381.
182. Rimmer, D. A., Johnson, P. D., Kelsey, A., Warren, N. D., and Saunders, C. J. (2006) Spray trials to assess approaches for post-event spraydrift incident investigation, *Aspects of Applied Biology* 77, 259-266.
183. Robertson, G., Lebowitz, M., O'Rourke, M., Gordon, S., and Moschandreas, D. (1999) The National Human Exposure Assessment Survey (NHEXAS) study in Arizona - introduction and preliminary results, *Journal of Exposure Analysis and Environmental Epidemiology* 9.
184. Rodriguez, T., Younglove, L., Lu, C., Funez, A., Weppner, S., Barr, D. B., and Fenske, R. A. (2006) Biological monitoring of pesticide exposures among applicators and their children in Nicaragua, *Int. J. Occup. Environ. Health* 12, 312-320.
185. Rohrer, C. A., Hieber, T. E., Melnyk, L. J., and Berry, M. R. (2003) Transfer efficiencies of pesticides from household flooring surfaces to foods, *J. Expo. Anal. Environ. Epidemiol.* 13, 454-464.
186. Royster, M. O., Hilborn, E. D., Barr, D., Carty, C. L., Rhoney, S., and Walsh, D. (2002) A pilot study of global positioning system/geographical information system measurement of residential proximity to agricultural fields and urinary organophosphate metabolite concentrations in toddlers, *J. Expo. Anal. Environ. Epidemiol.* 12, 433-440.
187. Rudel, R. A., Brody, J. G., Spengler, J. D., Vallarino, J., Geno, P. W., Sun, G., and Yau, A. (2001) Identification of selected hormonally active agents and animal mammary carcinogens in commercial and residential air and dust samples, *J. Air Waste Manag. Assoc.* 51, 499-513.
188. Rudel, R. A., Camann, D. E., Spengler, J. D., Korn, L. R., and Brody, J. G. (2003) Phthalates, alkylphenols, pesticides, polybrominated diphenyl ethers, and other endocrine-disrupting compounds in indoor air and dust, *Environ. Sci. Technol.* 37, 4543-4553.
189. Saller, J., Reyes, P., Maldonado, P. A., Gibbs, S. G., and Byrd, T. L. (2007) Children's exposure to pesticides used in homes and farms, *J. Environ. Health* 69, 27-31, 56.
190. Samanic, C., Hoppin, J. A., Lubin, J. H., Blair, A., and Alavanja, M. C. (2005) Factor analysis of pesticide use patterns among pesticide applicators in the Agricultural Health Study, *J. Expo. Anal. Environ. Epidemiol.* 15, 225-233.

**THIS IS A DRAFT PAPER FOR DISCUSSION. IT SHOULD NOT BE QUOTED, CITED OR REPRODUCED.**

191. Scher, D. P., Alexander, B. H., Adgate, J. L., Eberly, L. E., Mandel, J. S., Acquavella, J. F., Bartels, M. J., and Brzak, K. A. (2006) Agreement of pesticide biomarkers between morning void and 24-h urine samples from farmers and their children, *J. Expo. Sci. Environ. Epidemiol.*
192. Semchuk, K. M., McDuffie, H. H., Senthilselvan, A., Dosman, J. A., Cessna, A. J., and Irvine, D. G. (2003) Factors associated with detection of bromoxynil in a sample of rural residents, *J. Toxicol. Environ. Health A* 66, 103-132.
193. Sexton, K., Adgate, J. L., Eberly, L. E., Clayton, C. A., Whitmore, R. W., Pellizzari, E. D., Liou, P. J., and Quackenboss, J. J. (2003) Predicting children's short-term exposure to pesticides: results of a questionnaire screening approach, *Environ. Health Perspect.* 111, 123-128.
194. Shalat, S. L., Donnelly, K. C., Freeman, N. C., Calvin, J. A., Ramesh, S., Jimenez, M., Black, K., Coutinho, C., Needham, L. L., Barr, D. B., and Ramirez, J. (2003) Nondietary ingestion of pesticides by children in an agricultural community on the US/Mexico border: preliminary results, *J. Expo. Anal. Environ. Epidemiol.* 13, 42-50.
195. Shealy, D. B., Bonin, M. A., Wooten, J. V., Ashley, D. L., Needham, L. L., and Bond, A. E. (1996) Application of an improved method for the analysis of pesticides and their metabolites in the urine of farmer applicators and their families, *Environment International*. Vol. 22(6)(pp 661-675), 1996. 661-675.
196. Shealy, D. B., Barr, J. R., Ashley, D. L., Patterson, D. G., Jr., Camann, D. E., and Bond, A. E. (1997) Correlation of environmental carbaryl measurements with serum and urinary 1-naphthol measurements in a farmer applicator and his family, *Environ. Health Perspect.* 105, 510-513.
197. Siebers, J., Binner, R., and Wittich, K. P. (2003) Investigation on downwind short-range transport of pesticides after application in agricultural crops, *Chemosphere* 51, 397-407.
198. Solomon, K. R., Houghton, D., and Harris, S. A. (2005) Nonagricultural and residential exposures to pesticides, *Scand. J. Work Environ. Health* 31 Suppl 1, 74-81.
199. Starr, J., Graham, S., Stout, D., Andrews, K., and Nishioka, M. (2008) Pyrethroid pesticides and their metabolites in vacuum cleaner dust collected from homes and day-care centers 23, *Environ Res.* 108, 271-279.
200. Stephenson, G., Bowhey, C., Lang, S., and Solomon, K. (2001) Homeowner-applicator and bystander exposure to chlorpyrifos applied to turfgrass, *International Turfgrass Society Research Journal* 9.
201. Stout II, D. M. and Mason, M. (2003) The distribution of chlorpyrifos following a crack and crevice type application in the US EPA Indoor Air Quality Research House, *Atmos. Environ.* 37, 5539-5549.
202. Stout, D. M. and Leidy, R. B. (2000) A preliminary examination of the translocation of microencapsulated cyfluthrin following applications to the perimeter of residential dwellings, *J. Environ. Sci. Health B* 35, 477-489.
203. Streicher, J. J. (1998) Air Concentrations and Inhalation Exposure to Pesticides in the Agricultural Health Pilot Study, *Govt Reports Announcements & Index (GRA&I), Issue 06, 1998.*
204. Strong, L. L., Starks, H. E., Meischke, H., and Thompson, B. (2009) Perspectives of Mothers in Farmworker Households on Reducing the Take-Home Pathway of Pesticide Exposure 10, *Health Educ. Behav.*
205. Swan, S. H., Kruse, R. L., Liu, F., Barr, D. B., Drobnis, E. Z., Redmon, J. B., Wang, C., Brazil, C., and Overstreet, J. W. (2003) Semen quality in relation to biomarkers of pesticide exposure, *Environ. Health Perspect.* 111, 1478-1484.
206. Teitelbaum, S. L. (2002) Questionnaire assessment of nonoccupational pesticide exposure in epidemiologic studies of cancer, *J. Expo. Anal. Environ. Epidemiol.* 12, 373-380.
207. Thompson, B., Coronado, G. D., Grossman, J. E., Puschel, K., Solomon, C. C., Islas, I., Curl, C. L., Shirai, J. H., Kissel, J. C., and Fenske, R. A. (2003) Pesticide take-home pathway among

**THIS IS A DRAFT PAPER FOR DISCUSSION. IT SHOULD NOT BE QUOTED, CITED OR REPRODUCED.**

- children of agricultural workers: study design, methods, and baseline findings, *J. Occup. Environ. Med.* 45, 42-53.
208. Thompson, B., Coronado, G. D., Vigoren, E. M., Griffith, W. C., Fenske, R. A., Kissel, J. C., Shirai, J. H., and Faustman, E. M. (2008) Para niños saludables: a community intervention trial to reduce organophosphate pesticide exposure in children of farmworkers, *Environ Health Perspect.* 116, 687-694.
209. Tsai, M., Elgethun, K., Ramaprasad, J., Yost, M., Felsot, A., Hebert, V., and Fenske, R. (2005) The Washington aerial spray drift study: modeling pesticide spray drift deposition from an aerial application, *Atmospheric Environment* 39.
210. Tulve, N. S., Suggs, J. C., McCurdy, T., Hubal, E. A. C., and Moya, J. (2002) Frequency of mouthing behavior in young children, *J. Expo. Anal. Environ. Epidemiol.* 12, 259-264.
211. Tulve, N. S., Egeghy, P. P., Fortmann, R. C., Whitaker, D. A., Nishioka, M. G., Naeher, L. P., and Hilliard, A. (2008) Multimedia measurements and activity patterns in an observational pilot study of nine young children, *J. Expo. Sci. Environ. Epidemiol.* 18, 31-44.
212. Valcke, M., Samuel, O., Bouchard, M., Dumas, P., Belleville, D., and Tremblay, C. (2006) Biological monitoring of exposure to organophosphate pesticides in children living in peri-urban areas of the Province of Quebec, Canada, *Int. Arch. Occup. Environ. Health* 79, 568-577.
213. Valcke, M. and Bouchard, M. (2009) Determination of no-observed effect level (NOEL)-biomarker equivalents to interpret biomonitoring data for organophosphorus pesticides in children 27, *Environ Health* 8, 5.
214. Van Hemmen, J. J. (2006) Pesticides and the residential bystander, *Ann. Occup. Hyg.* 50, 651-655.
215. Vercruyse, F. and Steurbaut, W. (2001) On-farm exposure to pesticides, *Parasitica* 57, 39-50.
216. Ward, M. H., Nuckols, J. R., Giglierano, J., Wolter, C., Miller, R. S., Colt, J. S., Camann, D., and Hartge, P. (2002) Proximity to crops and residential exposure to agricultural pesticides in Iowa, *Epidemiology* 13, S210.
217. Ward, M. H., Lubin, J., Giglierano, J., Colt, J. S., Wolter, C., Bekiroglu, N., Camann, D., Hartge, P., and Nuckols, J. R. (2006) Proximity to crops and residential exposure to agricultural herbicides in Iowa, *Environ. Health Perspect.* 114, 893-897.
218. Weppner, S., Elgethun, K., Lu, C., Hebert, V., Yost, M. G., and Fenske, R. A. (2006) The Washington aerial spray drift study: children's exposure to methamidophos in an agricultural community following fixed-wing aircraft applications, *J. Expo. Sci. Environ. Epidemiol.* 16, 387-396.
219. Wessels, D., Barr, D. B., and Mendola, P. (2003) Use of biomarkers to indicate exposure of children to organophosphate pesticides: implications for a longitudinal study of children's environmental health, *Environ. Health Perspect.* 111, 1939-1946.
220. White, K. E. and Hoppin, J. A. (2004) Seed treatment and its implication for fungicide exposure assessment, *J. Expo. Anal. Environ. Epidemiol.* 14, 195-203.
221. White, L. M., Ernst, W. R., Julien, G., Garron, C., and Leger, M. (2006) Ambient air concentrations of pesticides used in potato cultivation in Prince Edward Island, Canada, *Pest Manag. Sci.* 62, 126-136.
222. Whyatt, R. M. and Barr, D. B. (2001) Measurement of organophosphate metabolites in postpartum meconium as a potential biomarker of prenatal exposure: a validation study, *Environ. Health Perspect.* 109, 417-420.
223. Whyatt, R. M., Camann, D. E., Kinney, P. L., Reyes, A., Ramirez, J., Dietrich, J., Diaz, D., Holmes, D., and Perera, F. P. (2002) Residential pesticide use during pregnancy among a cohort of urban minority women, *Environ. Health Perspect.* 110, 507-514.

**THIS IS A DRAFT PAPER FOR DISCUSSION. IT SHOULD NOT BE QUOTED, CITED OR REPRODUCED.**

224. Whyatt, R. M., Barr, D. B., Camann, D. E., Kinney, P. L., Barr, J. R., Andrews, H. F., Hoepner, L. A., Garfinkel, R., Hazi, Y., Reyes, A., Ramirez, J., Cosme, Y., and Perera, F. P. (2003) Contemporary-use pesticides in personal air samples during pregnancy and blood samples at delivery among urban minority mothers and newborns, *Environmental Health Perspectives* 111, 749-756.
225. Whyatt, R. M., Garfinkel, R., Hoepner, L. A., Holmes, D., Borjas, M., Williams, M. K., Reyes, A., Rauh, V., Perera, F. P., and Camann, D. E. (2007) Within- and between-home variability in indoor-air insecticide levels during pregnancy among an inner-city cohort from New York City, *Environ. Health Perspect.* 115, 383-389.
226. Williams, M. K., Barr, D. B., Camann, D. E., Cruz, L. A., Carlton, E. J., Borjas, M., Reyes, A., Evans, D., Kinney, P. L., Whitehead, R. D., Jr., Perera, F. P., Matsoanne, S., and Whyatt, R. M. (2006) An intervention to reduce residential insecticide exposure during pregnancy among an inner-city cohort, *Environ. Health Perspect.* 114, 1684-1689.
227. Williams, R. L., Bernard, C. E., and Krieger, R. I. (2003) Human exposure to indoor residential cyfluthrin residues during a structured activity program, *J. Expo. Anal. Environ. Epidemiol.* 13, 112-119.
228. Williams, R. L., Aston, L. S., and Krieger, R. I. (2004) Perspiration increased human pesticide absorption following surface contact during an indoor scripted activity program, *J. Expo. Anal. Environ. Epidemiol.* 14, 129-136.
229. Wilson, N. K., Chuang, J. C., and Lyu, C. (2001) Levels of persistent organic pollutants in several child day care centers, *J. Expo. Anal. Environ. Epidemiol.* 11, 449-458.
230. Wilson, N. K., Chuang, J. C., Lyu, C., Menton, R., and Morgan, M. K. (2003) Aggregate exposures of nine preschool children to persistent organic pollutants at day care and at home, *J. Expo. Anal. Environ. Epidemiol.* 13, 187-202.
231. Wilson, N. K., Chuang, J. C., Iachan, R., Lyu, C., Gordon, S. M., Morgan, M. K., Ozkaynak, H., and Sheldon, L. S. (2004) Design and sampling methodology for a large study of preschool children's aggregate exposures to persistent organic pollutants in their everyday environments, *Journal of Exposure Analysis and Environmental Epidemiology* 14, 260-274.
232. Zartarian, V. G., Ozkaynak, H., Burke, J. M., Zufall, M. J., Rigas, M. L., and Furtaw, E. J., Jr. (2000) A modeling framework for estimating children's residential exposure and dose to chlorpyrifos via dermal residue contact and nondietary ingestion, *Environ. Health Perspect.* 108, 505-514.