CALIFORNIA MEDICAL ASSOCIATION AGRICULTURAL PESTICIDE DRIFT

Resolution 114-00

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Whereas, pesticides released in one location may be a source of human exposure or environmental contamination several hundred feet to several hundred miles away, with possible chronic effects including cancer, birth defects, reproductive problems, developmental problems and nervous system damage; [1] and

Whereas, studies indicate that in some applications of pesticides, less than 1% of applied pesticides actually reach the target pest, while even under ideal aerial application circumstances, only 50% of the pesticides reach their target area; [2] and

Whereas, the California Pesticide Illness Surveillance Program reported 300 drift-related acute poisonings for 1996; [3] and

Whereas, according to scientists at the California Birth Defects Monitoring Project, children born to women living within a 1/4 mile of fields are more likely to suffer from certain kinds of birth defects [4]; and

Whereas, children are at greater risk of pesticide exposure than adults [5]; and Whereas, nearly four million Californians live within one half mile of heavy annual applications of 152 pesticides identified by state regulators as those most likely to contaminate air and threaten human health, with more than 30% of these pesticides having been designated by state or federal regulatory agencies as carcinogens, reproductive toxins or acute nerve poisons; [6] and

Whereas, an independent 2 year air sampling survey in eight California counties found that almost 2/3 of all samples contained pesticides known to cause cancer, brain damage, birth defects, acute poisonings, and other illnesses [7]; therefore be it

RESOLVED: That the CMA support efforts to protect California communities from pesticides in the air by calling upon state agencies such as DHS and CALEPA to strengthen efforts to protect schools and residential areas from pesticide drift and off-site pesticide movement; and be it further

RESOLVED: That the CMA support a reduction in use of pesticides with significant acute and chronic toxicity, such as Proposition 65 pesticides and Category I and II pesticides, that have a capacity to drift to schools and residential areas; and be it further

RESOLVED: That the CMA recommend that state agencies such as DHS and CALEPA develop procedures to provide adequate notification of full- or part-time inhabitants of sites at risk of pesticide drift, as part of the statewide permitting process regarding plans for application of pesticides in such areas.

REFERENCES

- 1. Zabik, JM and JN Seiber. 1993. "Atomospheric transport of organophosphate pesticide from California's Central Valley to the Sierra Nevada Mountains." Journal of Environmental Quality 22: 80-90; Baker, L et al. 1996. "Ambient air concentrations of pesticides in California." Environmental Science and Technology 30(4); Rice, CP and SM Chernyak. 1997. "Marine arctic fog: an accumulator of currently used pesticides." Chemospher 35(4): 867-878; Stubbs, H, Harris, J and Spear, R. A. Proportionate Mortality Analysis of California Agricultural Workers, 1978-1979. Am. J. Indust. Med. 6:305-320, 1984; Zahm, S, Ward, M, and Blair, A. Pesticides and Cancer. Occup. Med.: State of the Art Review, 12:269-289, 1997.
- 2. Pimentel, D and L Levitan. 1986. "Pesticides: amounts applied and amounts reaching pests." BioScience 36(2): 90; United States Congress, Office of Technology Assessment. 1990. "Beneath the bottom line: Agricultural approaches to reduce agric

hemical contamination. "Report No: OTA-4-418. Washington, DC: US Government Printing Office, p. 17. 3. California Department of Pesticide Regulation (DPR) 1998. "Pesticide Illness Surveillance Program." Sacramento, CA.

- 4. Shaw, Gary M. et al. "Maternal Pesticide Exposure from Multiple Sources and Congenital Anomalies", Epidemiology, January 1999. Vol 10. #1, pp. 60-66.
- 5. National Research Council, Pesticides in the Diets of Infants and Children, Washington D.C.: National Academy Press, 1993.
- 6. Ross, Zev and Jonathan Kaplan. 1998. "Poisoning the Air," California Public Interest Research Group, San Francisco, CA
- 7. Environmental Working Group. 1999. "What You Don't Know Could Hurt You: Pesticides in California's Air", San Francisco, CA