LETTER TO THE EDITOR

Response to Condon et al. comments on "Cancer clusters in the USA: What do the last twenty years of state and federal investigations tell us?"

Michael Goodman¹, Joshua S. Naiman², Dina Goodman³, and Judy S. LaKind^{4,5,6}

¹Emory University, Rollins School of Public Health, Atlanta, GA, USA, ²School of Arts and Sciences, University of Pennsylvania, Philadelphia, PA, USA, ³Emory College of Arts and Sciences, Atlanta, GA, USA, ⁴LaKind Associates, LLC, Catonsville, MD, USA, ⁵University of Maryland School of Medicine, Baltimore, MD, USA, and ⁶Pennsylvania State University College of Medicine, Hershey, PA, USA

We would like to take this opportunity to thank Ms. Condon and her colleagues for sharing with us reports on cancer cluster investigations conducted in the State of Massachusetts. Our review would have been impossible without their help, and without similar help from public health practitioners in other states.

The authors of the letter raise an important question: What should be considered a "success" in a community cancer cluster investigation? Condon et al. argue that such an investigation is a worthwhile endeavor because "Responding to concerns about community cancer patterns is a responsibility of state health officials" and in their experience "it is a valuable service." If demonstrating responsiveness to community concerns and using a cluster investigation as an opportunity to educate the public are the only goals, we see no reason to disagree. But there is little doubt that many perceived cancer clusters reported to state health agencies by concerned citizens are accompanied by an unambiguous expectation that a "successful" investigation will uncover an environmental cause of cancer in the affected community (Gawande, 1999; Winn, 2005; Thun & Sinks, 2004). Based on the evidence available to us and as described in our publication (Goodman et al., 2012), we stand by our conclusion that despite over 40 years of investigations, those expectations have not been met.

Condon et al. indicate that updated guidelines for cluster investigations, along with the use of new GIS and statistical software "have improved the science of cancer cluster investigations significantly." We sincerely hope that empirical evidence to support this assertion will soon follow.

Our findings and conclusions pertaining to investigations of residential cancer clusters by no means indicate that systematic studies of spatial and temporal patterns of disease distribution are not needed. On the contrary, much can be learned from this type of studies (Blot et al., 1976; Weinberg et al., 1982; Yabroff et al., 2005; Sloan et al., 2009; Singh et al., 2011; Wagner et al., 2012; Brantley-Sieders et al., 2012), which, albeit interesting and informative, were beyond the scope of our review.

In the course of collecting information for our review, we found that many public health practitioners who shared their data with us were not satisfied with the current approaches towards cluster investigations. Some cancers may indeed cluster in time and space, but if the goal of cluster investigations is to inform cancer prevention and control, we will need fundamental rather than incremental changes in the methods of evaluating this issue. We are continuing our work to advance the dialogue on this subject.

Declaration of interest

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Address for Correspondence: Michael Goodman, Emory University, Rollins School of Public Health, Atlanta, GA, USA. E-mail: mgoodm2@sph.emory.edu

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paper and this response. J.S.L. and M.G. consult to both government and industry.

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