

## Preventive pathology revisited

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*Those who cannot remember the past are condemned to repeat it*  
*George Santayana (1863–1952)*

A number of years ago, a paper in the journal *Injury Prevention* focused on the remarkable scope that forensic pathologists have of evaluating injuries in the morgue, clarifying dangerous circumstances and of formulating proposals to prevent similar deaths in the community [1]. The paper was entitled ‘Preventative Pathology’ and was an attempt to dispel the time-honored perception of pathologists that while they may know everything, they are inevitably too late. Given the 15 years that has passed since the publication of that paper, it is perhaps timely to re-evaluate the role of pathologists in injury prevention and community safety and in the evolution of preventive pathology.

There is no doubt that forensic pathologists have a key position in the examination of preventable deaths due to trauma [2], and the paper by Bamber et al. [3] in this issue of the journal exemplifies this. While the current author has similarly focused on aspects of childhood injury and death, the scope is however much wider and includes not only accidents at any age but also suicides, homicides, and certain heritable and non-heritable diseases. Examples of successes over the past decade include evaluation of infant and early childhood deaths in shared sleeping situations and in dangerous cribs, with recent research supporting

accidental suffocation as a cause of some of these deaths, and the remarkable reduction in cases of sudden infant death syndrome; the latter based on information gained at death scene examination [4]. The rapid identification of new types of illicit drugs and methods of suicide in adults are other examples [5, 6]. Identification of conditions with a genetic component may have great significance to individual and extended family members.

A requirement for an effective preventive pathology program to work is the ability to ensure that information that is obtained from the morgue is appropriately and effectively disseminated to those in the community who can most benefit from it. This may be relatively straightforward if forensic pathologists have a functional relationship with the local coroner, or if medical examiners’ offices have associations with local hospitals, injury and disease prevention organizations, police, or product safety groups. However, sometimes alerting family members to the potential for heritable disease is not straightforward, as autopsy reports may not go directly to the family of decedents in all jurisdictions [7].

Unfortunately, many forensic pathologists are still not active in injury and disease prevention programs. While there has been a reasonable representation of pathologists on mortality review committees, this has often involved compiling lists of lethal episodes without taking the further step of attempting to understand how to reduce the occurrence of such fatalities. Given that many lethal accidents result in cases bypassing emergency rooms and hospitals, this may represent a lost opportunity for prevention. In the worst case scenario, bodies may be examined, autopsied, and then buried, taking their potentially valuable lessons with them to the grave.

One of the ongoing themes at forensic meetings over the years has been the failure to recruit young physicians into

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the field. Certainly, there are a variety of different reasons for this that range from fiscal considerations with salaries, to heavy on-call responsibilities, and the ever-present requirement for courtroom appearances. Each of these may represent a considerable disincentive for a young practitioner. Perhaps rather than attempting to downplay these issues to potential candidates, we should focus on other areas where there is scope for different and new kinds of professional activities.

Integrating modern imaging techniques with autopsy practices is an example of how the traditional role of the forensic pathologist can be enhanced, and perhaps preventative pathology may be another. Certainly, involvement with injury and disease prevention campaigns may facilitate research and also allow pathologists to have contact with clinical colleagues and with members of the community through hospital and community-based organizations. Such activities cannot fail but to add to the richness of professional life, in addition to using precious information gleaned from the morgue, often at such an extraordinarily high cost. Falling autopsy numbers due to a genuine reduction in cases because of this type of activity would be a laudable goal for

most forensic institutions. Unfortunately, one thing is clear—if the community is not helped to remember these tragic events by examining pathologists, they will certainly be condemned to see them repeated.

## References

1. Byard RW. Preventative pathology. *Inj Prevent*. 1999;5:292–3.
2. Byard RW. Accidental childhood death and the role of the pathologist. *Pediatr Develop Pathol*. 2000;3:405–18.
3. Bamber AR, Pryce J, Ashworth MT, Sebire NJ. Sudden unexpected infant deaths associated with car seats. *Forensic Med Sci Pathol*. 2014. doi:10.1007/s12024-013-9524-5.
4. Byard RW. Sudden death in the young. 3rd ed. Cambridge: Cambridge University Press; 2010.
5. Byard RW, Rodgers NG, James RA, Kostakis C, Camilleri AM. Death and paramethoxyamphetamine—An evolving problem? *Med J Aust*. 2002;176:496.
6. Austin A, Winskog C, van den Heuvel C, Byard RW. Recent trends in suicides utilizing helium. *J Forensic Sci*. 2011;56:649–51.
7. Byard RW, Cordner SM. Alerting genetic relatives to a risk of serious inherited disease without a patient's consent. *Med J Aust*. 2011;194:671.