



Volume 21, Number 1, 2013

## Editor's Forum

**Paul Byrne, MB, ChB, FRCPC**

Interim Director and Clinical Professor, John Dossetor Health Ethics Centre, University of Alberta  
Staff Neonatologist, Stollery Children's Hospital

The most effective interventions of health care since the early 20th century have been due to the recognition that a great deal of individual and population illness can be prevented. Identification of populations vulnerable to specific diseases by screening before illness has a huge positive impact. In the western workplace attitudes towards working conditions have changed greatly over the past 100 years. Attitudes have evolved from indifference to worker health and safety to legally mandated standards of safety and accident and illness prevention being widespread. Maintenance of standards is ensured by monitoring and would seem to be acceptable without criticism. Charl Els however, asks us to critique this practice by asking how to balance the obvious benefits to worker health and safety with protection of individual privacy. He describes how implementing the responsibility to ensure safety among workers may intrude into the privacy of individuals. Els describes the need to optimize safety and health among workers by identification of behaviours relating to increased risk of occupational hazard. He emphasizes that this is not equivalent to drug detection by random screening of individuals. The former is effective in improving safety and the latter not so. This

distinction between test results from population screening and identification of clinical problems is important in clinical scenarios beyond those relating to occupational health and safety.

Diane Kunyk's paper also focuses on a distinction between a test result and subsequent actions - between an alcohol screening test and punitive interventions. She supports the need to deal

*continued on page 2* ►

---

## In This Issue...

Random Workplace Drug Testing: Why can't we have both safety and privacy?

- Charl Els, MBChB, FCPsych, MMedPsych (cum laude), ABAM, MROCC

Alberta's New Impaired Driving Act: The Grey Zone

- Diane Kunyk, RN, PhD

Cardiopulmonary Resuscitation for All:

A cautionary tale?

- Peter Brindley, MD, FRCPC, FRCP

John Dossetor Health Ethics Centre Website

Canadian Bioethics Society Annual Conference

We'd like your feedback...

► **Editor's Forum** *continued from page 1*

immediately with drivers who drink alcohol by preventing them from driving. However, Kunyk questions further punitive measures being applied before obtaining confirmatory blood alcohol levels. This suggested intrusion beyond the needs of public safety echoes the concerns of Els with respect to workplace monitoring. The efforts required in a tolerant society to balance community needs in terms of health, safety, and protection with personal privacy and individual private behaviours are fraught with difficulty and often controversial. Legal requirements are blunt and set the bar low as they require broad consensus and agreement on rules underpinning social order. Ethical requirements should be more sensitive than law in this regard.

Many decades have passed since cardiopulmonary resuscitation (CPR) was first considered effective treatment for cardiac arrest. Despite an abundance of research and discussion about CPR, Peter Brindley suggests that this has not resulted in clear effects

on clinical practice. He indicates that despite many studies of CPR suggesting clear criteria limiting its effectiveness, CPR is used ubiquitously. Furthermore, Brindley states that CPR appears unique as a treatment which is given *without consent* unless a known clear prior refusal exists. This has resulted in one suggestion that NO CODE be tattooed across one's chest if CPR is not desired! Brindley describes how this situation exists as a result of expectations, misinformation, and beliefs that go far beyond clinical practice. It takes a great deal of time and effort by caregivers to explore the complex reasons, fears and concerns underlying a "demand" for CPR. Physicians may bow to demands for CPR in many cases as "easy way out" rather than engaging in discussion to explain why a simple "No" is the ethically correct answer. This clinical retreat from "No CPR" is mistakenly considered ethical because it results from a shared decision-making process. Sadly this misses the point that the patient will not be helped by CPR in most cases and will likely be harmed by ongoing efforts to support life.

---

## Random Workplace Drug Testing: Why can't we have both safety and privacy?

**Charl Els, MBChB, FCPsych, MMedPsych (cum laude), ABAM, MROCC**

Addiction Psychiatrist, Medical Review Officer

Associate Clinical Professor, John Dossetor Health Ethics Centre, School of Public Health and

Department of Psychiatry, University of Alberta

Active untreated substance addiction (to alcohol and drugs, except nicotine) is incompatible with work in a safety-sensitive position. These include occupations where impaired performance could result in a significant incident affecting the health and safety of employees, customers, the public, property or the environment (Esso Petroleum Canada & C.E.P. Local 614, 1994). An estimated 8.3% of

full-time workers are current illicit substance users and 75% of persons 18 and older that use illegal drugs continue to be employed (U.S. Department of Health and Human Services & Substance Abuse and Mental Health Services Administration, Office of Applied Studies, 2007). This includes most heavy consumers of alcohol.

The use of alcohol or drugs on-the-job (or use in relation to work e.g., before work, at lunch or during breaks) may lead to an increased risk of accidents and injuries, lower productivity, increases in both absenteeism and presenteeism, and may erode workplace morale. Associated with addiction, there is also loss of time from accidents and increased health care costs as well as increased workers' compensation costs. Although occupational injury is significant in terms of its contribution to morbidity and mortality, the proportion of occupational injuries directly and causally attributed to acute substance use is relatively small.

The use of drugs and alcohol can occur in a recreational context (i.e., the person is not addicted and has not lost control over the use of the drug), or it may form part of the disease of addiction. Consumption of substances does not have to occur during work time, or in relation to the workplace to have an impact on workplace performance and risk – there are carry-over effects (e.g., hangovers, withdrawal phenomena, fatigue) and lifestyle factors (e.g., associating with criminals to buy drugs, sleep deprivation due to late nights of drug-seeking activities and use) that might foreseeably impact occupational capacity, tolerance, and risk.

Impairment (irrespective of causation) is defined as “a significant deviation, loss, or loss of use of any body structure or body function in an individual with a health condition, disorder, or disease”. Drugs and alcohol can directly or indirectly lead to impairment, and its impact on capacity and risk may be compounded by other factors like workplace stress, noise, dirt, suboptimal dangerous working conditions, interpersonal conflict, improper maintenance of equipment, insufficient training and supervision of employees, psychiatric illness, fatigue, excessive multitasking demands, unmet creativity requirements, and personal problems.

Addiction in workers (including healthcare and other professionals) has evoked 3 possible responses in a variety of settings. Not all employers address

addiction as a disability. Some employers (and regulatory bodies for health professionals) offer accommodation and rehabilitation opportunities, while other employers (or professional regulatory bodies, also with a duty to accommodate under Human Rights legislation) may ignore the nexus between addictive disease and its characteristic behavior, and view such behavior as culpable. The latter group tends to invoke discipline and punitive measures as a response to the disease of addiction. One crude way of silencing a dog barking at night is to simply shoot it... similarly one way of dealing with the problems addicted persons cause is to simply terminate their employment. The third response is a hybrid of the first two.



Comprehensive drug-free workplace programs are considered an appropriate response to deal with the growing and complex problem of substance use. Component of such drug-free workplace programs include testing, training, education and offering support for those suffering from addiction. Although drug testing typically detects the presence of a drug (or its metabolite) in the body for a specified window period (usually 2-3 days, but variable), such testing does *not* measure impairment and it does not diagnose addiction. With the exception of alcohol, the level of the drug detectable also does not provide any reliable indication of the amount used, or the level of impairment at the time of use or at the time

of testing. A breath-alcohol level is the exception and may, however, provide an indication of the level of impairment, and is reflective of the blood-alcohol level at the time of testing. But, even this alcohol-test does not diagnose addiction or establish a disability. Current drug testing procedures do not have the technological sophistication to distinguish between recreational use, drug abuse, drug misuse, accidental exposure, or the presence of drug addiction. Drug (other than alcohol) testing is designed only to detect the presence of drugs, and not to measure impairment. As such it only monitors one element of the worker's compliance with a workplace policy.

The most commonly used matrices for drug testing are urine and serum, but other body fluids may be utilized under certain circumstances. In workers with addiction, possible drug use during treatment

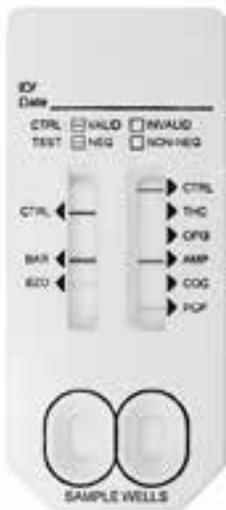
must be monitored continuously, and this can help those suffering from addiction withstand urges to use. It can also provide early evidence of disease relapse so treatment can be modified. Drug testing can occur in 4 contexts: pre-access (required by company owner), pre-employment, for-cause (including reasonable suspicion and post-accident), and random. Pre-access testing refers to owner-requested drug

testing, while the other 3 refer to employer-requested testing, and unlike the employer, the company owner is not subject to Human Rights legislation. Not all these testing scenarios are universally implemented in the workplace, and not all are considered ethically defensible.

The employer knows it is responsible for safety in the workplace, knows the risks, the history, and the goals of the industry, but cannot unilaterally impose

carte blanche measures to achieve its safety goals. There are limits to what is ethically reasonable for an employer to expect and demand from workers to ensure a safe workplace. If the employer wishes to introduce universal random testing in safety-sensitive settings, the question is: How can the employer's duty and the employee's right to privacy in relation to off-duty conduct be balanced? What about the average healthy, non-addicted well-performing employee in a safety-sensitive position, who chooses to consume a small quantity of alcohol and/or marijuana while off duty on a Friday evening? Based on the pharmacology of alcohol and cannabis, this employee will most likely no longer be impaired as a result of the drugs use by the time his/her duty resumes 60 hours later, on Monday morning. Cannabis metabolites however, will still potentially be detectable by random urine drug testing following the weekend's consumption, even in the absence of any impairment. In such a case: Does random workplace drug testing infringe on the worker's privacy?

The most recent challenge in the context of occupational drug testing is currently unfolding related to random workplace drug testing in safety-sensitive settings in Alberta. This involves testing of all employees in these settings, and not only those who have encountered problems with addiction (current or previous) or those enrolled in a mandated and sanctioned monitoring and maintenance program. Recently, Alberta's Drug and Alcohol Risk Reduction Project (DARRPP, 2012) launched a two-year initiative to evaluate and report on the effectiveness of comprehensive workplace alcohol and drug programs, including random workplace testing. The initiative involved a group of employers, labour associations, and unions from three major companies in Alberta. This pilot program was announced in June 2012 with a mandate to establish best practices for random alcohol and drug testing for safety-sensitive work sites and positions, as well as to develop guidelines for processes such as case management, assessment, and follow-up. The last weekday prior to the implementation of the program,



workers at one company in Fort McMurray secured a temporary court injunction preventing the company from starting a random drug testing operation (Larson & Blais, 2012). This ruling was appealed and subsequently dismissed by two of three judges in Alberta's top court.

Although safety is an important concern for any company and for its workers, the issue under discussion is to balance safety obligations, while respecting both privacy rights and human rights. The purpose of Human Rights legislation is to protect against discrimination and to guarantee certain rights and freedoms, while privacy conveys the right of the individual to be left alone to make personal choices. This occurs within limits and is grounded in the basic moral tenet that each individual has an incalculable worth. But, how do the rights to privacy apply as it pertains to workplace screening for drugs? In a scenario of recreational drug use (with no evidence of impairment during working hours) by a worker in a safety-sensitive occupation, drugs may be detected long after its effects have dissipated. What is reasonable action for the employer to ensure a safe workplace when it comes to off-duty conduct of an employee, as in the above example? Is it reasonable to allow for broad random drug testing in safety-sensitive positions, where there is no evidence of workplace safety problems, or of addiction (current or past)? What is the empirical evidence to suggest that random drug testing does indeed improve workplace safety and decrease accidents?

The Canadian Human Rights Commission's Policy on Alcohol and Drug Testing (2009) suggests that in accordance with current case law and consistent with the Canadian Human Rights Act random drug and alcohol testing are prima facie discriminatory. In its policy on Alcohol and Drug testing, the Commission states that it encourages employers to adopt programs and policies that focus on identifying impairment and safety risks, that are accommodating and remedial, and not punitive. It further recognizes that drug testing does not detect impairment at the time of

the test. As random drug testing does not offer any information pertaining to current risk it does not appear to be ethically justified.

In the absence of direct assessment of impairment, random drug testing in the otherwise healthy worker has not been proven to decrease occupational risk. Drug testing in safety-sensitive positions may help prevent accidents for those deemed at risk of ongoing substance use, e.g., those with established addiction. However, in individuals where no addiction has been established, and where there is no impairment or perception of disability, this principle has not been empirically proven to apply. In the absence of evidence to prove increased safety, it suggests that if off-duty consumption does not lead to impairment while on-duty, but which might be detected by random testing, such testing may violate an employee's privacy rights. "Blanket" random drug testing policies do not appear to balance employer's duty to provide a safe workplace with the employee's privacy rights.

Currently, employers can require employees in safety-sensitive positions to disclose current use of alcohol and drugs (within the last 5 years for alcohol dependency, and within the last 6 years for drug dependency, Canadian Human Rights Commission's Policy on Alcohol and Drug Testing, 2009). The employer also has a duty and a right to undertake testing where an employee reports for duty in an unfit state, or where there are reasonable grounds to suspect substance use, e.g., where risks or performance issues have been identified and there is reasonable suspicion of drug use.

The question of whether broad random drug testing is ethically allowable in the workplace may, however, not be amenable to a single yes or no response, but will likely be dependent on context, and requires exploration. One important variable is the nature of the safety-sensitive position. Who will be subject to this definition? Beyond workers in high-risk occupations, are healthcare and legal professionals also working in safety-sensitive positions?

Another variable is the relative causal contribution of substance use to accidents, which appears relatively small, based on current empirical evidence. Of importance may be the need to examine all aspects of workplace risk, including the general risk-taking profile of employees. Drug users may be more likely (not only as a result of drug use) to engage in risk-taking behavior in the work place; hence independently contributing to increased occupational incidents. This may suggest an alternative more specific and effective screening strategy to deal with workplace risks, without invading privacy by implementing broad random drug testing.

Achieving consensus on what constitutes a safety-sensitive occupation is critical. It is not within the purview of the employer to assume the right to unilaterally dictate which positions constitute safety-sensitive ones. Rather, such process should involve the employee as well, take into account the nature of the equipment or machinery used, complexity of decisions, and the nature of the material handled. A further issue is the possible consequences or the risks if the person performing the duties does so while impaired by drugs or alcohol? Such determinations should be conducted on a case-by-case basis (Esso Petroleum Canada & C.E.P. Local 614, 1994).

If Alberta's DARRPP (2012) is a prospective pilot measuring the impact of an intervention on employed human subjects, should consideration not be given to treating this as a formal research project, and thereby expecting health ethics review and approval to be sought for research involving human beings? Have those employees involved in this pilot not become involuntary research subjects in a drug screening trial for which they have not provided explicit consent, and which may invade their privacy?

The issue of universal random drug testing in safety sensitive workplaces requires further exploration and will continue to be the subject of further legal challenges. Despite the limitations of urine drug testing, some protocols (e.g., for-cause) may have benefit in terms of occupational risk and capacity.

At this time, however, empirical evidence does *not* support broad random drug testing as improving safety in the workplace, and may indeed constitute a violation of privacy rights. Based on current jurisprudence, reasonable cause drug testing (e.g., post-accident) is generally considered ethically defensible, while random alcohol and drug testing has not enjoyed the same status to date.

Universal random drug and alcohol testing in the workplace (without taking context into account) may serve the likely (and perhaps intended) purpose of being a drug prohibition tool. This is in contrast to the spirit of human rights, namely that of ensuring a proper assessment and offering accommodation, treatment, support and rehabilitation to those affected by (or suspected of suffering from) the disability of addiction. Achieving occupational safety and ensuring privacy are two of the employer's duties, and the issue is one of balancing safety obligations, while respecting both privacy rights and human rights. Framing random testing as a fundamental and necessary safety measure erroneously implies that safety is only achievable with a measure that justifies invasion of individual privacy.

## References:

- Alberta's Drug and Alcohol Risk Reduction Project (DARRPP). (2012). Retrieved from <http://www.darrpp.ca/>
- Canadian Human Rights Act. s25. Retrieved from <http://laws-lois.justice.gc.ca/eng/acts/h-6/>
- Canadian Human Rights Commission. (2009). Canadian Human Rights Commission's Policy on Alcohol and Drug Testing.
- Esso Petroleum Canada and C.E.P. Local 614 [1994], 56 L.A.C. (4th) 440 and supported in *Entrop v. Imperial Oil Ltd.*, [2000] O.J. No. 2689.
- Larson, J.L. & Blais, T. (2012, October 12). Court injunction granted to prevent random drug testing. *Edmonton Sun*. Retrieved from <http://www.edmontonsun.com/2012/10/12/court-injunction-granted-to-prevent-random-drug-testing>
- United States Department of Health and Human Services & Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (2007). Results from the 2006 National Survey on Drug Use and Health: National Findings. Rockville, Maryland, 27.

---

# Alberta's New Impaired Driving Act: The Grey Zone

**Diane Kunyk, RN, PhD**

Assistant Professor, Faculty of Nursing

Assistant Adjunct Professor, John Dossetor Health Ethics Centre, University of Alberta

Alberta's Bill 26, the Traffic Safety Amendment Act, was passed on December 6, 2011. It targets drivers who have consumed alcohol but who are not considered legally impaired according to the Criminal Code of Canada and introduces increasingly harsher sanctions for those who are. From its introduction, this legislation has been applauded and critiqued – even from within the Alberta Legislative ruling party.

## Standards and Sanctions

There are 3 different standards for drivers in Alberta: zero tolerance, criminal charges, and progressive administrative penalties. Zero tolerance remains the requirement for new drivers in the Graduated Driver Licensing Program (an extended learning stage requiring more experience in low-risk driving situations before passing the advanced road test). Those with any amount of alcohol in their system will incur an immediate 30-day license suspension as well as a 7-day vehicle seizure. With every 30-day suspension, an additional 1-year in the program is required. Zero tolerance is not an uncommon standard for new drivers as they are considered uniquely vulnerable to an alcohol related crash due to their inexperience with both drinking and driving (Shults, 2001).

Under the Criminal Code of Canada, individuals face charges if driving with a blood alcohol concentration (BAC) over .08 (i.e., 80 milligrams of alcohol in 100 milliliters of blood), driving while impaired, and/or refusing to provide a sample. These standards have not changed but harsher sanctions are applied with the new legislation. The license of the charged driver is immediately suspended, there is a 7-day

vehicle seizure, and there may be a requirement for an addiction assessment. If criminally convicted of impaired driving, the mandatory use of ignition interlock devices will be at the drivers' expense.

Progressive administrative penalties for drivers with a BAC between .05 and .08 were introduced with Bill 26. Administrative penalties are distinct from the sanctions related to criminal charges and convictions. Whereas the federal government has the constitutional authority to enact criminal offences prohibiting various aspects of drinking and driving, the provinces have authority over roads, driving and licensing and can incur administrative penalties relating to these matters (Chamberlain & Solomon, 2002). With the previous administration, drivers who recorded a BAC between .05 and .08 were subject to a 24-hour suspension of their license. Under the Traffic Safety Amendment Act, these drivers will now receive a roadside sanction of a 3-day suspension and 3-day vehicle seizure for the first offence. Further sanctions apply with subsequent offences.

## Impaired Driving

It is important for any jurisdiction to reduce traffic accidents associated with impaired driving. The consequences of drinking and driving are potentially devastating for its victims, the driver, their families, and society at large. Effective immediate and long-term preventive strategies are required. Sparing this human suffering would also reduce the associated high costs of police intervention, the judicial process, and imprisonment.

Driving impaired by alcohol remains the single largest cause of criminal death and one of the

leading criminal causes of injury in Canada (Traffic Injury Research Foundation, 2010). In 2010, there were 96 people killed and 1,384 people injured in alcohol-related collisions on Alberta roads. The Government of Alberta (2010) also reports that 22% of drivers in fatal collisions on Alberta's roads were found to have consumed alcohol.

In 1969, the .08 BAC was entered into the Criminal Code of Canada as the legal concentration for a driver. Since that time, research has established that impairment occurs at lower BAC levels (U.S. Department of Transportation, 2000). A Canadian review concluded that lowering the BAC limit to .05 would significantly contribute to reductions in drinking and driving, and resultant crashes, injuries, and fatalities (Chamberlain & Solomon, 2002). This lower limit is supported by the Canadian Medical Association and the Canadian Public Health Association, among others.

## The Grey Zone

Without revisions to the Criminal Code, provinces and territories concurring with the need for a lower drinking and driving limit are left grappling with enacting progressive administrative penalties. The challenge is to develop policy that preserves public safety, deters drinking and driving, is equitable, and stands tests of constitutionality. Will the new administrative penalties in Bill 26, the Traffic Safety Amendment, achieve this task?

When drinking and driving occurs, police must make quick and independent decisions to contain risk. With the former legislation, police could suspend the license of the driver suspected to be impaired for 24 hours. With the new Act, police may enforce punitive sanctions. When this occurs, the role of the police is expanded from one of investigating and charging to include judging and passing sentence.



When an officer has reason to suspect that a driver has been consuming alcohol (i.e., “drinking”), they can demand a breath sample into an approved screening device (roadside screening test). If the driver records a warning, the officer can enforce administrative penalties. If the recording is a fail, the driver must be retained to the police detachment for confirmation with an approved instrument.

The distinction between these instruments is important. The roadside screening device does not measure blood alcohol levels, does not differentiate between alcohol from the breath or in the mouth (if there is alcohol in the blood, it will be exhaled along with the breath; if there is also alcohol in the mouth, it will be added to that from the lungs and inaccurately elevate the results), and requires frequent calibration. When the results indicate that the driver may have BAC above the criminal code limit (a fail on the screen), then police must demand a second test be taken on an approved instrument. It is this recording with an “intoxilyzer” (breathalyzer) that is considered evidentiary.

When the approved screening device records a warning, no further testing is required. The officer may enforce the administrative penalties. Unlike drivers charged under the Criminal Code, this conviction of the driver cannot be appealed unless the license suspension is for longer than three days or if it is the second or subsequent vehicle seizure.

The enactment of these administrative penalties raises ethical questions. For the purposes of preventing a possible crime, is it appropriate for police to be given the authority to judge and pass sentence? Is it ethical to enforce penalties using a possibly inaccurate measure without the recourse of appeal? With these new administrative penalties, is provincial legislation creeping parallel to criminal law without some of the safeguards that are in place as a part of the criminal justice system?

As it appears that Alberta has determined that lower BAC levels are indicative of increased risk

of impaired driving, would it not be appropriate to advocate for federal legislation requiring these same conditions in the Criminal Code? If enacted, then the ethical dilemmas presented with creating a new category of penalties for drivers with BAC levels between .05 and .08 would no longer be necessary.

## The Broader Environment

It is not uncommon in our society to direct the focus of public policy on the individual, and the Traffic Safety Amendment Act places the burden of responsibility on the driver that has consumed alcohol. Individuals do have responsibilities to ensure they do not operate a vehicle when impaired by the use of alcohol (or other substances). Drivers should be responsible for knowing their limits and to ensure they do not drive when impaired. Research suggests, however, that drivers are poor at judging their own driving impairment (Verster & Roth, 2012).

With Bill 26, the intervention occurs when police “catch” individual drivers. Reducing the effects of impaired driving may be better served by increasing the presence of the police in areas of drinking. Research has identified that the presence of police in “hot spots” can deter undesirable behavior and the magnitude of the event is proportionate to their presence (Weisburd & Sherman, 1995). Increased police patrols, implemented with or without other intervention elements, appears to reduce the adverse consequences of alcohol-impaired driving (Good, et al., 2008). Every time a police officer goes into the station to process an arrest, it reduces these documented preventive effects of police patrol on crime. Rather than focusing on individuals, increasing the presence of the police in areas of drinking could have a broader population level effect.

In the health community, single policy strategies for dealing with complex problems are rarely considered the solution. The broader environment must be contemplated as it creates conditions that may contribute to the problem as well as being part of the solution. In Alberta, alcohol is widely consumed, and

per capita drinking continues to be higher in Alberta than the national average (Statistics Canada, 2010). The number and types of alcohol-related services and venues have also increased while restrictions on alcohol advertising, promotions, and other marketing activities have eased (Solomon et al., 2011).

If the goal is to reduce collisions due to impaired driving on Alberta roads from alcohol use, a comprehensive strategy targeted at the broader environment to supplement the Traffic Safety Amendment Act should prove promising. A variety of interventions have been proven successful in reducing the number of fatal crashes that have population level effects and are within the

jurisdiction of the provincial government. These include raising taxes on alcohol, reducing access to alcohol, and increasing the minimum drinking age (Boyum et al., 2011; Cook, 2007).

What the introduction of Bill 26 has achieved is to spark important conversations about individual rights and our responsibilities to one another. Ethical questions have been raised regarding the administrative penalties within this Act and these deserve to be addressed. As it is important to enact genuine solutions to this complex problem, keeping the conversation alive is a meaningful step to dealing well with the complex problem.

## References:

- Boyum, D., Caulkins, J., & Kleiman, M. (2011). Drugs, Crime, and Public Policy. In J.Q. Wilson & J. Petersilia (Eds.) *Crime and Public Policy*. Oxford University Press.
- Chamberlain, E., & Solomon, R. (2002). The case for a 0.05% criminal law blood alcohol concentration limit for driving. *Injury Prevention* 8 (Suppl III), iii1-iii17.
- Cook, P. (2007). *Paying the Tab: The Costs and Benefits of Alcohol Control*. Princeton, NJ: Princeton University Press.
- Good, C.W., Van Bramer, L.D., Gliner, J.A., Porter, T.R., Roberts, I. G., & DiGuseppi, C. (2008). Increased police patrols for preventing alcohol-impaired driving (review). *Cochrane Database of Systematic Reviews*. Issue 4. Art. No.: CD005242. DOI:10.1002/14651858.pub2.
- Government of Alberta. (2010). Traffic Safety Issues: Alberta Traffic Safety Statistics.
- Shults, R., Elder, R., Sleet, D., Nichols, J.L., Alao, M.O., Carande-Kulis, V.G., Zaza, S., et.al. (2001). Reviews of the evidence regarding interventions to reduce alcohol-impairing driving. *American Journal of Preventive Medicine*. 21(4) (suppl 1), 66-88.
- Solomon, R., Chamberlain, E., Abdoullaeva, M., Tinholt, B., & Chiodo. (2011). The case for comprehensive random breath testing programs in Canada: reviewing the evidence and challenges. *Alberta Law Review*. 49(1), 37-78.
- Statistics Canada. (2010). The control and sale of alcoholic beverages in Canada. Fiscal year ending March 31, 2010. Ottawa, Ont. Statistics Canada.
- Traffic Injury Research Foundation. (2010). STRID 2010 Monitoring Report: Progress in 2004-2005. Ottawa: Ontario.
- U.S. Department of Transportation. (2000). A review of the literature on the effects of low doses of alcohol on driving-related skills. National Technical Information Service, Springfield, Virginia.
- Verster, J., & Roth, T. (2012). Drivers can poorly predict their own driving impairment: a comparison between measurements of subjective and objective driving quality. *Psychopharmacology*. 219, 775-781.
- Weisburd, D., & Sherman, L. (1995). General Deterrent Effects of Police Patrol in Crime "Hot Spots". *Justice Quarterly*. 12(4), 625-648.

---

## Cardiopulmonary Resuscitation for All: A cautionary tale?

**Peter Brindley, MD, FRCPC, FRCP**

Intensivist, General Systems Intensive Care Unit and Neuro Sciences Intensive Care Unit, University of Alberta Hospital  
Associate Professor, Division of Critical Care Medicine and Associate Adjunct Professor, John Dossetor Health Ethics  
Centre, University of Alberta

Cardiopulmonary resuscitation (CPR) can be a wonderful medical intervention. After all, it can prevent premature death. However, it can also prolong dying, increase family duress, extend patient suffering, and squander scarce resources (Eisenberg & Mengert, 2001). Like many aspects of acute care medicine, a double-headed Janus exists where CPR can be both the best and worst of what we can do. As a result, the topic engenders strong emotions, and is central to contemporary critical care. However, much of the literature still focuses on the “how” of CPR rather than the “who”. Perhaps this is why CPR is currently the only medical intervention expected for everyone without explicit documentation to the contrary. In other words, there is a mandate to perform chest compressions, apply electrical shock, and intubate everyone who has NOT clearly stated otherwise (Brindley, et al., 2002). In short, CPR matters to all of us that have a heart.

On first blush CPR deserves its special status, after all patients die if it is foregone (Cotler, 2000). Closer examination shows this justification to be specious and inadequate. After all, if urgent surgeries or transplantation are withheld then patients will also die, albeit on a slower time scale. To perform a laparotomy in the setting of metastatic cancer, or organ transplantation in the recalcitrant alcoholic, currently requires justification to be done - rather than justification NOT to be done. However, for these same patients, the expectation is for full CPR unless the family or patient has agreed, or can be convinced, otherwise (Brindley, et al., 2002). In addition, while unexpected cardiac arrests do occur, for hospitalized patients they are more often the inevitable end stage



of frailty and chronic illness. Regardless, it may be CPR's social metamorphosis from “occasional” to “typical” to “expected” that is most foreboding. The idea of universal CPR offers a cautionary tale for other specialties, and a “Cassandra” for many medical innovations. All are conceived with noble intentions and justified as only ever for select patients. The history of CPR is proof that the medical slippery slope flourishes, even when budgets do not.

None of CPR's original authors argued for it to be universal (Zoll, et al., 1956; Safar, 1957; Kouwenhoven, et al., 1960). Furthermore, in theory, no physician is obligated to perform what they



believe to be futile. However, despite a near sixty-year “trial” of universal resuscitation - during which survival has not significantly improved (Eisenberg & Mengert, 2001; Brindley, et al., 2002) - CPR may be the closest thing we have to a “medical right”. If the family is insistent enough, it is my experience that they will get it. This means that CPR is no longer justified in the manner expected of treatments that are invasive, expensive, and usually unsuccessful. Despite consistent predictors of poor survival, we now have nearly one million annual CPR attempts in North America, and over one billion dollars spent on unsuccessful attempts (Eisenberg & Mengert, 2001). Overall, we also have approximately 70% of Canadians dying in hospital, and 25% of these in Intensive Care Units (ICUs; Truog, et al., 2006; Heyland, et al., 2000). This means that death is also changing into an institutionalized and technologically support phenomenon. Truog, et al. and Heyland, et al. report that the ICU is no longer exceptional treatment: it now consumes more than 20% of the hospital budget, and 1% of the entire national GDP. ICU is a wonderful investment when supported by data. It is a tragic waste when driven by denial.

As outlined, universal CPR (unless explicit documentation to the contrary) sets off a cascade that begins with universal ICU admission. After all, post-arrest patients cannot be managed elsewhere, and resuscitation does not end with the return of a pulse. However, we are also approaching universal dialysis unless explicit documentation to the contrary. Furthermore, patients are not so much put “on” a transplant-list any more. Instead, they are assumed “on” until actively taken “off”. HIV and cancer are increasingly regarded as chronic diseases, and hence limits are often ignored until cardiopulmonary collapse. If so then this means that these discussions occur under pressure and orchestrated by relative medical strangers rather than by physicians who know the patient and have the trust of the family. As an Intensivist, I accept that my job includes pushing therapeutic envelopes, and of course, each case should be judged on its individual merits. However, in only 10 years, I have seen every dictum of “those shalt not admit to the ICU” overturned: metastatic cancer; severe dementia; disabling strokes; pulmonary fibrosis...the list goes on. Currently at least, major surgery would rarely be justified for these aforementioned patients because

surgery does not treat the underlying disease. Chest compressions, defibrillation, and mechanical ventilation do not address the underlying illness either, but similar logic no longer prevails.

Increasingly our profession seems unwilling to simply say “no” (Kutsogiannis, et al., 2011). This has many potential explanations but the result is the same. Perhaps modern healthcare is so fractured and subspecialized that the path of least resistance (“just do it”) wins out. Perhaps “progress” is interpreted to mean always “more” but never “less”. Perhaps it is easier to think in black and white terms (do “everything” or do “nothing”) rather than to consider the individualized goals of care that serve the patient. Perhaps we simply wish to avoid long or difficult conversations. Perhaps it is even the bogeyman of litigation, or perhaps this is just an easy excuse. Regardless, this is why our profession could so easily morph from saving lives to prolonging deaths. We need to emphasize that we are still “consultants”, and should be proud to provide a considered opinion: whether popular or not. Otherwise, we become mere technicians who perform (but do not refuse) interventions and start (but do not stop) machines. CPR provides the precedent that for each patient that benefits from an innovation many more can be inappropriately harmed (Brindley, et al.,

2002). Clinical guidelines must include not just when to start, but when to withhold or withdraw. In other words, you do not set sail without a destination...or without an anchor.

Obviously therapy should be individualized, and noticeably our ability to predict is far from perfect. However, what we have failed to communicate is that it is not technically difficult to maintain most patients well beyond the likelihood of leaving hospital. In addition, the vast majority of ICU patients do not die because we cannot keep their heart and lungs going. Instead, they die following an emotionally draining decision to withdraw life support (Truog, et al., 2006; Heyland, et al., 2000; Kutsogiannis, et al., 2011; Brindley 2010). When we do stop it is not because there is no option, but rather because it is right to do so. Physicians must advocate, but not solely for more resources. We also need to advocate for more common sense. Technical innovations are wonderful but only if balanced by humanity. There must be time for adequate debate and tolerance for diverse opinion. Finally, it is a tired platitude that we need to become more engaged. However, it is comparatively novel to implore that we relearn the occasional, compassionate, but immovable “no”. Surely that is true patient advocacy.

## References:

- Brindley, P.G., Markland, D.M., Mayers, I., & Kutsogiannis, D.J. (2002). Predictors of survival following in-hospital adult cardiopulmonary resuscitation. *Canadian Medical Association Journal*, 167(4), 343-348.
- Brindley, P.G. (2010). Cardiopulmonary resuscitation, societal expectations, and the importance of saying “No”. *Canadian Journal of General Internal Medicine*, 5(2), 62-63.
- Cotler, M.P. (2000). The “do not resuscitate” order; clinical and ethical rationale and implications. *Medical Law*, 19(3), 623-633.
- Eisenberg, M.S., & Mengert, T.J. (2001). Primary care: cardiac resuscitation. *New England Journal of Medicine*, 344(17), 1304-1312.
- Heyland, D.K., Lavery, J.V., Tranmer, J., et al. (2000). Dying in Canada: is it an institutionalized, technologically supported experience. *Journal of Palliative Care*, 16, S10-16.
- Kouwenhoven, W.B., Jude, J.R., & Knickerbocker, G.G. (1960). Closed-chest cardiac massage. *The Journal of the American Medical Association*, 173(10), 1064-1067.
- Kutsogiannis, D.J., Bagshaw, S.M., Laing, B., & Brindley, P.G. (2011). Predictors of Survival Following Adult Critical Care Cardiopulmonary Resuscitation. *Canadian Medical Association Journal*, 183(14), 1589-1595.
- Safar, P. (1957). Mouth-to-mouth airway. *Anesthesiology*, 18(6), 904-906.
- Truog, R.D., Brock, D.W., & Cook, D.J. (2006). Rationing in the intensive care unit. *Critical Care Medicine*, 34, 958-963.
- Zoll, P.M., Linenthal, A.J., Gibson, W., Paul, M.H., & Norman, L.R. (1956). Termination of ventricular fibrillation in man by externally applied electrical countershock. *New England Journal of Medicine*, 254(16), 727-732.

---

## John Dossetor Health Ethics Centre website....

In 2012 the John Dossetor Health Ethics Centre (JDHEC) launched a new website. The site's url address is <http://www.bioethics.ualberta.ca> and is hosted by the University of Alberta. This website is a very useful communication tool both within and beyond the university and hospital communities. The website has assumed increasing importance in publicizing the activities and services available at JDHEC to the academic and clinical communities as well as the broader public. It features an updated design that offers easier navigation and provides up to date information about JDHEC and other important ethics resources. In addition to maintaining all of the features of the old website, the new website incorporates social media components, such as Twitter and Facebook. Please visit the website for information on our members, upcoming events, ongoing research, education, publications, *Health Ethics Today*, presentation archives, and other resources.

---

### We'd like your feedback....

Please take a moment and let us know if you would like to continue receiving *Health Ethics Today* in hard copy or electronically:

E-mail: [dossetor.centre@ualberta.ca](mailto:dossetor.centre@ualberta.ca)

Phone: 780-492-6676

Fax: 780-492-0673

Mail: John Dossetor Health Ethics Centre  
5-16 University Terrace  
University of Alberta  
Edmonton, Alberta T6G 2T4

# **CANADIAN BIOETHICS SOCIETY ANNUAL CONFERENCE**

**New Heights and Broader Plains:  
Expanding Vistas for Bioethics**

**May 29 – June 1, 2013  
Banff, Alberta**



The upcoming Canadian Bioethics Society Annual Conference will be held May 29 - June 1, 2013, at the Rimrock Resort Hotel in Banff, Alberta. Please refer to [www.bioethics.ca/2013](http://www.bioethics.ca/2013) for updated information.

PUBLICATION AGREEMENT NUMBER: 40064803  
RETURN UNDELIVERABLE CANADIAN ADDRESSES TO  
University of Alberta  
John Dossetor Health Ethics Centre  
5-16 University Terrace  
EDMONTON, AB T6G 2T4  
Email: dossetor.centre@ualberta.ca

# Health Ethics Today

*Editor* • Paul Byrne

*Assistant Editor* • Carol Nahorniak

*Distribution* • Stacy Cabral

*Layout* • Marketing Services, University of Alberta

*Health Ethics Today* is produced by the John Dossetor Health Ethics Centre, University of Alberta. No part of this publication may be reproduced, in whole or in part, in any manner, without prior written consent of the editorial committee. All rights reserved. For reproduction requests, notification of address changes or duplicate mailings, contact the John Dossetor Health Ethics Centre.



John Dossetor Health Ethics Centre  
University of Alberta  
5-16 University Terrace  
Edmonton, Alberta, Canada T6G 2T4  
Telephone: (780) 492-6676 • Fax: (780) 492-0673  
Website: [www.bioethics.ualberta.ca/](http://www.bioethics.ualberta.ca/)  
Email: [dossetor.centre@ualberta.ca](mailto:dossetor.centre@ualberta.ca)

The opinions expressed in this newsletter are those of the authors only and not necessarily those of the John Dossetor Health Ethics Centre.



Articles from  
*Health Ethics Today* are  
indexed on EBSCOhost