

The dangers of driving and talking on the cellphone

What would we do if we heard a patient say, “Dear, why don’t you have several stiff drinks, put on a pair of blinkers” (like horses wear), “and drive over and pick up Johnny at school?” I think we’d be taken aback. However, haven’t we heard many of our patients say something like, “Call me on your cellphone while you’re on your way to pick up Johnny at school.” A great deal of evidence suggests that both requests will put the driver and everyone else on the road at a similar risk

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for an auto crash. The use of a cellphone while driving is clearly risky, and physicians should counsel their patients to avoid this risky use while driving.

What are the effects of cellphone use on ability to drive? There is a growing body of evidence, including methodologically sound studies of crash risk, that cellphone use by drivers substantially increases the risk of a crash.¹ Cellphone use is associated with both a fourfold increase in crash-serious enough to injure the driver² and a fourfold increase in property-damage-only crashes.³ Strayer and

colleagues completed a study using a high-fidelity driving simulator and concluded that the impairments associated with using a cellphone while driving can be as profound as those associated with driving while drunk. They found that participants using a cellphone had delayed braking reactions and were involved in more traffic accidents than when they were not conversing on a cellphone. By contrast, when drivers were intoxicated from ethanol they exhibited a more aggressive driving style, following closer to the vehicle immediately in front of them, and applying more force while braking.⁴ In their seminal article, Redelmeier and Tibshirani reported that epidemiological evidence suggests that the relative risk of being in a traffic accident while using a cellphone is similar to the hazard associated with driving with a blood alcohol level at the legal limit.³

Numerous authors have found that the impairment that cellphone use causes to driving performance occurs regardless of whether the cellphone is a hands-free or handheld model.^{3,5,6} When people have cellphone conversations, they are required to consider the information they hear very carefully. This concentration on the conversation competes for the brain’s resources in a way that listening to the chatter of a passenger does not and can result in impaired driving performance.⁷ Some researchers have suggested that since passengers are in the car, they are aware of the driving conditions and will keep quiet in difficult driving situations.

As well, using a cellphone causes impairment to our peripheral vision, similar to horse blinkers, rendering us blind to objects we would normally have no trouble seeing (for example, a

child in a crosswalk). Maples and colleagues measured visual fields on study participants when they were having a cellphone conversation and when they were not. They found greater overall constriction between the visual field isopters plotted during cellphone use compared with no cellphone use.⁸ It would appear that our brain recruits neurons for activities that require our attention, such as having a cellphone conversation, although we are not aware this is occurring.

Large numbers of people use cellphones while driving and the numbers continue to increase. The latest studies show that 8% of drivers use a cellphone while driving.⁹ Drivers on cellphones will have driving ability similar to a drunk driver and will not be able to see objects in their peripheral vision. And, these drivers will be four times more likely to be in a car crash than drivers not using a cellphone.

Patients listen carefully to advice that is given to them by their physician. Please take a few minutes to tell them how important it is for them to stay off the cellphone while driving.

—Roy Pursell, MD
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Table. Quebec Task Force grades of whiplash-associated disorders

STI classification			
Grade I	Grade II	Grade III	Grade IV
No physical neck/upper back sign(s)	Neck/upper back musculoskeletal signs: <ul style="list-style-type: none"> • Decreased ROM • Point tenderness 	Neck/upper back neurological signs: <ul style="list-style-type: none"> • Decreased reflexes • Decreased sensation • Decreased strength 	Neck/upper back fracture/dislocation

Although much of the “chin-in” flexion/extension and rotation movements occur at the atlanto-occipital and C1-C2 joints respectively, full active motion invokes the movement of many tissues, including muscles, ligaments, and facet joints. All of these areas have the potential to be affected by trauma and it can be difficult to isolate them during physical examination and testing.

If there is any possibility of neurological compromise, then sensorimotor function and deep tendon reflexes of the upper extremities must be done.

Consideration should be given to general medical conditions including psychological/psychiatric factors. A visual analog scale for pain may be used.

How to classify WAD based on the physical examination

In the CL19, ICBC uses the classification of grades of WAD for the neck/upper back, as defined by the Quebec Task Force in 1995 (see the **Table**).

This classification system, although not perfect, is generally accepted by clinicians and may be used to aid management of WAD. Future articles will refer to this classification system with discussion on the management of WAD.

Please direct any comments or questions to me by e-mail at Laura.Jensen@ICBC.com or fax at 604 647-6148.

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The opinions expressed in this article are those of the author and do not necessarily represent the position of the Insurance Corporation of British Columbia.

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natural evolution,” she says. “We responded with our ideas and have since attended three workshops with the ministry to develop the concept—it’s been a very collaborative process.”

Hefford says as well as offering universal benefits—for instance the capacity to work together to meet population health needs—Divisions present the opportunity to address unique community issues. “Our Division’s initial priority is supporting GPs to provide hospital care, particularly for complex patients,” she says. “We also need to deal with the issue of residential care and, finally, to work on ways to ensure that unattached patients in our community get access to health care.”

When the White Rock/South Surrey Division is completely established, says Hefford, it is expected to include approximately 60 family physicians.

Find out more

To form a Division, family physicians must be collaboratively involved in discussing common issues that impact patient care and physician professional satisfaction, and be interested in working as partners with their health authority and the GPSC to make changes at the practice and health system levels.

For more information, visit the GPSC section at www.bcma.org/gpsc-Divisions-family-practice or contact Brian Evoy at 604 638-2880 (direct) or 800 665-2262 (toll free) and at bevoy@bcma.bc.ca.

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