Most physicians in British Columbia know immunization as a primary care service. Some are aware of the renewed focus on improving immunization programs in the province. This was initially stimulated by the National Immunization Strategy in 2004, and federal funding for provincial and territorial immunization programs. The initial allotment of $400 million over 3 years has now ended, but assisted with launching varicella, pneumococcal, meningococcal C conjugate, and adolescent pertussis vaccine programs around the country. The renewed funding of $300 million announced earlier this year is earmarked for human papillomavirus vaccine. The total cost of vaccines to support BC immunization programs is projected to rise from $14 million in 2001–2002 to about $53 million in 2008–2009.

The cost of vaccines to support BC immunizations is projected to be $53 million in 2008–2009.

A number of process improvement initiatives are gaining ground on the backdrop of Immunize BC: A Strategic Framework for Immunization in BC. This framework was announced in April by the Honourable George Abbott, Minister of Health. It highlights six priority actions:

- Promote the immunization program to the public and health care professionals.
- Improve access to immunization services.
- Ensure an adequate supply of knowledgeable, trained service providers.
- Create an integrated immunization registry.
- Improve the vaccine inventory management system.
- Establish an immunization research agenda that includes the sociocultural aspects of vaccine delivery and uptake.

The coordination of actions in each of these areas is with the BC Immunization Subcommittee, a subcommittee of the Communicable Disease Policy Committee. It has representation from regional health authorities, the Ministry of Health, BC Centre for Disease Control, First Nations, and physicians (Dr Simon Dobson from pediatrics and Dr Michelle Linekin from family medicine).

There are two new initiatives in 2007 that physicians need to know about: vaccine-specific billing codes and better vaccine inventory management.

Vaccine-specific billing codes
The Medical Services Plan (MSP) now requires that vaccines given to those under 19 years old be billed using one of 17 vaccine-specific billing codes. The codes include all publicly funded vaccines and will be amended if vaccines are added. Two tools are available to make recording easier. One is an immunization schedule for the patient chart. As each vaccine is given, the date, site of injection, and vaccine lot number are recorded. The schedule becomes a permanent record of immunization for the chart, from which the codes can be transcribed for electronic entry. The second tool is a pocket-sized card with the vaccine codes. Over the next 2 years, new information systems will flow these billing data into immunization registries. This is now done manually through submission of line-listed data to public health in most parts of BC where doctors immunize children. Data capture through billing codes has been done successfully for many years in Manitoba, allowing for both immunization coverage assessment and recognition of population vulnerabilities.

Better vaccine inventory management
Vaccines are biologicals with short shelf lives and cold storage requirements. About $2 million is wasted each year in BC, from a total budget of around $35 million. Most of this 6% waste is preventable. Regional health authorities and BCCDC are improving cold chain during transport and storage. Physicians can help by posting the vaccine storage and handling guidelines and ensuring that office staff have read them—available at BCCDC’s web site at www.bccdc.org/content.php?item=214. One staff member should be given primary responsibility for vaccine management. Vaccine refrigerators should be monitored with maximum-minimum thermometers, and temperatures should be checked and logged twice daily. Call your health department if you need advice on how to handle exposed vaccine. Store vaccine with the shortest expiry date at the front of the refrigerator so that it will be used first. Never store vaccine on fridge door shelves. Pack vaccines in cold chain carry bags with ice packs for transport.

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vs. incentives and penalties
A hard lesson that ICBC and international transportation safety agencies have learned is that awareness of individual risk factors and exposure to the dire consequences of risky driving may not be enough to change driving behavior. As with other health-compromising behaviors, patient education is necessary but may not be sufficient to modify behavior. Incentives and penalties such as strategically designed risk-based insurance products and police enforcement are also needed. Nevertheless, public campaigns and patient education is essential in the overall prevention program mix because education can amplify the positive impact of complementary measures such as enforcement and engineering.

Risk-taking behavior and recovery
The good news is that a risk-taking orientation may be a protective factor in recovery from the injuries it caused in the first place. When ICBC interviewed young risk takers about their post-crash experiences they reported feeling impatient during their recovery and felt motivated to quickly get back to their pre-crash status. Whether this translates into an earlier return to work is still an open question, but studies of recovering injured athletes indicate a similar pattern of enhanced readiness to resume a normal routine for the higher risk takers.

This is consistent with the view that sensation seekers tend to have a higher tolerance for emotional arousal, greater openness to new experiences, and more optimistic cognitive style—all factors that are generally associated with better health outcomes.

ICBC’s work with risky drivers also revealed that they may have a more adaptive explanatory style. They tend to view their injuries as specific rather than global in terms of daily functioning, and perceive their injury symptoms as transitory rather than chronic. They also may be less vulnerable to secondary injury reactions such as depression. Therefore, what appears to get risk takers in trouble also helps them recover faster. Better understanding of risky behaviours may inform not only prevention but also the treatment of injuries sustained in motor vehicle crashes.

If you have suggestions for ICBC about future article topics, or questions relating to the care of patients injured in motor vehicle collisions, please contact medinquiries@icbc.com.

—John Vavrik, PhD, Registered Psychologist Manager Strategic Applications, ICBC

References