A campaign to raise awareness about the importance of up-to-date pertussis immunization, especially among health-care professionals and families with infants and young children, was recently launched by the Department of Health and Wellness.

Pertussis is a highly-contagious, acute bacterial respiratory infection. Infants are at greatest risk of developing serious complications, or even dying, from pertussis despite treatment. About three-quarters of infants who become ill with pertussis acquire the infection from their immediate family and household contacts.

Infants and young children are at particular risk of contracting pertussis until they have completed their primary immunization series.

The best way to prevent mortality and significant morbidity from pertussis is for physicians and other health-care providers to ensure that infants and young children are immunized according to the recommended schedule. It’s recommended that everyone, but especially caregivers, and those in close contact with infants and young children, receive pertussis immunization (given as Tdap) as adults as childhood immunization doesn’t confer life-long immunity. Ideally, this would occur 10 years after the school-based booster dose and be followed every subsequent 10 years by a dose of Td (tetanus, diphtheria) vaccine.

For maximum protection, children need a primary series of pertussis-containing vaccine at two, four, six months followed by booster doses at 18 months, between four to six years of age, and again as part of the Grade 7 school-based immunization.

The best way to protect very young, under-immunized children is to “cocoon” them from exposure to the bacterium by ensuring that all caregivers and close contacts (both children and adults) are up to date with their pertussis immunization. Health-care providers should also receive a Tdap booster, if needed, especially those who work in areas such as post-natal wards, pediatric units, special care settings, primary care offices, and emergency departments.

Pregnant women should not receive pertussis immunization as the maternal antibody may interfere with the infant’s antibody response to pertussis vaccines. There are studies currently underway in Nova Scotia and the U.S.
New mothers, their partners and families, childcare workers, babysitters, and anyone who spends time around young children should receive a Tdap vaccination if they haven’t been immunized as an adult. Adult pertussis vaccine has been publicly-funded in Nova Scotia since 2007. Therefore all adults can be offered Tdap vaccine if their immunization is incomplete or if they have never received a dose of acellular pertussis vaccine in adulthood. Note: In Nova Scotia, acellular pertussis vaccine replaced whole cell vaccine in 1998. Acellular vaccine is associated with fewer adverse reactions than whole cell vaccine and has greater immunogenicity.

The duration of protection from pertussis with this vaccine is unknown but it is at least 10 years. At this time, however, there is no recommendation for adults to receive more than one dose of acellular pertussis. There’s no minimum interval required after the individual has received a tetanus-diphtheria-only (Td) vaccine.

During the Department of Health and Wellness pertussis awareness campaign packages of posters and fact sheets were sent to primary care offices, pediatric and obstetrical practices, and emergency physicians.

For more information, contact a Public Health office or refer to the Canadian Immunization Guide 7th ed. 2006 at www.phac-aspc.gc.ca/publicat/cig-gci/p04-pert-coqu-eng.php

MATERNAL-NEWBORN ORIENTATION PROJECT

The Maternal-Newborn Orientation project is a province wide initiative aimed at providing educational materials and support to meet the needs of diverse regional hospitals as well as the unique training requirements for nurses providing care for childbearing women and families in rural communities. Last fall (2010) nurses, educators and managers in regional hospitals and communities across the province were asked about the strengths and limitations of their existing orientation programs.

Based on this input, RCP has been exploring educational initiatives that will provide opportunities for individualized self-directed as well as collaborative group-based learning, including E-Learning modules, workshops and the development of perinatal nursing courses for RNs and LPNs. As of September, 2011, modules on Prenatal Screening and Assessment, Supportive Care in Labour and an Introduction to Fetal Heart Surveillance are available on the RCP website at: http://rcp.nshealth.ca/education/learning-modules.

These E-Learning modules will also be available on the provincial Learning Management System (LMS). Preliminary feedback has been very positive. Modules scheduled for development this fall include: The Process of Labour and Birth; Introduction to Breastfeeding; Assessment of the Newborn; and Postpartum Assessment and Adaptation.

If you have any comments or questions, please contact Anne Simmonds, Perinatal Nurse Consultant, RCP @ anne.simmonds@iwk.nshealth.ca
The Canadian Paediatric Society (CPS) is launching the 6th Edition of the Neonatal Resuscitation Program (NRP) materials this fall and into the new year. Five sites from across Canada have been selected for this launch, and facilitators from CPS will be present at all sites during each launch. National NRP Steering Committee representatives from Atlantic Canada have identified key Instructors and Instructor-Trainers throughout the region to participate as Faculty.

The NRP Instructor Workshop for the Atlantic Provinces has been scheduled for January 8th, 9th and 10th in Halifax. Faculty will attend a “briefing” on January 8th in order to review and discuss the materials and practice teaching. On the 9th and 10th, one-day workshops will be held on each of these days to orientate key NRP Instructors who will be invited by the CPS from across the region.

Previous NRP updates have involved practice changes, and so Canadian providers will find a confirmation of the practice changes introduced with the launch of the last edition of NRP in 2006. Many of the key modifications made at that time for Canadian providers (e.g. oxygen administration and titration) have been adopted by the American Academy of Pediatrics and the American Heart Association for the 6th Edition of NRP. For our launch, then, there will be an emphasis on optimal and effective teaching – the teaching method in the updated NRP is focused on team assessment and communication, simulation and debriefing. Many instructors have already employed these types of skills in their clinical teaching; these will be formally taught and practiced during the launch.

Further details will soon be available from the CPS – updated information will be posted on the NRP section on the CPS website (www.cps.ca/nrp)

WE’RE GOING GREEN!

IN AN EFFORT TO BE ENVIRONMENTALLY FRIENDLY, WE WILL BE PRINTING LIMITED QUANTITIES OF THE RCP NEWSLETTER. TO SIGN UP FOR AN ELECTRONIC COPY OF THE NEWSLETTER PLEASE SEE THE LINK ON THE HOME PAGE OF OUR WEBSITE AT: http://rcp.nshealth.ca

CONGRATULATIONS!
Welcome to Julie Johnson, perinatal nurse consultant who joined the RCP team on September 19, 2011.

Annette Elliott Rose (nee Ryan) perinatal nurse consultant with RCP and her husband, Chris welcomed their first baby, Georgia Grace on September 11, 2010. Annette returned from maternity leave in August.

QUALITY ASSESSMENT (QA) REVIEWS: Transition of the healthy newborn from hospital to home following birth

In 2010, the RCP began a series of Quality Assessment Reviews in Nova Scotia District Health Authorities (DHAs) focusing on care and support for mothers and newborns as they transition from hospital to home following birth. The incentive for selecting this topic for review came in part from health professionals concerned about the challenges with ensuring optimal care for mothers and babies, particularly in those communities where access to physicians, other care providers, and health care resources is limited.

Accreditation Canada’s maternal/child population standards and standards subsections provided a framework, guiding the structure of the Review and identification of strengths and challenges related to newborn care. Refer to Box 1.1

Box 1.1 Accreditation Canada’s Maternal Child Population Standards

- Healthy Living
- Health Promotion and disease prevention
- Identification of at-risk client groups and early interventions for those at risk
- Integration and coordination of services across the system, including social services and community organizations

Standards Subsection
- Investing in services for maternal/child populations

The process for the QA Reviews has included a review of data and health records, and focus groups with mothers who live in the larger as well as the more rural communities in the Districts. There have been meetings with hospital and community-based family physicians, pediatricians, nurse practitioners, public health and hospital nurses, community home visitors, midwives, outreach workers, District leadership and laboratory staff. During all meetings important issues were raised, including strategies for addressing challenges identified. There was acknowledgment that new mothers must have access to a health professional in a timely fashion in order for ‘comprehensive global newborn physical assessment’ to be carried out within 7 to 10 days of birth, as recommended in the NS Healthy Babies, Healthy Families: Postpartum and Postnatal Guidelines (2002). There are a number of situations that may make this difficult to ensure. For example during focus groups many mothers, particularly those in more rural communities reported not having a family physician.
Several others described having difficulty making an appointment during that time period because office telephone lines were very often busy or the first available appointment time was 2 weeks or more away. Several approaches for meeting these challenges were suggested. These included: hospital-based care providers seeing babies without a family physician for their initial assessment through the hospital Perinatal Clinic, hospital staff making the initial follow-up appointment with the woman’s family doctor prior to discharge, or flagging the importance of newborn appointments with office staff so that mothers can easily schedule this initial appointment within the recommended time period.

There was acknowledgement of the importance of ensuring that the primary care provider in the community has sufficient information about the newborn course in hospital. One example of success has been the implementation of routine Bilirubin Screening. Care providers throughout the Districts reported that they regularly receive information about screening results, including recommendations for follow-up. It is equally important however to ensure that information about clinical jaundice including initial and subsequent serum bilirubin (SBR) levels and treatment with phototherapy is communicated to the primary care provider in the community.

Additionally knowledge of weight loss, including birth and discharge weights, and any feeding difficulties is essential. One option suggested is for a copy of the completed Newborn Examination Record to be faxed to the primary care provider as mail systems may not be timely enough to ensure it is available at the time of the first post-discharge appointment. A copy should also be given to the mother/parent to take to the appointment.

Finally it is important that all mothers are given information and support to safely feed and care for their babies, and to recognize signs of thriving and signs of potential concern. During focus groups mothers often expressed feeling a lack of confidence in these early days and weeks and many reported that they discontinued breastfeeding soon after going home, considerably less than the six months of exclusive breastfeeding recommended by the Canadian Paediatric Society (CPS), because they were anxious about milk volumes and whether the baby was breastfeeding well. The entire team/all perinatal care providers have a role in providing support to new mothers by giving consistent messages, maintaining an awareness of provincial and community resources, and building maternal confidence.

Reports summarizing discussions have been sent back to the specific District/facility following each Review. At the conclusion of this series of QA Reviews, the RCP will complete a provincial report that will include recommendations for supporting the transition from hospital to home. For more information about RCP reviews please email rcp@nshealth.ca or call (902) 470-6798.
**Loving Care** is a strengths-based and capacity-building series of parent health education books. The series was developed by the Nova Scotia Department of Health and Wellness, Public Health Services, Department of Community Services, Reproductive Care Program, and the IWK Extra Support for Parents Program, with support from Child Safety Link and several Family Resource Centres. Part of the development process included ongoing consultations with families and content experts.

**Loving Care** consists of 3 age-paced books that focus on child development and attachment and one accompanying book, *Parents and Families* that focuses on family and parent self-care.

The series has been designed and written to meet the diverse learning needs of all families. **Loving Care** offers easy to understand early parenting information. In all the books parents are positioned as teachers and experts in knowing their own child.

Since 2008, **Loving Care: Birth to 6 months** and **Parents and Families** have been offered to families, either prenatally or at birth. The **6 to 12 months** book was released in 2009. The **1 to 3 Years** book, which completes the series, is being released this fall. Unfortunately, due to a number of factors (budgets, demographics and district priorities) some DHAs are providing hard copies of the 1 to 3 Years book to participants in targeted programs, and are referring other families to download the electronic versions of the books.

English and French **Loving Care** books are distributed to families through Public Health Services. Navigatable PDFs of the books can be found at [www.gov.ns.ca/hpp/LovingCare](http://www.gov.ns.ca/hpp/LovingCare).

Previous editions of the RCP newsletter have introduced the main themes covered in the other books. Table 1 outlines key messages in **Loving Care: 1 to 3 Years**. If you have any questions about Loving Care please call your local Public Health Services office.

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**DIABETES & PREGNANCY**

Preconception and pregnancy care by an interdisciplinary diabetes healthcare team has been shown to improve pregnancy outcomes. To refer your patients to the IWK Health Centre Pregnancy & Diabetes Clinic please use the new referral form located on the IWK Health Centre website: [www.iwk.nshealth.ca](http://www.iwk.nshealth.ca).

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**Upcoming RCP Event**

**ADVANCED LIFE SUPPORT IN OBSTETRICS**
**ONE-DAY RECERTIFICATION**
**APRIL 28th OR 29th 2012**
**IWK HEALTH CENTRE, HALIFAX, NS**
**REGISTRATION AND COURSE INFORMATION:**
[http://rcp.nshealth.ca](http://rcp.nshealth.ca)
<table>
<thead>
<tr>
<th>Topic</th>
<th>Table 1: A Selection of Key Messages from Loving Care: 1 to 3 Years</th>
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| Attachment                   | • Children learn to see the world as a good place when parents and caregivers respond to their needs with love and care. This builds self esteem, confidence, individuality, respect and progressive independence.  
  • Remember that all children are different and their temperament will impact how they react in situations. |
| Sexual Development           | • Sexuality is a healthy and natural part of all our lives.  
  • For young children sexuality involves being male or female, how they feel about themselves and their bodies and how they relate to others.  
  • Between 1 and 3 years, children: begin to learn what it means to be a boy or girl; are curious about their own and other’s bodies; notice differences between bodies; enjoy being naked and exploring their bodies and masturbating; talking about their bodies and being able to understand the correct words for body parts.  
  • Parents can teach children about their bodies and sexuality as they grow. |
| Physical Development         | • A number of developmental charts are included in the book.  
  • Includes information on readiness to do things, ‘when to wonder’  
  • Offers parents a chance to think about when to look for help related to their child’s development |
| Screen Time                  | • Interactive activities with parents or caregivers help baby’s brain develop.  
  • Time spent with TV, videos and video games affect brain development |
| Play                         | • Parents are encouraged to play with their children and follow their child’s cues.  
  • Language, social and physical skills develop through play.  
  • Outdoor play is important.  
  • A number of age appropriate games are included in the book |
| Behaviour                    | • Toddlers’ behavior can be fun, exciting and frustrating at times.  
  • Patience, understanding and love are essential.  
  • The book offers strategies for dealing with common concerns like aggression, fears, whining, and clinging. |
| Discipline                   | • Called ‘loving guidance’.  
  • Book includes learning empathy, re-directing behavior, problem solving, temperament and how life changes affect children’s behavior. |
### Toilet Learning
- Some children are ready to start around 2 years.
- Look for signs of readiness that may include: can stay dry in diapers for a few hours, notices when they are peeing or pooping, notices when diapers are dirty, poops at regular times during the day, can get on and off the toilet using a sturdy stool, can pull down pants, knows words like pee, poop, dry, wet and toilet, is interested in the toilet and wants to be independent.

### Food
- Trust toddlers know how much they want to eat.
- It’s the parent’s role to decide what foods to offer, where to eat, when to eat.
- Eating together as a family is important.
- Continue breastfeeding up to 2 years and beyond.

### Sleep
- Toddlers need lots of sleep (from 10-13 hours of sleep per day, including from 1-3 hours of naptime).
- Routines are important.
- Look for cues for sleep at bedtimes and naps. Cues include: losing interest in what they are doing, talking less, rubbing eyes, pulling ear, yawning, droopy or watery eyes, sucking thumb, lying down to play, wanting to breastfeed.
- Routines are important.

### Health
- Washing hands with soap and water is one of the best and easiest ways to keep toddlers and everyone in the family healthy.
- The 12 month, 18 month, and influenza immunizations are listed in the book.
- Three steps to prevent cavities:
  1. Keep children’s teeth and mouth clean. Parents whose children are at risk for early child tooth decay should brush their child’s teeth with water and a small rice sized grain of fluoridated toothpaste (risk factors are listed in the book).
  2. Don’t let food or drink stay on toddler’s teeth. (Never put to bed with bottle or sippy cup; never let them sip all day on drinks other than water.)
  3. See a dentist regularly.
- Have a smoke-free home and car. There is no level of tobacco smoke that is safe for children.
- Children can be exposed to second and third hand tobacco smoke. Second hand smoke is smoke that children breathe in. Third hand smoke is picked up when tobacco toxins stick to toys, clothes, sheets, towels, carpets, furniture, dishes etc.
- Book includes comprehensive safety checklist including information about outdoor safety, car seats and bike safety.