

# BC PRENATAL GENETIC SCREENING PROGRAM UPDATE

March 2011 Since the launch of the BC Prenatal Genetic Screening Program (PGSP) in February 2009, we have made significant progress in the development of sites that perform nuchal translucency (NT) ultrasound around the province. This has allowed the PGSP to offer Integrated Prenatal Screening (IPS) (NT plus first and second trimester biochemistry) to a larger proportion of women at higher risk. This accomplishment is a step in striving to meet our goal of providing safe and accurate testing to all women who choose prenatal genetic screening.

This newsletter contains information on:

- Updated criteria for an NT ultrasound;
- Information on First Trimester Screening (FTS);
- Overview of utilization of screening tests in 2010.

## UPDATED CRITERIA FOR AN NT ULTRASOUND

**Effective immediately, women who are  $\geq 35$  years old at their expected date of delivery (EDD) qualify for an NT ultrasound to be done in conjunction with first and second trimester serum markers (IPS).**

In order to ensure the quality of NT ultrasound, every sonographer must annually perform a minimum number. As such, pregnant women 30 years and older from the Northern Health Authority and East Kootenay/Kootenay/Boundary regions are also eligible for an NT ultrasound as part of IPS.

The other eligibility criteria for NT to be done in conjunction with serum biochemistry (IPS) remain unchanged and include:

- a) Women with twin pregnancies;
- b) Women who have a history of a previous child or fetus with Down syndrome, trisomy 18 or trisomy 13;
- c) Women who are HIV positive;
- d) Women pregnant following invitro fertilization (IVF) with intracytoplasmic sperm injection (ICSI).

## FIRST TRIMESTER SCREENING (FTS)

The PGSP receives queries from patients and health care providers regarding the availability of First Trimester Screening in the province. FTS involves an ultrasound along with serum biochemistry in the first trimester. In order for the detection rate of FTS to be equivalent to IPS or SIPS and have a comparable low false positive rate, the assessment of other ultrasound parameters (e.g. nasal bone) is required. Given that the current focus of the PGSP is to continue to build NT capacity across the province and improve access to screening for all pregnant women, we currently can not offer FTS within the provincial PGSP.

Pregnant women have the choice of paying privately for FTS through private clinics in Vancouver, Burnaby, Kelowna, and Victoria. Our website has further information regarding FTS and how it compares to SIPS and IPS. You and your patient may find this information helpful in deciding on the best screening option.

**BC Prenatal  
Genetic Screening  
Program**

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## UTILIZATION OF PRENATAL SCREENING TESTS IN 2010

- Approximately 25,000 women chose prenatal screening for Down syndrome, trisomy 18 and neural tube defects. This represents approximately 55% of pregnancies.
- With the implementation of more NT ultrasound sites, a larger number of women 36 years and older had IPS as opposed to SIPS when compared to 2009. This has resulted in a lower false positive rate for those women.
- There has also been an increase in the utilization of SIPS with a decrease in the utilization of Quad compared to 2009, again, reducing the false positive rate for those women.

### Types of Screening in Singletons

Singletons	IPS %		SIPS %		Quad %	
Maternal Age	2009	2010	2009	2010	2009	2010
< 35	1.0	1.9	44.6	63.7	54.4	34.4
35	3.8	12.6	53.1	64.6	43.1	22.9
36 - 39	9.8	43.1	53.5	39.1	36.7	17.8
40 +	54.7	65.8	26.8	19.7	18.4	14.6

This is a GOOD change in clinical practice, since SIPS has a lower false positive rate than Quad. HOWEVER, The shift from Quad to SIPS has not occurred consistently in all health authorities.

Health Authority	Age Group	IPS %	SIPS %	Quad %
Northern	< 35	5	41	54
Fraser	< 35	2	59	39
Interior	< 35	2	64	33
Vancouver Island	< 35	2	70	28
Vancouver Coastal	< 35	3	70	27

We must encourage pregnant patients to see their health care providers early in their pregnancy so they can be provided with the option of a screening test that has a lower false positive rate (SIPS vs. Quad).

Did you know that through our website [www.bcprenatalscreening.ca](http://www.bcprenatalscreening.ca) you can do the following?

- Order copies of the patient pamphlets that have been translated into French, Punjabi, and simplified and traditional Chinese;
- Determine the correct date range for patients to have their blood drawn by using the "Dating Tool";
- Find answers to FAQs regarding ordering and organizing serum screening.

**As of April 2011, our administrative office will be moving.**

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