Canadian Blood Services
Société canadienne du sang

ISBT 128   **Updated 2009-05-25**

Frequently Asked Questions

1. **What is ISBT 128?**
   ISBT 128 is an international standard for the transfer of information associated with blood transfusion. It provides a globally unique donation numbering system, international standardized product definitions, and standard data structures for bar coding and electronic data interchange.

   The ISBT 128 standard has been designed to ensure the highest levels of accuracy, safety and efficiency for the benefit of donors, patients and official ISBT 128 licensed facilities worldwide.

   Canadian Blood Services will implement the ISBT 128 standard for the labelling of blood and blood components.

2. **When will Canadian Blood Services be implementing ISBT 128?**
   Canadian Blood Services has received all necessary approvals to proceed with the implementation of the ISBT 128 labelling standard on May 31, 2009. This means that beginning June 1, 2009, all donations collected on or after this date will be labelled using the ISBT 128 labelling standard.

3. **Can hospitals expect to receive mixed shipments of inventory during the transition period?**
   Yes. Hospital Laboratory Information System (once ISBT 128 ready) will need to be able to receive components labelled with the Codabar label as well as the ISBT 128 label.

   Since some Codabar labelled components will not expire for some time after the implementation of ISBT 128 (e.g. 12 months for frozen plasma, 10 years for frozen/deglycerolized red blood cells), hospital systems will need to be able to manage the dual inventory for an extended period

4. **Will Canadian Blood Services help prepare our Lab Information Systems for ISBT 128?**
   In November, 2008, and then again in February 2009, hospitals were provided with ISBT 128 product codes and label text along with sample component labels, to assist in preparing for the ISBT 128 implementation. This list is also available for download on www.transfusionmedicine.ca.

5. **Will the new label look the same as the old label?**
   When ISBT 128 is implemented, you will notice some changes to the label. The new label, which follows the ISBT 128 standard, is larger in size and has more information available in both eye readable and barcode format.

   Canadian Blood Services will also provide an extended portion to the label to allow time for hospitals to transition their laboratory software to the new ISBT 128 labelling standard. The intent of the extended label is to provide hospitals sufficient barcode information in Codabar format as an interim measure while hospitals finalize information system upgrades and implementations, enabling them to benefit from the use of the ISBT 128 label.

6. **Will the extended label have all the same functionality as the current Codabar label?**
   Due to the limited size of the extended label, it was not possible to duplicate all functionality available on the current Codabar label. The most significant impact being the change to the start and stop characters on the 4 character site/year bar code. The start and stop characters were aligned to this change, as follows:
   − Site/year identifier: a/a
   − Donation number: d/d

   Due to insufficient space to align these barcodes side by side the possibility of a concatenated scanner read was also removed.

7. **How long will the extended label be available?**
   Canadian Blood Services does not have a specific date for discontinuing the extended label. We continue to encourage all hospitals that are bound by the Codabar duplicate number problem to adopt the ISBT 128 label standards as soon as possible, as the ISBT 128 donation number format eliminates the duplicate donation number issue.

8. **How does ISBT 128 eliminate duplicate donation numbers?**
   Currently, donation numbers repeat over a specified time period due to the limitations of the donation number sequence. With the ISBT 128 standard, a 13 character donation number (DN), consisting of a facility identification code, a year indicator and a six digit sequential number is used. This format ensures that the full donation number is not expected to repeat for 100 years.

9. **What are some of the other benefits to adopting the ISBT 128 standard?**
   There are many other benefits to adopting the ISBT 128 standard.
   − ISBT 128 provides a standard label layout and internationally standardized product codes and definitions for blood components.

- ISBT 128 provides significantly more product codes and the product codes more specifically define the product. For example, the product codes can differentiate between Homologous, Directed (allogeneic) and Autologous products and/or indicate divided products
- There is more information available in barcode and eye readable format. This facilitates the electronic exchange of information between information systems. Data identifiers included in the bar code structure provide added controls to reduce errors and improve safety

10. Can we add information to the label? Can the location of the information on the label be changed?
Although some aspects of the label have been adjusted to meet Canadian needs, the ISBT 128 standard limits the amount of customization that can be done on the label. ISBT 128 has a standard label format which must be followed.

11. What information will be in barcode format and what will be eye-readable?
As mentioned earlier, there will be both barcodes and eye-readable text on the ISBT 128 label, the same as there is with the current label. The following information will be presented in both bar code and eye-readable format:
- Donation Number
- Blood Group
- Product Code
- Expiry Date and Time
- Special Information

There will also be additional eye-readable text on the label, including:
- Eye-readable text containing the interpreted bar coded information (e.g. product name and description)
- Additional eye-readable only text (e.g. supplier name address and license number, product storage conditions, special information)

12. You also mentioned earlier that the ISBT 128 label will be larger. What are the physical dimensions of the ISBT 128 label?
A 'standard' ISBT 128 label is 10 cm x 10 cm (4" x 4")

13. Will the extended portion of the label increase the size?
Yes. With the 'extended' portion of the ISBT 128 label that will be implemented by Canadian Blood Services for a transition period, the size will increase to 10 cm x 12 cm (4" x 5").

14. How much space will be left on the bag for hospitals to put additional stickers?
There is more room on the Buffy Coat bags than on Pall Medical bags, however space is limited.

15. Is there any information which appears on the current label, but will be removed with the ISBT 128 implementation?
Information may be presented in a different format or be located in a different position, however, all critical information will continue to be printed on the ISBT 128 label.

With ISBT 128 implementation the labels of all plasmas will show ABO only. This decision was made after consultation with representatives of the Hospital Customer Service Advisory Panel. This is also aligned with the current practice at Héma-Québec. During the transition period the extended label will continue to show the ABO/Rh in Codabar format.

16. Our current red cells come with a bunch of small labels on the back of the blood bag with the unit number on them. When ISBT arrives will these same labels exist on the back of the units?
Yes, there will be some labels on the back of the red cell unit. In order to maximize the number of labels that we could fit on the bag there will be less bar coded labels and more eye readable only labels. Samples of the label set for the back of a red cell container can be found on transfusionmedicine.ca.

17. It is the practice of some nurses and clinicians to use the extra labels on the back of the subset for red cell containers, for chart records, instead of writing the donor number on the chart with a pen. Can Canadian Blood Services guarantee that the adhesive on the labels will permanently attach to paper?
The labels supplied on the back of components distributed by Canadian Blood Services are provided as a courtesy, in response to specific customer requests. Permanent adhesion to all surfaces can not be guaranteed by Canadian Blood Services due to the many environmental influences these labels may be exposed to once outside Canadian Blood Services' control.

Canadian Blood Services has not changed the adhesive, or other materials used in the production of the Donation Number Label set applied to the collection containers of blood and blood components. The adhesive used on the label subset continues to meet our specifications/requirements.

18. Will the labels on the back of the bag be the donation identification number (i.e.: the 13 character ISBT 128 donation number)?
The labels on the back of the bag will be in the 16 character ISBT 128 format - the 13 character ISBT 128 donation number plus the two process control flag characters and a manual check character.

There will also be two donation number labels with the 11 character Codabar barcode and number included in the subset.

19. Is the manual check character on the ISBT 128 code a number, a letter, or could it be either?

The manual check character can be a letter (e.g.: A), a number (e.g.: 2), or a symbol (e.g.: *). The Manual Entry Check character (K) for ISBT 128 donation and pool numbers is calculated using the ISO/IEC 7064 modulo 37-2 check sum method. This is a complicated calculation that can be found in the ISBT 128 Standard Technical Specification.

20. How will you indicate additional phenotype information? Will you use phenotype tags?

The process will remain the same as today. Additional phenotype information will continue to be indicated on phenotype tag attached to the unit(s) if antigen testing has been performed on a unit post end labelling.

21. What information will be provided by Canadian Blood Services on Form 1000103659, *Notification of Component Recall/Withdrawal* when recalling/withdrawing ISBT 128 labelled components, while using the extended ISBT 128 label?

The information that will be provided is as follows:

Donation Number:

– ISBT 128 format comprised of:
- 13 character ISBT 128 donation number;
- 2 flag characters - (flag characters provided by Canadian Blood Services on this form, will not match flag characters on the blood component end label, but will be included as placeholders only – flag characters are not part of the donation number and are not required for identification purposes);
- 1 manual check character;

and

– Codabar 11 character donation number format comprised of:
- site/year identifier – (the last two characters of the collection facility and the two digit year);
- 7 character donation number – (the six digit sequence number and the check character).

For example, for ISBT Donation Number C0521 09 283606 00 Y the following will be recorded for the donation number:
- C05210928360600Y / 2109 5 283606

22. What will hospitals need to provide when reporting back to Canadian Blood Services?
When reporting to Canadian Blood Services, hospitals will need to provide the 13 character ISBT 128 donation number <u>and</u> the manual check character. Computerized facilities using the interim extended label may provide the Codabar 11 character donation number format comprised of the site/year identifier and the 7 character donation number.

23. What if my hospital software does not capture this information?
We are aware that there are differences in software functionality in terms of capturing and displaying the complete ISBT 128 donation number. There are variations in what the different systems will read/write related to the manual check character associated with the donation number.

When reporting to Canadian Blood Services, hospitals using the ISBT 128 standard (either manual transcription or automated) will need to provide the 13 character ISBT 128 donation number and the manual check character.

If you are not able to provide this information, you may continue to provide Canadian Blood Services with the same information that they are providing today.

24. Where can I get sample barcodes in order to test our lab equipment?
A booklet of scannable sample labels is available by request through your Canadian Blood Services HLS Representative.

25. What kind of supporting materials will be provided to hospitals for communicating the changes related to the ISBT 128 implementation at Canadian Blood Services?
Canadian Blood Services will be providing hospitals with communications items to support the implementation of ISBT 128. These materials include:
- posters;
- pocket cards;
- information fact sheets; and
- before and after label examples.

You will receive these items through your Hospital Liaison Specialist. Some of these materials are also available for download and printing from www.transfusionmedicine.ca.

26. Should my hospital consider joining ICCBBA?

Hospitals wanting additional, more detailed information on ISBT 128 can access the website of The International Council for Commonality in Blood Banking Automation (ICCBBA), Inc. at www.iccbba.org. Computerized facilities should consider registration and/or licensing with ICCBBA.

Registration and licensing with ICCBBA is required if you apply ISBT 128 labels. This encompasses facilities that pool, aliquot, or modify products and label them with ISBT 128 bar codes. Even if it may not be required, your facility may also wish to register and pay licensing fees in order to receive all ISBT 128 documentation and updates and access the Registered Users section of the ICCBBA Website. All new product codes, other updates and current copies of the ICCBBA databases are maintained in this section. The annual license fee for transfusion services is maintained as low as possible to encourage such facilities to maintain regular contact with ICCBBA and remain fully informed about updates and changes to the ISBT 128 standard. Please refer to the Registration and Licensing section on the ICCBBA website (ICCBBA.org) for more information and the registration process.

27. Where can I find more information about the ISBT 128 implementation at Canadian Blood Services?

For information regarding the ISBT 128 implementation at Canadian Blood Services visit the Canadian Blood Services Transfusion Medicine web site at www.transfusionmedicine.ca.

If you have any additional questions, please contact your local Canadian Blood Services Hospital Liaison Specialist.