HALT-C Data Management System Specimen Shipping and Tracking

I. Introduction

At each HALT-C study visit specimens are drawn for shipping to the Central Repository (BBI). Types of specimens include frozen serum in aliquot tubes, fresh blood in Vacutainer tubes with ACD, frozen whole blood, and frozen liver specimens in aliquot tubes or OCT. The information on specimens collected is entered into the HALT-C DMS using the aliquot form(s) for that study visit. Shipments and manifests are prepared using the Specimen Shipping portion of the HALT-C DMS.

II. Summary of Steps for Shipping to the Repository or Central Labs

A summary of the steps involved in preparing specimens for shipment to the Repository or ancillary study central labs are given here. Each of these steps is discussed in detail below.

1. Collect specimens at each visit according to protocol.
2. Label all aliquot tubes, Vacutainer tubes, and OCT containers with the appropriate aliquot labels.
3. Complete the aliquot form(s) for that visit, with information on all the specimens that were collected at that visit.
4. Data enter the aliquot form(s). When an aliquot form is entered, specimens are considered available for shipping. Some specimens are immediately available; others will be held at the clinical site for at least two weeks prior to shipping.

On the day that the shipment will be made:

1. Use the Specimen Shipping portion of the HALT-C DMS (reached from the Main Menu), and choose the type of shipment to be made.
   - Prepare Frozen Shipment: All Main Trial and Ancillary Studies frozen specimens that are shipped to the Central Repository
   - Prepare Fresh Shipment: All Main Trial and Ancillary Studies shipments made at room temperature. This includes fresh whole blood and MBT breath specimens.
   - LP/CTL Shipping: Fresh whole blood or fresh liver specimens for the LP and CTL studies. This option is available only to sites participating in the Immunology/Virology Ancillary Study.
   - AS Shipping: Liver specimens for the Iron & HFE study sent to the University of Connecticut. This option is available only to site participating in the Iron & HFE Ancillary Study.

   Print the list of specimens that are “available to ship”. Note: Do NOT check the boxes to the left of the samples prior to printing this list. The boxes can be used on the printed page to help keep track of which specimens have been pulled for shipment. Keep this list to refer to while finalizing the shipment.
2. Verify that all specimens on the list are physically available for shipment, and that all specimens that you plan to ship are included in the list. If necessary, enter additional aliquot forms to include additional specimens in the shipment.
3. Pack the specimens in the appropriate shipping container. Complete a FedEx Airbill and a Declaration of Dangerous Goods. Procedures vary slightly depending on the destination of the specimens. Refer to section E-4, Shipping Procedures, for more detailed information.

4. Finalize the shipment using the appropriate menu item in the Specimen Shipping portion of the HALT-C DMS.
5. Print the final manifest, and include it in the box with the shipment. Finalizing a shipment also generates a notification by email to the appropriate recipient.

A. Which Specimens Should be Shipped?

- The Visit Control Sheet for each study visit lists the specimens to be collected at that visit for the Repository and Ancillary Study Central Labs. This list includes the volume, type, purpose, and sequence number of each specimen to be collected for shipping. It is helpful to print the Visit Control Sheet out prior to the patient visit, so that aliquot tubes, Vacutainer tubes and aliquot labels can be prepared in advance.
- In addition, the Repository Specimen Table located in Section E-1, Attachment B, of this manual (Specimen Collection + Processing: Blood), lists all blood specimens to be collected both the Main Trial and Ancillary Studies that are shipped to the Central Repository.
- Some ancillary studies (Serum Fibrosis Markers, Immunology/Virology, QLFT) also have specimens shipped to the Repository. Consult the ancillary study protocol, in Section K of this manual. All Ancillary Study specimens are also listed on the VCS.

Refer to Section E, Specimen Collection + Processing, for detailed information on collecting and processing blood and liver specimens prior to shipping.

B. When Should Specimens be Shipped?

- Fresh blood and liver specimens: Fresh whole blood and liver specimens are shipped at ambient temperature, on the same day they are collected. Specimens should be shipped Monday – Thursday using Priority Overnight service. Refer to Section K-1, Immunology/Virology AS, of this manual, for more information processing and shipping fresh liver for the CTL study.
- Frozen Specimens: Frozen specimens are stored and shipped in batches on a regular schedule (weekly or bi-weekly), Monday through Wednesday. Some frozen specimens, such as W20 and repeat HCV RNA, are time-sensitive and should be shipped as soon as possible. All frozen specimens are shipped using Priority Overnight Service.
- MBT specimens: Breath specimens collected for MBT are stored at room temperature and may be shipped to BBI on a regular schedule. MBT specimens are available for shipping under “Prepare Fresh Shipment”. Refer to Section K-6, QLFT Ancillary Study, for more detailed information on processing and shipping MBT specimens.
- Liver for HFE & Iron AS: Liver specimens for the HFE & Iron AS are stored in the freezer with the other frozen specimens until ready for shipping. Specimens should be shipped in batches of 25-50 at ambient temperature to the University of Connecticut using 2-4 day delivery. Refer to Section K-8, Iron & HFE Mutation AS, of this manual for more detailed information on processing and shipping liver specimens for the Iron & HFE AS.
- Locally stored specimens: Some frozen serum specimens are held for several weeks locally, prior to shipping them to the Repository. The Visit Control Sheet and aliquot forms (see below) list the specimens to be stored locally. When it is time to ship these specimens to the Repository, the locally stored specimens will be included on the list of specimens that are “available to ship” (displayed when a frozen shipment is prepared).

  Note: Repository shipping procedures are described in detail in Section E-4, Shipping Procedures.

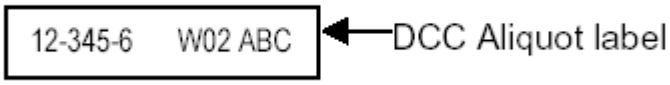
III. Labeling Specimens

Each specimen to be shipped to the repository must be labeled with the proper aliquot labels. Screening and Lead-in Phase, and all Ancillary Study specimens need to be labeled with two aliquot labels. Randomized and Responder Phase Main Trial specimens will have one aliquot label supplied by BBI. It is helpful to label all aliquot tubes required for a patient visit before the patient arrives.

A. Types of Labels

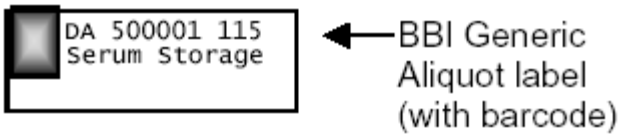
DCC Aliquot Labels

Aliquot labels supplied by the DCC have an ID number, a Visit number, and patient initials (except at the S00 visit) and do not have bar codes. The DCC automatically sends your site DCC aliquot labels when a patient enters a new phase of the study. If there is a problem, please contact the DCC.



BBI Generic Aliquot Labels

These are smaller bar-coded labels that come 10 to a strip. Each label has a Sample ID, a Sequence number, and a sample purpose. BBI sent your site BBI Generic Aliquot labels at the start of the study. If your site runs low on BBI Generic Aliquot labels (for Screening, Lead-in, R00, repeat HCV RNAs, and any ancillary study in which your site participates), please request more from BBI.



BBI ID-Numbered Aliquot labels.

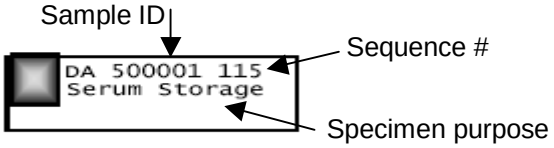
These are larger bar-coded labels that come 3 to a strip. Each label has an ID number, a Visit number, Sample ID, a Sequence number, and a sample purpose. BBI automatically sends your site BBI ID-numbered Aliquot labels when a patient enters the Responder or the Randomization phase of the study. If there is a problem, please contact BBI.

B. Explanation of Sample IDs and Sequence Numbers

The sample ID and sequence # uniquely identify a specimen for a particular patient at a particular visit. These aliquot labels also contain a brief description of the specimen's purpose.

- Sample IDs: Each sample ID is composed of 2 letters plus 6 numbers; an example is DA 001023. The letters identify the site: DA→ site 11; DB→ site 12; DC→ site 13; DD→ site 14; DE & DF→ site 15; DG→ site 16; DH→site 17; DI→site 18; DJ→site 19; DK→ site 20.

- Sequence numbers identify a specimen's type and purpose, e.g. frozen serum for AFP testing, or fresh blood for EBV transformation. The entire list of sequence numbers, and their specimen type and purpose, are listed in Attachment B of Section E-1 in this manual.



C. Labeling Procedures

Lead-In Phase:

a. **Main Trial aliquots:** Use one DCC Aliquot label and one BBI Generic Aliquot label.
b. **Ancillary Studies aliquots:** Use one DCC Aliquot label and one BBI Generic Aliquot label.
   i) If your site did not receive DCC Lead-In Phase labels, please verify that S00 visit Form #4 has been data entered for that patient. Data entry of Form #4 triggered printing of the W02 through W24 DCC Aliquot labels. If there is a problem, please call the DCC.

W20 Responder Phase:

a. **Main Trial aliquots:** Use one BBI ID-Numbered Aliquot label.
b. **Ancillary Studies aliquots:** Use one DCC Aliquot label and one BBI Generic Aliquot label.
   i) When your site data enters a Form #21 indicating a patient is entering the Responder Phase, the DMS triggers printing of DCC Aliquot labels for Ancillary Study Responder Phase visits. All Ancillary Study labels for the W30 through M72 visits are then sent. If you do not receive these labels, please call the DCC.

   ii) The DCC then informs BBI to print BBI ID-Numbered Aliquot labels for Main Trial Responder Phase visits. All Main Trial labels for W30 through W72 visit are sent. If you do not receive these labels, please call BBI.

Express patient S00 visit:

a. **Main Trial aliquots:** Use one DCC Aliquot label and one BBI Generic Aliquot label.
b. **Ancillary Studies aliquots:** Use one DCC Aliquot label and one BBI Generic Aliquot label.
   i) When your site data enters a Form #1 indicating a patient will be brought in for screening, the DMS triggers printing of DCC Aliquot labels for the S00 visit. Aliquot labels include the Main Study and all Ancillary Studies being done at your site.

   ii) The DCC overnights the S00 Visit labels to your site within five business days. For these labels to arrive on time, you must data enter Form #1 at least one week prior to a patient's S00 visit. If you are concerned about delivery, please call the DCC.

Express patient R00 visit:

a. **Main Trial aliquots:** Use one DCC Aliquot label and one BBI Generic Aliquot label.
b. **Ancillary Studies aliquots:** Use one DCC Aliquot label and one BBI Generic Aliquot label.
   i) When your site data enters a Form 3, Screening Medical History, with question E1 = 1 (indicating an Express patient will be brought in for a baseline visit), the DMS triggers printing of DCC Aliquot labels for the R00 visit. Aliquot labels include the Main Study and all Ancillary Studies being done at your site.

ii) The DCC overnights the R00 Visit labels to your site within five business days. For these labels to arrive on time, you must data enter Form 3 with E1 = 1 at least one week prior to an Express patient's R00 visit. If you are concerned about delivery, please call the DCC.

Breakthrough / Relapser patient R00 visit:

a. **Main Trial aliquots:** Use one DCC Aliquot label and one BBI Generic Aliquot label.
b. **Ancillary Studies aliquots:** Use one DCC Aliquot label and one BBI Generic Aliquot label.
   i) When your site data enters a Form #99 with question B8 = 1 (indicating a Breakthrough or Relapser patient will be randomized), the DMS triggers printing of DCC Aliquot labels for the R00 visit. Aliquot labels include the Main Study and all Ancillary Studies being done at your site.

   ii) The DCC overnights the R00 Visit labels to your site within five business days. For these labels to arrive on time, you must data enter Form #99 with B8 = 1 at least one week prior to a Breakthrough or Relapser patient's R00 visit. If you are concerned about delivery, please call the DCC.

Randomized Phase (all patients):

a. **Main Trial aliquots:** Use one BBI ID-Numbered Aliquot label.
b. **Ancillary Studies aliquots:** Use one DCC Aliquot label and one BBI Generic Aliquot label.
   i) **Patients who entered Randomization Phase after April 2002:** When your site data entered a Form #21 or a Form #99 indicating a patient is entering the Randomized Phase, the DMS triggers printing of DCC Aliquot labels for Ancillary Study Randomization visits. All Ancillary Study labels for the M09 through M54 visits are sent. If you do not receive these labels, please call the DCC.

      (1) The DCC then informs BBI to print BBI ID-Numbered Aliquot labels for Main Trial Randomization visits. All Main Trial labels for M09 through M54 visit will be sent. If you do not receive these labels, please call BBI.

   ii) **Patients who entered Randomization Phase before or during April 2002:** When your site data entered a Form #21 or a Form #99 indicating a patient is entering the Randomized Phase, the DMS triggered printing of DCC Aliquot labels for Ancillary Study Randomization visits. All Ancillary Study labels for the M09 through M54 visits were sent. If you did not receive these labels, please call the DCC.

      (1) The DCC then informs BBI to print BBI ID-Numbered Aliquot labels for Main Trial Randomization visits. ID-Numbered BBI Aliquot labels were initially sent for the first four visits (M09, M12, M15, and M18). Additional ID-Numbered Aliquot labels are sent one year later for the remaining visits (M21, M24, M27, M30, M33, M36, M39, M42, M45, M48, and M54). If you do not receive these labels, please call BBI.

SUMMARY	Main Trial or AS?	Use DCC Aliquot Label?	BBI Generic Aliquot Label?	Use BBI/Pt. ID Aliquot Label?
Lead-In Phase Patients	Both	Yes	Yes	No
Express Patients in Screening	Both	Yes	Yes	No
Express Patients at R00	Both	Yes	Yes	No
Responder Phase Patients	Main Trial	No	No	Yes
	Anc. Studies	Yes	Yes	No
BT / REL patients at R00	Both	Yes	Yes	No
Randomization Phase Patients	Main Trial	No	No	Yes
	Anc. Studies	Yes	Yes	No

IV. Using Aliquot Forms

All specimens to be shipped to the Repository or Central Lab must be recorded on the appropriate aliquot form. Aliquot forms provide a place to record the patient ID, visit, sample ID, and blood draw date. Entering the aliquot form links a sample ID to a patient ID at a particular study visit. This is crucial for tracking the shipment of specimens in the HALT-C DMS. Without this information it would not be possible to track specimens (and properly record test results) once the specimens have been shipped.

Aliquot forms also record information about which specimens were collected, the volume of each specimen, and whether or not problems arose during specimen processing. Refer to the QxQ for each of the aliquot forms in Section M of this manual for detailed instructions on completing aliquot forms.

Aliquot Forms used in the Main Trial

Form #	Title	Visit(s)
70	Screening 1 Aliquot Form	Screening (S00)
71	Screening 2 Aliquot Form	Screening (S00)
72	Lead-in Phase Aliquot Form	All Lead-in visits (W00-W24)
73	Randomized Phase Aliquot Form	All Randomized phase visits (M09-M54)
74	W20 Responders Aliquot Form	All Responder Phase visits (W30-W72)
76	Repeat HCV RNA Aliquot Form	Responder Phase visits as needed (W30-W72)
77	R00 Visit Aliquot Form	Randomization Visit (R00) for Express, Breakthrough, or Relapse patients

Aliquot Forms used in the Ancillary Studies (See Section K for further details.)

Form #	Title	Visit(s)
102	Serum Fibrosis Marker AS Aliquot Form	W00, W24, W48, W72, R00 (B/R only), M12, M24, M36, M48
175	Immunology/Virology Aliquot Form	S00, W00, W24, R00 (B/R only), M12, M24, M36, M48, M54
270	CTL Serum Aliquot Form	S00
271	CTL Liver Aliquot Form	S00, M24, M48
273	LP Aliquot Form	W00, W24, R00 (B/R only), M12, M24, M36, M48, M54
184	Iron & HFE Aliquot Form	S00, M24, M48
193	QLFT Aliquot Form	W00, R00 (Express only), M24, M48
195	QLFT Methionine Breath Test Aliquot Form	W00, R00 (Express only), M24, M48

The protocol requires different specimens to be collected at different visits. Therefore, the aliquot forms that are used for an entire trial phase specify the specimens (i.e. sequence numbers) to be collected and recorded at each visit. For example, Form 72, Lead-in Phase Aliquot Form, is completed at every visit during the Lead-in Phase, but different specimens are collected at different visits. Part of Form 72 is displayed on the next page. In this example, sequence #101 (W20 HCV RNA) is collected only at the W20 visits. The questions related to that sequence # would be completed only at that visit. The DMS is programmed to expect answers to those questions only at that particular visit.

Example: Form 72, Lead-in Phase Aliquot Form, filled out at W20

SECTION B: SAMPLE ID

B1. Enter the sample ID (2 letters + 6 numbers) **from the set of labels to be used for this patient at this study visit:**

Sample ID: D A 0 0 3 6 7 7

B2. Date of blood draw: (MM/DD/YYYY) 0 3 /0 8 / 2 0 0 3

SECTION C: SPECIMEN INFORMATION

C1. Were there any problems after specimen collection, such as a delay in processing or hemolysis?

Yes ..... 1 (complete a, b, c + d for each tube collected/aliquotted)

No ..... (2) (complete a + b for each tube collected/aliquotted)

C2. Serum in aliquot tubes, to be shipped frozen:

Sequence #	Purpose	Expected Volume	Study Visit	a. Aliquotted? Yes	a. Aliquotted? No (skip to next item)	b. Volume (ml)	c. Code	d. Date processed
101	HCV RNA	(1.0 ml)	W20	(1)	2	1 0 0	specify	__/__/__
102	HCV RNA	(1.0 ml)	W20	(1)	2	1 0 0	specify	__/__/__
103	HCV RNA	(1.0 ml)	W20	(1)	2	1 0 0	specify	__/__/__
104	HCV RNA	(remain)	W20	(1)	2	1 0 0	specify	__/__/__

V. Finalizing a Shipment

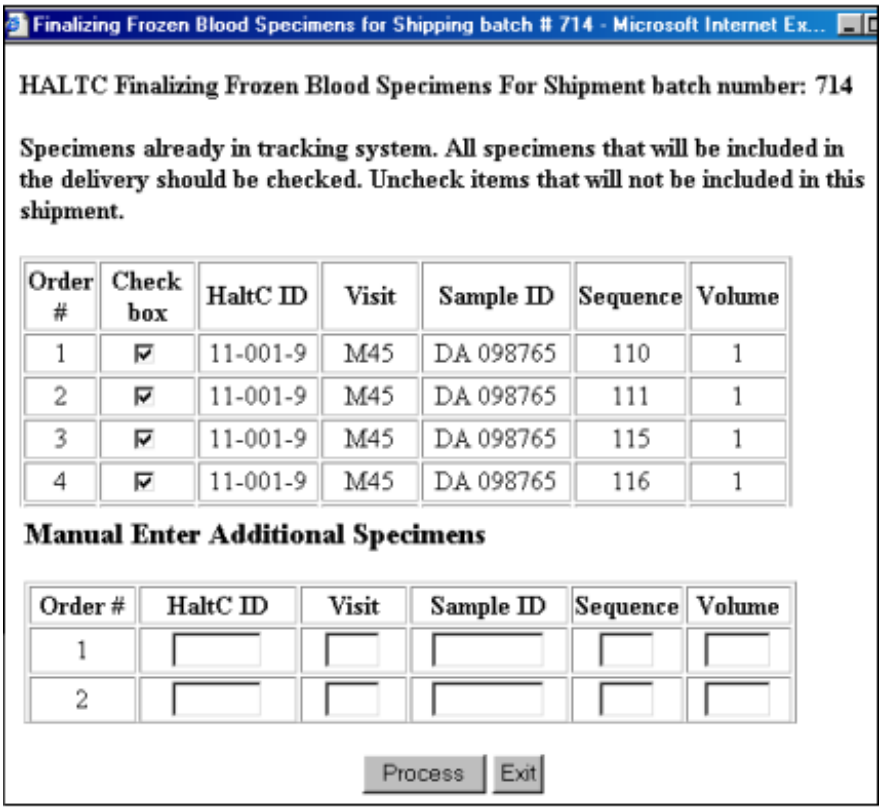
Once the content of a shipment is verified, the shipment can be finalized. To finalize the shipment, return to the Specimen Shipping menu in the data management system, and click on the appropriate link to finalize the shipment.

- Finalize Shipment: All fresh and frozen shipments going to the Central Repository (BBI)
- AS Shipping: Choose "Finalize AS Shipment" for liver specimens for the Iron & HFE study sent to the University of Connecticut. This option is available only to site participating in the Iron & HFE Ancillary Study.
- LP/CTL Shipping: Choose the "Finalized LP/CTL Shipment" for Fresh whole blood or fresh liver specimens for the LP and CTL studies. This option is available only to sites participating in the Immunology/Virology Ancillary Study.

Note: Shipments should always be finalized on the day that they are shipped. The shipping date is assigned to the items in the batch when the shipment is finalized. If the shipment is finalized on one day, but shipped on another, the incorrect shipping date will be associated with the items in the batch.

The list of specimens intended for shipping should be compared with the list of specimens displayed. If a specimen will not be included in this particular shipment, click on the check box next to the specimen. The check will be removed, indicating that the specimen is not to be included in this shipment. Any specimens that are removed in this way will reappear the next time a frozen shipment is prepared.

The example screen below lists all the items to be included in a particular batch. To finalize a shipment batch, click the "Process" button at the bottom of the screen. The items checked will be included in the printed manifest and will be listed in an automatic email sent to the repository or central lab. If there are any problems with the information displayed (e.g. missing specimens or an extra specimen), or if the specimens will not be shipped on the same day, exit from this screen using the "Exit" button.


Finalizing Frozen Blood Specimens for Shipping batch # 714 - Microsoft Internet Ex...

HALTC Finalizing Frozen Blood Specimens For Shipment batch number: 714

Specimens already in tracking system. All specimens that will be included in the delivery should be checked. Uncheck items that will not be included in this shipment.

Order #	Check box	HaltC ID	Visit	Sample ID	Sequence	Volume
1	☑	11-001-9	M45	DA 098765	110	1
2	☑	11-001-9	M45	DA 098765	111	1
3	☑	11-001-9	M45	DA 098765	115	1
4	☑	11-001-9	M45	DA 098765	116	1

Manual Enter Additional Specimens

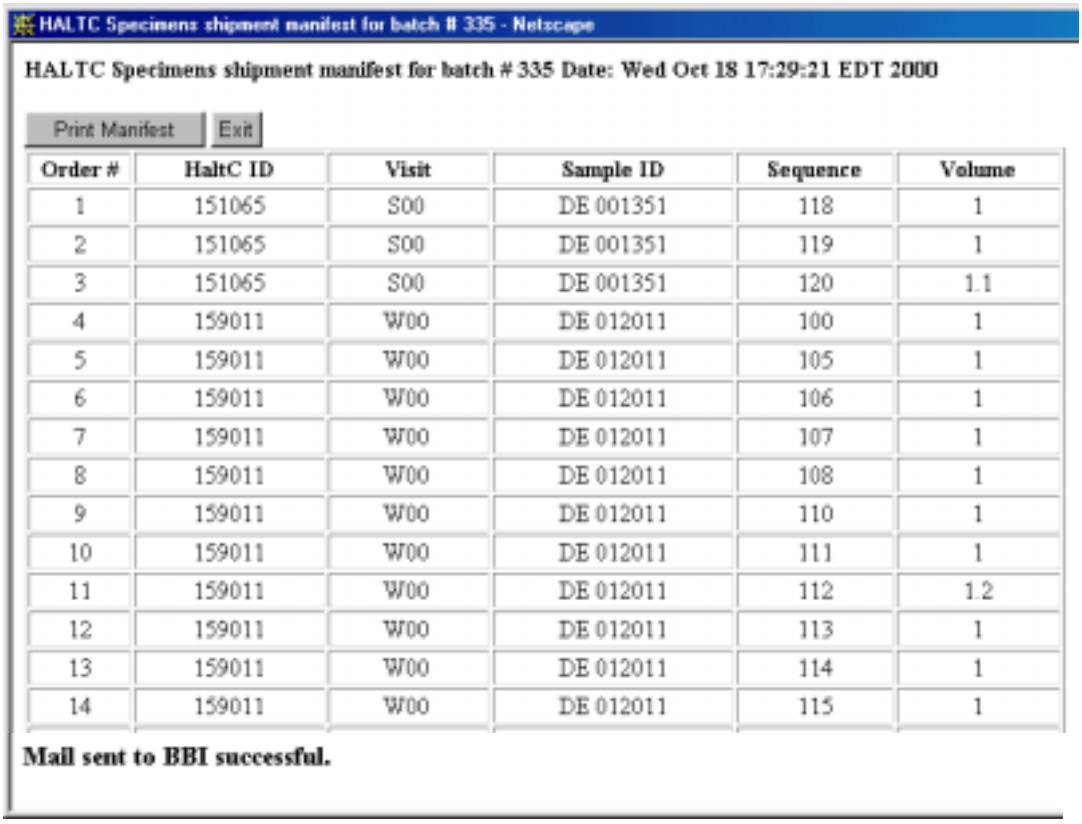
Order #	HaltC ID	Visit	Sample ID	Sequence	Volume
1					
2					

Process Exit

The fields on the bottom half of the screen can be used in the (rare) circumstance that there are specimens that need to be included in this shipment that have not yet been data entered into the system with one of the aliquot forms. This will allow these specimens to be included on the manifest, but entry of the completed aliquot form must still be done.
Once specimens have been included in a finalized batch, the Specimen Shipping part of the DMS assumes that those specimens have been shipped to the Repository (i.e. they will not be displayed the next time a frozen shipment is prepared).

VI. The Shipping Manifest

After finalizing a shipment, the final shipping manifest will be displayed. Print the manifest using the “Print Manifest” button. Include the manifest in the shipping container, and save a copy to be kept at the site, in case there are questions about the shipment. At the same time that the manifest is displayed, an electronic version of the manifest for the batch is sent to both the recipient and to NERI.


HALTC Specimens shipment manifest for batch # 335 - Netscape

HALTC Specimens shipment manifest for batch # 335 Date: Wed Oct 18 17:29:21 EDT 2000

Print Manifest Exit

Order #	HaltC ID	Visit	Sample ID	Sequence	Volume
1	151065	S00	DE 001351	118	1
2	151065	S00	DE 001351	119	1
3	151065	S00	DE 001351	120	1.1
4	159011	W00	DE 012011	100	1
5	159011	W00	DE 012011	105	1
6	159011	W00	DE 012011	106	1
7	159011	W00	DE 012011	107	1
8	159011	W00	DE 012011	108	1
9	159011	W00	DE 012011	110	1
10	159011	W00	DE 012011	111	1
11	159011	W00	DE 012011	112	1.2
12	159011	W00	DE 012011	113	1
13	159011	W00	DE 012011	114	1
14	159011	W00	DE 012011	115	1

Mail sent to BBI successful.