

Packaging and Shipping of Samples to Diagnostic Services Ground Transportation

There are many well documented adverse side effects to formalin exposure in humans, and it is for this reason, as well as to minimize the risk of zoonotic infections and to contain noxious odours, that it is paramount that proper packaging and shipping procedures are adhered to. The use of new or decontaminated containers for shipping and packaging that prevents escape or leakage of contents is necessary. For ground transportation, the following packaging instructions are applicable:

1. Place the **sample** in a **waterproof primary receptacle (container)** such as a test tube with rubber stopper or a screw cap vial.
2. **Cushioning** must be provided between multiple receptacles and can include styrofoam tube holders or bubble wrap.
3. Place the **primary receptacle (with cushioning)** inside a **water tight secondary receptacle (such as a zip lock bag)** with an **absorbent material**. The absorbent material must be provided between the primary and secondary receptacles in sufficient quantities to absorb all the liquid in the primary receptacle. One square of paper towel absorbs ~1ml of fluid.
4. Place the **secondary receptacle(s)** in a sturdy **outside package (Midland bag)** with at least one surface having a minimum dimension of 4 inches.
5. Affix a **label** on the outside package indicating **“exempt animal specimen”**, when appropriate, as explained below (see Figure 1).

PRESS FIRMLY - YOUR SHIPPING LABEL IS PART 3 APPUYEZ FERMEMENT - VOTRE ÉTIQUETTE D'EXPÉDITION EST LA 3 ^{ème} PARTIE			
MONTH MOIS	DAY JOUR	YEAR ANNÉE	1-800-561-7121 www.midlandcourier.com More than just on time! La ponctualité et plus!
SHIPPER / EXPÉDITEUR ATLANTIC VET COLLEGE DIAG SERV		ACCOUNT # / N° DE COMPTE 16465	
ADDRESS / ADRESSE 550 UNIVERSITY AV			
CITY / VILLE CHARLOTTETOWN		PROV. PE	POSTAL CODE / CODE POSTAL C1A4P3
REFERENCE NO. (902) 566-0410			
CONSIGNEE / CONSIGNATAIRE		ACCOUNT # / N° DE COMPTE	
ATTENTION TELEPHONE			
ADDRESS / ADRESSE			
CITY / VILLE		PROV.	POSTAL CODE / CODE POSTAL
<input type="checkbox"/> HOLD FOR PICK UP AT BRANCH RETENIR POUR CUELLETTE À LA SUCCURSALE		<input type="checkbox"/> CUBED CUBE	
COMPLETE THIRD PARTY INFORMATION BELOW COMPLÉTEZ L'INFORMATION AU-DESSOUS DE LA TROISIÈME PARTIE		AGREEMENT # / ENTENTE #	
NAME / NOM		DECLARED VALUE VALEUR DÉCLARÉE	
ATTENTION		\$ IF VALUE OVER \$1,000. SI AU-DESSUS DE 1000 \$	
ADDRESS / ADRESSE		IMPORTANT: MAXIMUM LIABILITY - \$2,000.00 RESPONSABILITÉ MAXIMUM 2000 \$ SI DOMMAGES EN TRANSPORT	
CITY / VILLE		PROV. POSTAL CODE / CODE POSTAL	
PLEASE READ CAREFULLY THE LIMITATIONS OF LIABILITY AND CONDITIONS ON REVERSE		S.V.P. LIRE ATTENTIVEMENT AU VERSO LES CONDITIONS ET LIMITES DE RESPONSABILITÉ	
SHIPPER'S SIGNATURE / SIGNATURE DE L'EXPÉDITEUR		HST / T.V.H. REG.# R103 683 181	DRIVER'S SIGNATURE / SIGNATURE DU COURRIER
CONTROLLED SHIPMENT EXPÉDITION CONTRÔLÉE		COS LOG NO. P.A.E. N° DU JOURNAL	RATE QUOTE NO. N° COTATION DU TAUX
DATE		TOTAL CHARGES MONTANT TOTAL	
TIME / HEURE		\$	
BILLING / FACTURATION			

M 13873945

REC. NO. 00209356

PREPAID PORT PAYE COLLECT PORT DU 3rd PARTY COMPLETE 3rd PARTY INFORMATION BELOW

SPEED LETTER SPEED LETTER PLUS GROUND TERRESTRE

OVERNIGHT AIR AERIEN-DE NUIT AIR BY 5:00 PM AERIEN-PAR 17h DEFERRED AIR AERIEN-DIFFERE

DANGEROUS GOODS MATIERES DANGEREUSES HEATED SERVICE SERVICE CHAUFFREIN

APPOINTMENT REQUIRED: REMISE VOUS REQUIERE: DATE TIME / HEURE AM PM

ADDITIONAL INFORMATION / INFORMATION ADDITIONNELLE

C.O.D./P.S.I.

\$

CHEQUE RETURN

\$

DESCRIPTION OF GOODS DESCRIPTION DE LA MARCHANDISE IN POL x WL x H CM

USED HOUSEHOLD GOODS AND PERSONAL EFFECTS SHIPPED AT OWNER'S RISK OF DAMAGE
MARCHANDISES USAGÉES ET BIENS PERSONNELS EXPÉDIÉS AU RISQUE DU PROPRIÉTAIRE SI DOMMAGES EN TRANSPORT

Figure 1: Sample Midland Courier Label

If a large piece of fixed tissue needs to be submitted, it can be placed in a large container of formalin for initial fixation of the tissue and then transferred to a smaller volume for shipping. If gel-type ice packs are used, put them in a zip lock bag to contain moisture as they thaw and use cushioning material between the gel packs and the samples. It is important to place the completed submission forms in a separate plastic bag.

In February of 2008, an amendment was made to the Transportation of Dangerous Goods Regulations Section 1.42 indicating that the words “exempt animal specimen” must be marked on the package address label in order to ship non-infectious specimens by courier. A modified excerpt from this amendment is as follows¹:

Professional judgment is required to determine if a specimen is exempt under this section. Factors such as the known medical history, symptoms and individual circumstances of the source, human or animal, and endemic local conditions should be considered. Examples of specimens that may be transported under this section include

- *blood or urine specimens to monitor cholesterol levels, blood glucose levels, hormone levels, or organ function;*
- *biopsies to detect cancer; and*
- *specimens for antibody detection in animals.*

Examples of specimens which may be transported under this paragraph include blood or urine to monitor biochemical, endocrine, hematological, therapeutic drug or serological tests for animals with non-infectious diseases. **Also included** are specimens taken from animal patients that are intended to be processed in a laboratory for routine bacteriology, virology or parasitology. It must be packaged in such a way that the specimen itself will not deteriorate and any pathogens it contains will not “grow” during transport. Specimens included in this list can be sent in a package that is designed and maintained so that under normal conditions of transport, including handling, there will be no release of the specimen. Please follow the Transportation of Dangerous Goods by Ground directions on the previous page.

If there are any questions concerning the status of a specimen for shipping, please contact the staff of Diagnostic Services (902-566-0863).

Reference:

1. Regulations Amending the Transportation of Dangerous Goods Regulations. Canada Gazette Part II. Vol. 142, No. 4, February 20, 2008:131-304 (Registration SOR/2008-34)

Notable Items:

- Enclose the paperwork for all samples in a single zip-lock bag and place it on top of the samples.
- Put frozen gel-packs in a zip lock bag to contain the moisture as they thaw.
- Remove old conflicting labels that could confuse delivery or sorting in the laboratory.
- Do not wrap forms around samples if the sample leaks, the form will be damaged.
- Do not tape tubes to ice packs since they will often get crushed by the weight of the ice.
- Do not send samples in syringes.
- Remove all sharps from the shipment.