



Asian Cohort for Alzheimer's Disease

in collaboration with

**The National Centralized Repository for Alzheimer's Disease
and Related Dementias (NCRAD)**



Contact Information

- Questions?

Please contact NCRAD Coordinators at:

- Phone: 1-800-526-2839 or 317-274-7546
- E-mail: alzstudy@iu.edu or wilmesk@iu.edu
- Website: www.ncrad.org



Training Overview

- Blood Collection
 - Blood Collection Schedule
 - Kit Request Module
 - Specimen Labels
 - Handling/Processing Study Specimens
 - Sample Shipping

****If not able to collect blood samples for a participant, Saliva can be collected for DNA extraction****

- Saliva Collection
 - Saliva Collection Schedule
 - Specimen Labels
 - Handling/Processing Study Specimens
 - Sample Shipping
- NCRAD Website
- Questions?



ACAD Blood-Based Biomarker Collection Schedule

Sample Type	Tube Type	Number of Tubes Supplied in Kit	Aliquot Volume	Tubes to NCRAD	Ship
Whole blood for isolation of plasma & buffy coat (for DNA extraction)	EDTA (Purple-Top) Blood Collection Tube (10 ml)	1	N/A	N/A	N/A
	PLASMA: 2.0 ml cryovials with purple cap (residual volume placed in 2.0 ml cryovial with blue cap)	4	1.5 ml plasma aliquot per 2.0 ml cryovial (purple cap)	Up to 4	Frozen
	BUFFY COAT: 2.0 ml cryovial	1	1.0 ml buffy coat aliquot per 2.0 ml cryovial (gray cap)	1	Frozen



Kit Request Module

<https://kits.iu.edu/acad>





Kit Request Module

- An initial stock of kits will be delivered prior to the designated site-specific start date.
- Kits and individual supplies are available to order:
 - ACAD Blood-Based Kit
 - ACAD Blood-Based Supplemental Supply Kit
 - ACAD Frozen Blood Shipping Supply Kit
 - ACAD Saliva Collection Kit
 - ACAD Saliva Shipping Supply Kit



NCRAD Kit Request Module

1. Choose your site from the drop-down list
2. The coordinator name and contact information will appear
3. Verify that this information is accurate, correct if necessary

Resize font: 

NCRAD

ACAD Kit Request System

Site * must provide value 03 UCSF

UCSF - 03

UCSF Weill Institute for Neurosciences, Memory and Aging Center
ATTN: Diana Mei

Address: 675 Nelson Rising Lane, Suite 190
San Francisco, CA 94158

Email: Diana.mei@ucsf.edu
Phone: 415-476-1692

Is the contact name above correct? * must provide value ☒ Yes ☐ No reset

Is the shipping address above correct? * must provide value ☒ Yes ☐ No reset

Is the e-mail address above correct? * must provide value ☒ Yes ☐ No reset



Study Visit Kits

ACAD Blood-Based Kit Qty	<input type="text" value="1"/>
ACAD Frozen Blood Shipping Supply Kit Qty	<input type="text"/>
ACAD Saliva Collection Kit Qty	<input type="text"/>
ACAD Saliva Shipping Supply Kit Qty	<input type="text"/>
Do you need Extra Supplies? <small>* must provide value</small>	
<input type="radio"/> Yes <input checked="" type="radio"/> No	
reset	
Comments	<div><div></div><div>Expand</div></div>
Each ACAD Blood-Based Kit Contains: 1: EDTA (Purple-Top) Blood Collection Tube (10 ml) 3: Cryovial tube (2.0 ml) with purple cap 1: Cryovial tube (2.0 ml) with blue cap 1: Cryovial tube (2.0 ml) with gray cap 2: Disposable graduated transfer pipette 1: Pre-printed Collection Tube Label 5: Pre-printed Cryovial Label 3: Pre-printed Kit Number Label 2: Label for handwritten PTID Label 1: Resealable bag 1: Cryovial box (holds up to 25 cryovials)	
<div>Submit</div>	

- Indicate the quantity needed of each kit
- Once selected, kit components of the chosen kit will appear at the bottom of the screen (Pictured)
- Click “Submit” to turn in your request.
- The IU staff will notify you that your request has been received and address any issues.
- **Note: You can order more than one type of kit in a single kit request



NCRAD Kit Request Module: When It Must be Used

- Each site will be responsible for ordering kits (labels included) and maintaining supplies on site for scheduled participants
- To order, sites will use the Indiana University online kit ordering module: <https://kits.iu.edu/acad>
- Allow a minimum of **2 weeks** for your order to be processed and delivered.



Blood Specimen Labels



Label Type Summary

1. Kit Number Label
2. PTID Label
3. Collection Tube Label
4. Cryovial Label

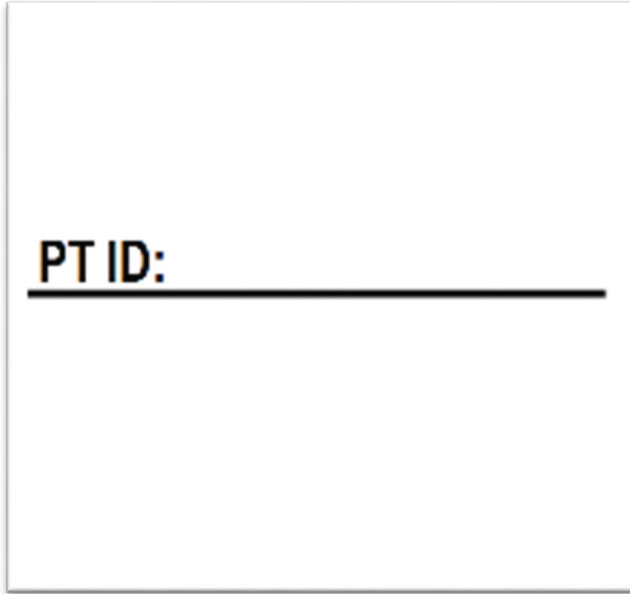
Kit Number Labels



Provided by NCRAD in the kits

- Used to track patient samples and provide quality assurance
- Will be placed on the following locations:
 1. Biological Sample and Shipment Notification Form
 2. Outside cryobox that houses aliquot tubes during storage and shipment

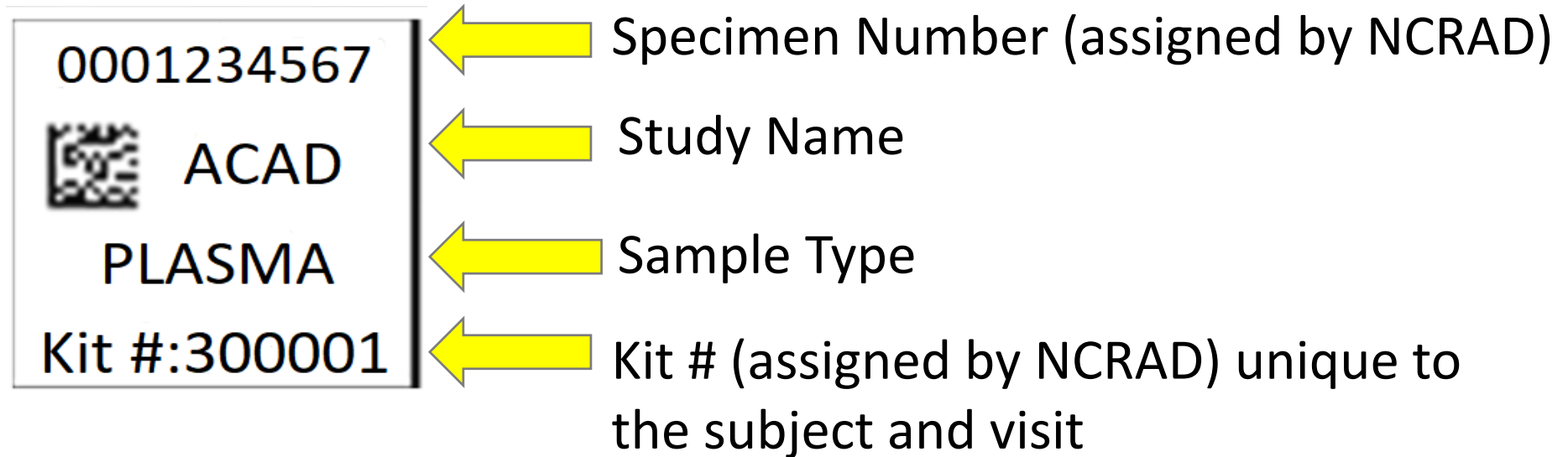
PTID Label



PT ID: _____

- Subjects will be identified by their PTID.
- The PTID may only be available shortly before the visit
- Sites will be responsible for handwriting this onto the provided labels
 - Must use fine point permanent marker
 - Each site will receive 4 markers in initial kit supply
- Write information on label prior to adhering to tube
- Label will be placed on all collection tubes
 - EDTA (Lavender-Top) Blood Collection Tube (10 ml) for DNA and Plasma
- Kits will include one extra label

Collection Tube Labels



Placed on all collection tubes

Cryovial Label

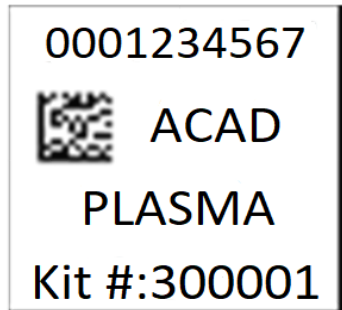
ACAD
Plasma
Kit: 300001

ACAD
Buffy Coat
Kit: 300001

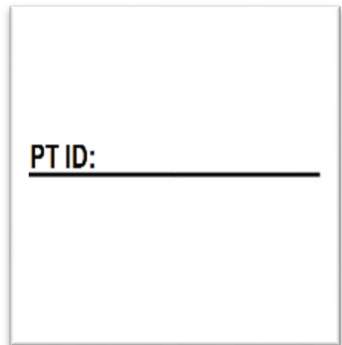
- Only one label to be placed on each cryovial
 - Plasma
 - From EDTA tube
 - Buffy Coat
 - From EDTA tube

Blood Collection Tube

Label 1: Collection Tube Label



Label 2: PTID Label



All collection tubes will have 2 labels:

- The handwritten PTID label
- The Collection Tube Label



Collection
Tube Label

PTID Label

EDTA (Purple-Top) Blood
Collection Tube (10 ml)

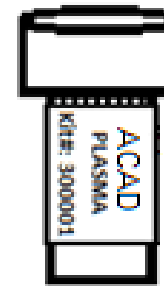
Labeling NCRAD Cryovials

Please...

- Label all collection and aliquot tubes before cooling, collecting, processing or freezing samples.
- Label only 1 subject's tubes at a time to avoid mix-ups.
- Wrap the label around the tube horizontally. Label position is important for all tube types.
- Make sure the label is completely adhered by rolling between your fingers.



Incorrect



Correct



Handling/Processing Study Blood Specimens



Site Required Equipment


Blood Collection/Safety Equipment

1. Personal Protective Equipment (PPE)
 - Lab Coat, Safety Glasses
2. Tourniquet
3. Alcohol Prep Pad
4. Gauze Pad
5. Butterfly Needles
6. Bandage
7. Sharps Bin and Lid

Processing/Storage Equipment

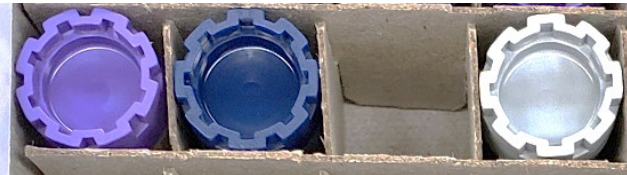
1. Centrifuge capable of ≥ 2000 rcf with refrigeration to 4°C
2. -80°C Freezer
3. Wet Ice Bucket

Sample Collection - Blood

Tube Type	Number of Tubes Drawn	Tube Image
EDTA (Lavender-Top) Blood Collection Tube (10 ml) for Plasma	x1	

NCRAD Cryovial Cap Colors

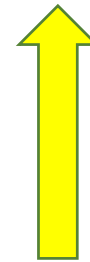
Cap Color	Sample Type
Purple Cap	Plasma
Blue Cap	Residual
Gray Cap	Buffy Coat



Purple cap

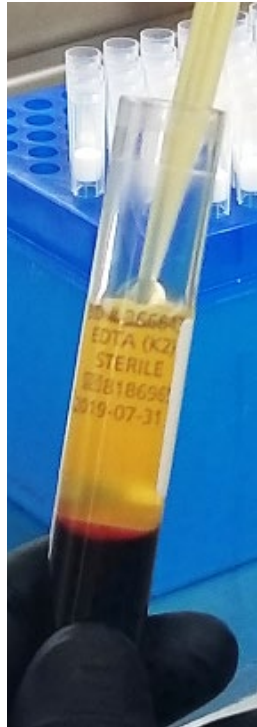


Blue
Cap



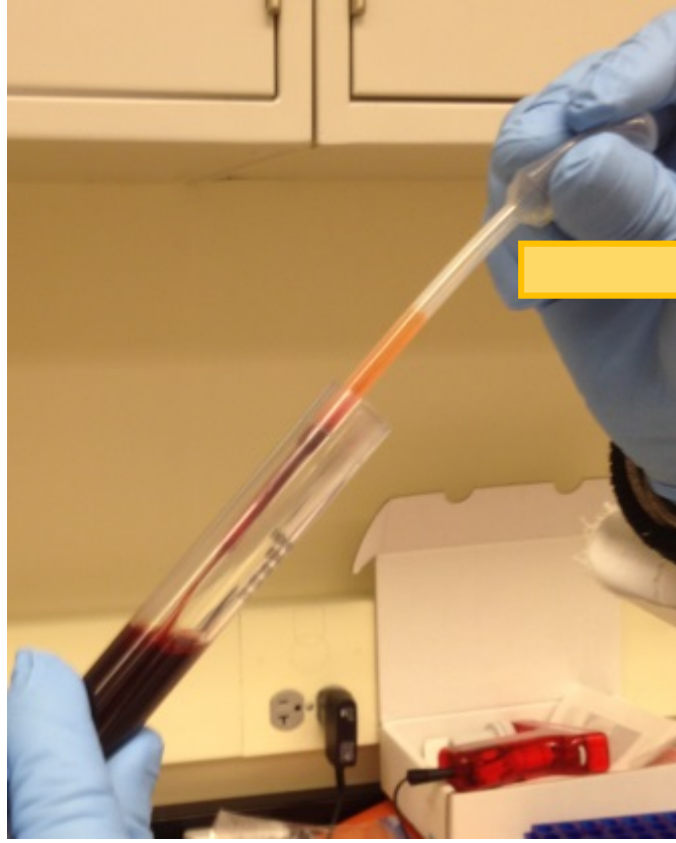
Gray
Cap

Plasma Collection



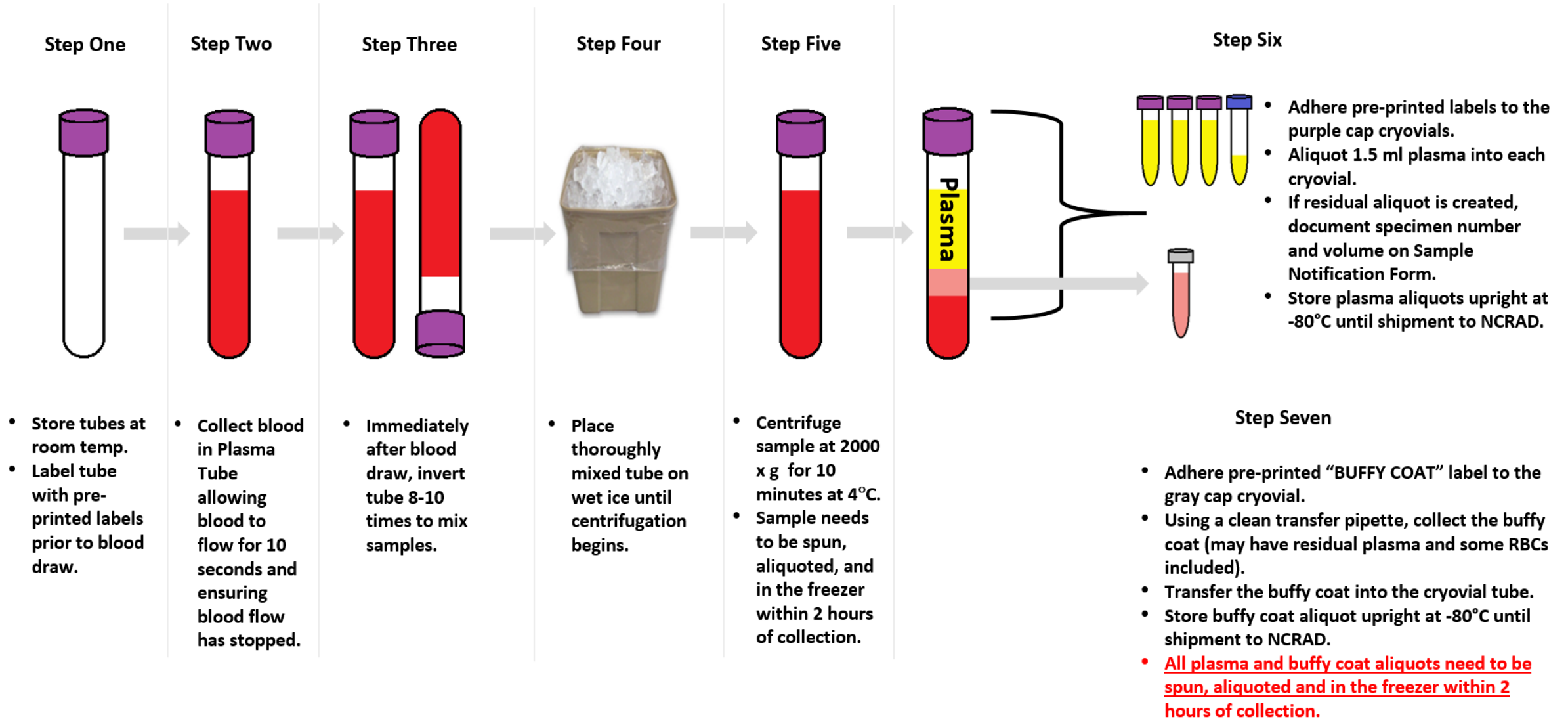
**Plasma Aliquots (up to
4 possible) and Buffy Coat (1)**

Buffy Coat Collection



Create 1 buffy
coat

Plasma and Buffy Coat Preparation (10ml Purple Top Tube)



Blood Sample Shipping



Blood Sample Shipment Summary

Sample Type	ACAD	Processing/ Aliquoting	Tubes to NCRAD	Ship
Whole blood (Purple-Top EDTA) for isolation of plasma & buffy coat (for DNA extraction)	Yes	1.5 ml plasma aliquots	Up to 4	Frozen
	Yes	1.0 ml buffy coat aliquot	1	Frozen

Frozen Sample Shipping

- **Ship Monday-Wednesday Only**
 - Plasma and Buffy Coat
 - Hold packaged samples in a -80°C freezer until pickup.
- Batch Samples together
 - 8 Cryoboxes
 - **Batch shipping should be performed every 3 months or as a full shipment of specimens accumulates, whichever is sooner.**

Frozen Blood Shipping - Cryoboxes



One cryobox to
contain Plasma and
Buffy Coat Aliquots



Place kit number
label on each cryobox

Frozen Shipping – Dry Ice Requirements

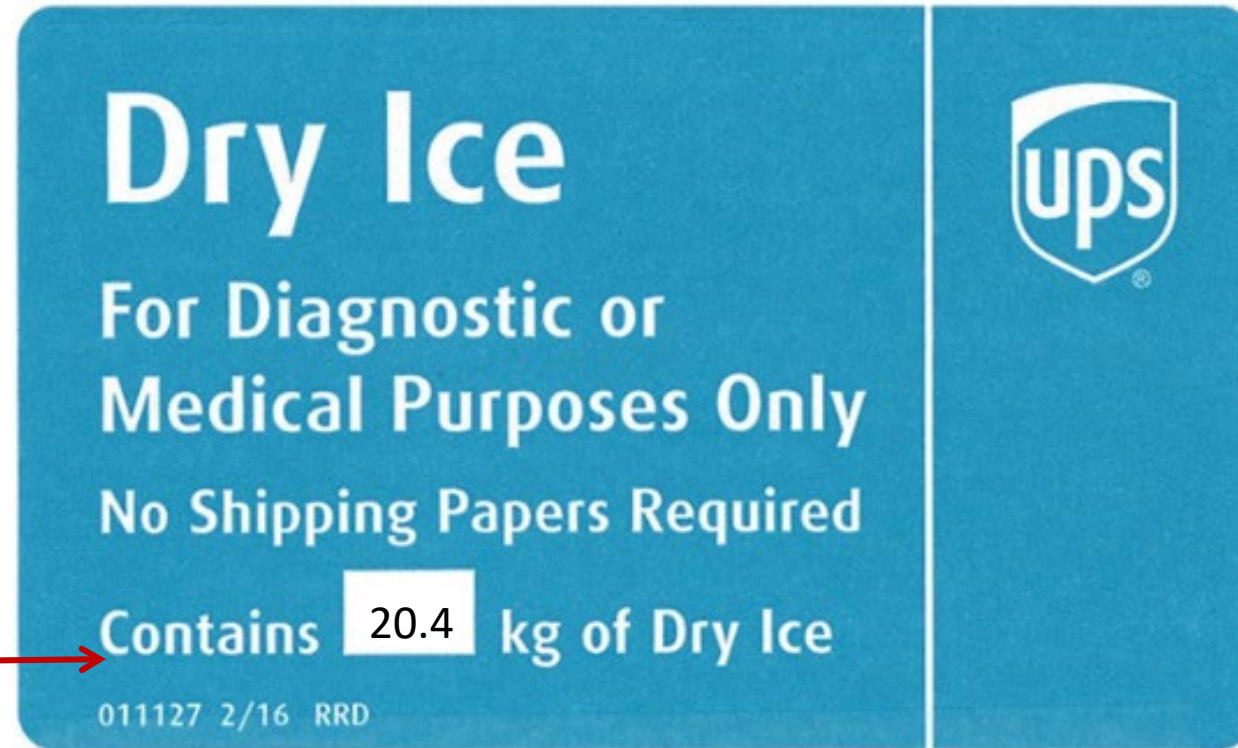


- Fully cover the cryoboxes with about 2 inches of dry ice in the provided shipper.
- Each Styrofoam shipper must contain about 45 lbs (20 kg) of dry ice.

Frozen Shipping – Dry Ice Requirements

Dry Ice label should not be covered with other stickers and must be completed or the shipping carrier will reject/return your package!

Net weight
of dry ice in
kg



Shipping Frozen Samples

- Schedule UPS pickup
- *Send Biological Sample and Shipment Notification Form to IU ahead of shipment*
 - *Email: alzstudy@iu.edu*

Blood Sample and Shipment Notification Forms

- A copy of the sample form *must* be emailed to NCRAD prior to the date of sample arrival.
- Please include sample forms in all shipments of frozen and ambient samples.
- Email: alzstudy@iu.edu



Blood Sample and Shipment Notification Form



Appendix C



Site ID: _____ Participant ID: _____

Blood Sample and Shipment Notification Form

Please email or fax this form prior to the date of shipment.

To: Kelley Faber Email: alzstudy@iu.edu FAX: 317-321-2003 Phone: 1-800-526-2839			
General Information:		UPS tracking #: _____	
From: _____	Date: _____		
Phone: _____	Email: _____		
Study: ACAD	GUID: _____	Kit #:	KIT BARCODE
Visit (circle one): V01 V02			
Sex: <input type="checkbox"/> M <input type="checkbox"/> F	Year of Birth: _____		
Blood Collection:			
1. Date Drawn: _____ [MMDDYY]	2. Time of Draw: _____ [HHMM]		
3. Last time subject ate: _____ [MMDDYY]	4. Last time subject ate: _____ [HHMM]		
Blood Processing:			
Plasma & Buffy Coat (Purple-top) Tube (10 mL)			
Time spin started: _____	[HHMM]		
Duration of centrifuge: _____	Minutes		
Temp of Centrifuge: _____ °C	Rate of centrifuge: _____ x g		
Time aliquoted: _____	[HHMM]		
Number of 1.5 mL plasma aliquots created (lavender cap): _____	_____ mL		
If applicable, volume of residual plasma aliquot (less than 1.5 mL in blue cap): _____	_____ mL		
If applicable, specimen number of residual plasma aliquot (last four digits): _____	_____		
Buffy coat last four digits of specimen number: _____	_____		
Buffy coat volume: _____	mL		
Original blood volume drawn: _____	mL		
Time aliquots placed in freezer: _____	[HHMM]		
Storage temperature in freezer: _____	°C		
Notes: _____			

Blood collected for:

- Plasma
- DNA

Send by E-mail prior to shipment, and include a copy in each shipment

Saliva Sample Collection

If not able to collect blood samples for a participant, Saliva can be collected for DNA extraction



ACAD Saliva-Based Biomarker Collection Schedule

Sample Type	Tube Type	Number of Tubes Supplied in Kit	Tubes to NCRAD	Volume	Ship
Saliva for DNA extraction	Saliva Kit (DNA Genotek) OGR-500	1	1	2.0 ml of Saliva collected in each 4.0 ml tube	Ambient

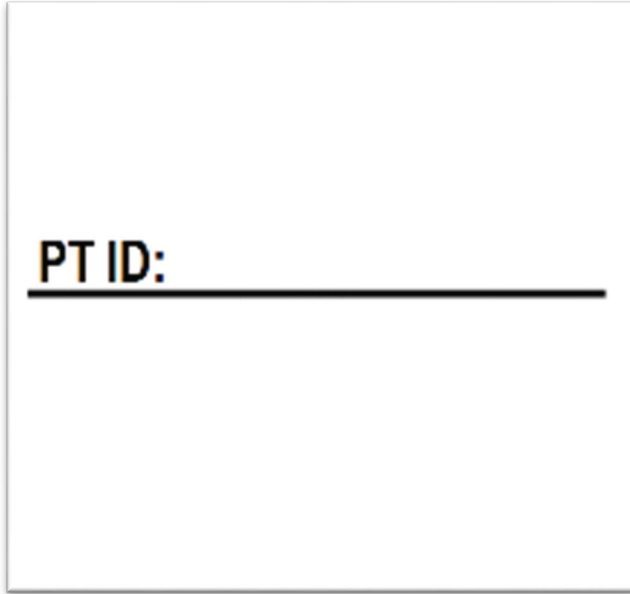
Saliva Specimen Labels



Label Type Summary

1. PTID Label
2. Specimen Label

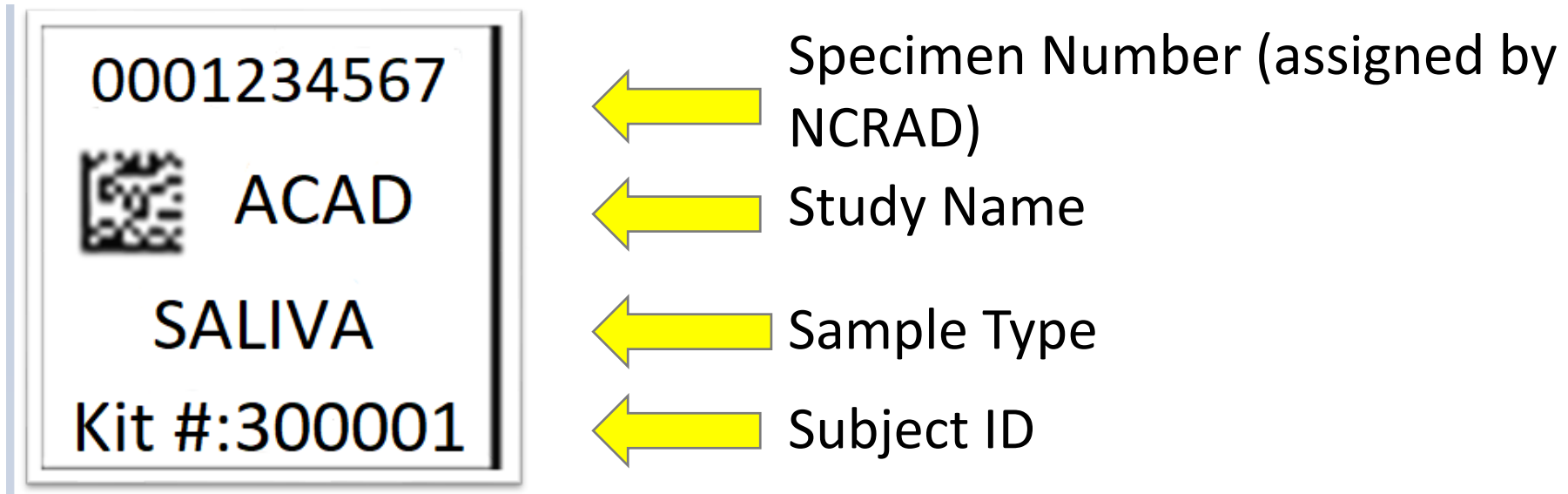
PTID Label



PT ID: _____

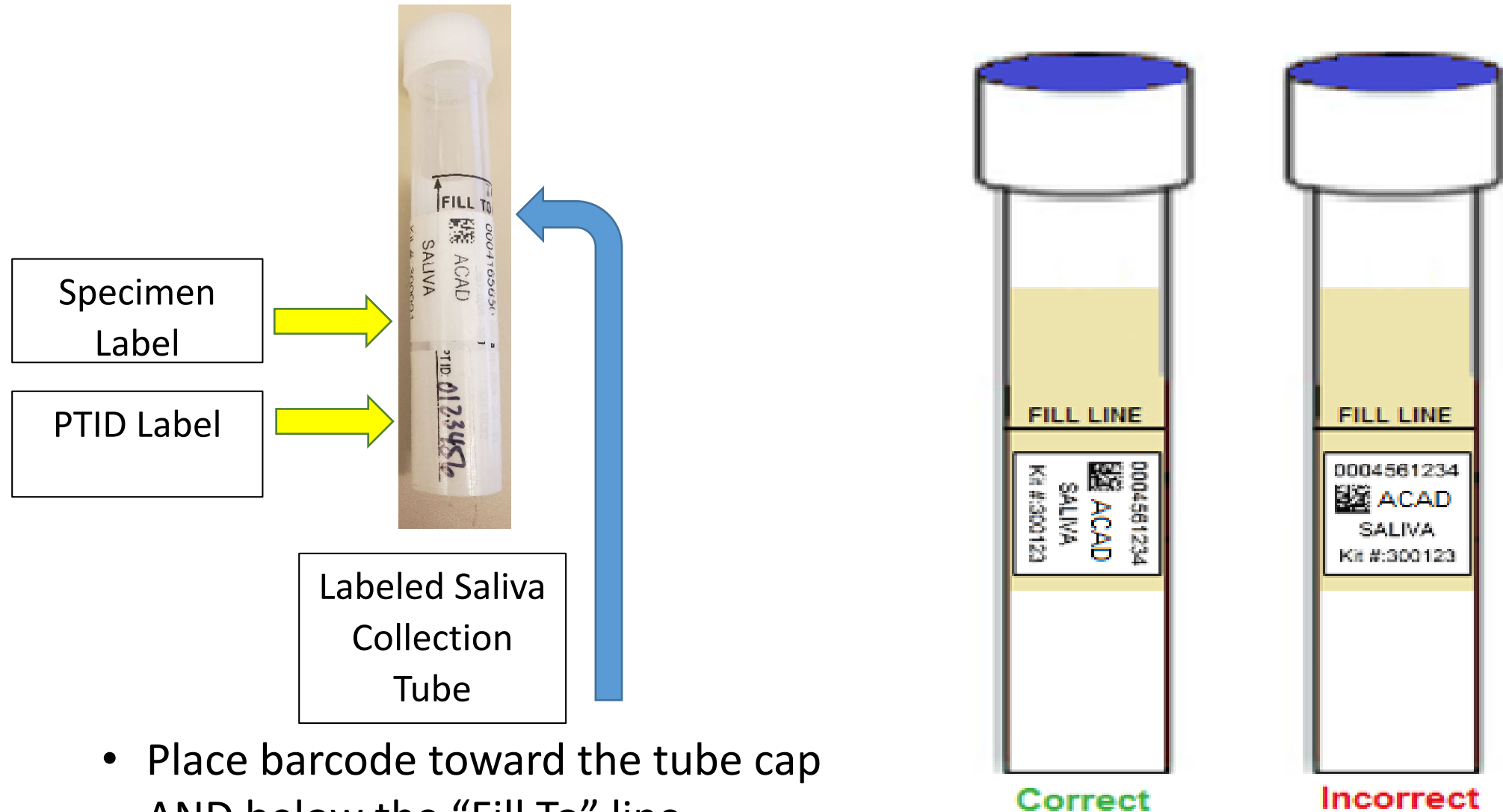
- Subjects will be identified by their PTID.
- The PTID may only be available shortly before the visit
- Sites will be responsible for handwriting this onto the provided labels
 - Must use fine point permanent marker
 - Each site will receive 4 markers in initial kit supply
- Write information on label prior to adhering to tube
- Label will be placed on all collection tubes
 - Saliva Collection Tube
- Kits will include one extra label

Saliva Specimen Labels



One Specimen Label for each saliva collection tube. The second, matching Specimen Label should be affixed to the participant's corresponding Biological Sample and Shipment Notification Form.

Saliva Collection Tube



- Place barcode toward the tube cap AND below the “Fill To” line.
- Place labels before sample collection

Saliva Sample Collection



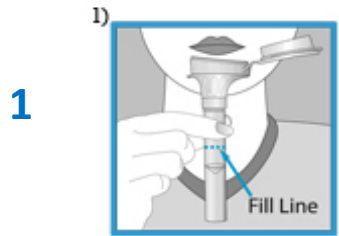
NCRAD Saliva Collection Instructions

Preparation for saliva collection:

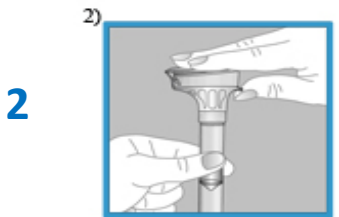
- **Remember:** Do NOT remove plastic film from the lid.
- **Subject should not eat, drink, smoke, chew gum or brush teeth for 30 minutes prior to giving sample.**
- Subject does NOT need to rinse their mouth prior to giving the sample.
- Before spitting, subject should relax and rub their cheeks gently for 30 seconds to create saliva.
- Most people take between 2 and 5 minutes to deliver a saliva sample.

NCRAD Saliva Collection Instructions

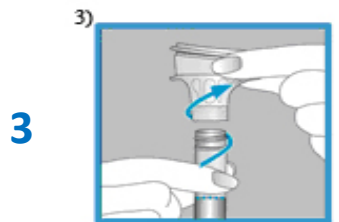
Collection:



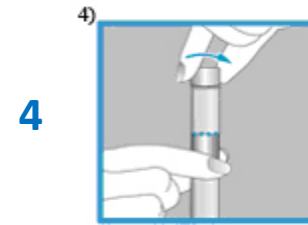
Do NOT remove the plastic film from the lid of the container. Spit directly into the funnel at the top of the tube until the amount of liquid saliva (not including bubbles) reaches the fill line shown. The saliva tube has a false bottom, so you will only need to provide 2 ml of saliva to reach the fill line. Do NOT fill above the line.



After collection, hold the tube upright.



Unscrew the funnel from the tube.



Pick up the small cap for the tube. Use the small cap to close the tube tightly. Discard the funnel.



Shake the capped tube for 5 seconds. Complete the Biological Sample and Shipment Notification Form Place sample into the provided biohazard bag. Peel the protective wrapping off to seal the bag. Roll packaging around the tube.

Place sample into the provided Bulk Saliva Shipping Box.

Video of Saliva Collection Procedure:

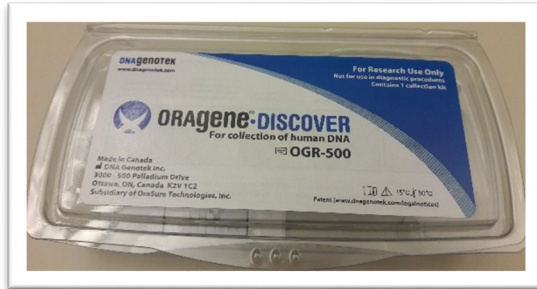
To review a video of the saliva collection procedure, please visit:

<http://www.dnagenotek.com/ROW/support/ciOG500.html>

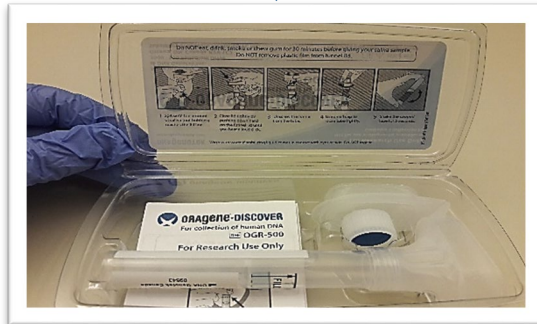
Saliva Sample Shipping



Saliva Sample Shipping



Collect saliva,
ensure properly
closed and place in
biohazard bag.



Place the sealed biohazard bag, with the saliva
tube sealed separately inside, into the bulk
shipping box (contains 36 saliva samples)



UPS ClinPak

Saliva Sample Shipping (cont'd)

- Ensure all ambient, labeled saliva samples are appropriately packaged.
- Place the completed Saliva Sample and Shipment Notification Forms in the UPS ClinPak.
- Apply all provided warning labels and the printed UPS return label to the outside of the package, taking care not to overlap labels.
- Use UPS tracking to ensure delivery occurs.

Saliva Sample and Shipment Notification Forms

- A copy of the sample forms *must* be emailed or faxed to NCRAD prior to the date of sample arrival.
- Please include all sample forms within UPS ClinPak
- A web-based version will be an option soon.
- Email: alzstudy@iu.edu



Saliva Sample and Shipment Notification Form



Appendix D



Site ID: _____ Participant ID: _____
Saliva Sample and Shipment Notification Form
Please email or fax this from prior to the date of shipment.

To: Kelley Faber Email: alzstudy@iu.edu FAX: 317-321-2003 Phone: 1-800-526-2839

General Information:

UPS tracking #: _____

From: _____ Date: _____

Phone: _____ Email: _____

Study: ACAD GUID: _____

Specimen
Label:

Specimen Label

Visit(circle one): V01 V02

Sex: ☐ M ☐ F

Year of Birth: _____

Saliva Collection:

1. Date collected:	_____	[MMDDYY]
2. Time of collection:	_____	[HHMM]
3. Last date subject ate:	_____	[MMDDYY]
4. Last time subject ate:	_____	[HHMM]

Internal NCRAD Use-Do Not Complete:

Saliva Volume: _____ ml

Notes:

Send by E-mail prior to shipment, and include a copy in each shipment

NCRAD Website


Holiday Closures

Date	Holiday
January 1	New Year's Day
3 rd Monday in January	Martin Luther King, Jr Day
4 th Monday in May	Memorial Day
July 4	Independence Day (observed)
1 st Monday in September	Labor Day
4 th Thursday in November	Thanksgiving
4 th Friday in November	Friday after Thanksgiving
December 25	Christmas

https://ncrad.org/holiday_closures.html





ACAD Active Study Page



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Welcome ACAD Study staff, coordinators and Pls.
This section encompasses study specific tools and videos for your reference. If you have any questions, comments, or new ideas, please contact NCRAD by email or phone 317-274-7546 or 800-526-2839.

ACAD Blood-Based Biomarker Collection Schedule



	Baseline
DNA	✓
Plasma	✓

ACAD Saliva-Based Biospecimen Collection Schedule

	Baseline
DNA	✓

Study Resources

[Kit Request Module](#)[Biological Sample and Shipment Notification Forms](#)[Manual of Procedures](#)[Study Related Video Tutorials](#)[Training Slides](#)



Download Documents

[Downloadable Blood Sample Form](#)[Downloadable Saliva Sample Form](#)[Manual of Procedures](#)[Training Slides](#)

Additional Resources

[Kit Request System](#)[Web-based Blood Sample Form](#)[Web-based Saliva Sample Form](#)

Questions/Comments

[Email: alzstudy@iu.edu](#)[Phone: 800-526-2839](#)

<https://www.ncrad.org/resource/acad.html>

Contact Information

- Questions?

Please contact NCRAD Coordinators at:

- Phone: 1-800-526-2839 or 317-274-7546
- E-mail: alzstudy@iu.edu; wilmesk@iu.edu
- Website: www.ncrad.org

