

## COVID-19 Convalescent Plasma Collection: Donor Eligibility, Processing, Labeling, and Distribution

**THIS PROTOCOL IS EXPECTED TO CHANGE AS FDA RELEASES NEW INFORMATION IN RESPONSE TO THE EVOLVING PANDEMIC. CHECK FREQUENTLY FOR UPDATES.**

**The new information provided by FDA on 04 03 20 is highlighted.** Refer to: [Investigational COVID-19 Convalescent Plasma - Emergency INDs](#)

This COVID-19 Convalescent Plasma (CCP) collection protocol was prepared by AABB based on information provided by members of the CCP Collection Working Group, in consultation with the FDA's Center for Biologics Evaluation and Research. The Convalescent Plasma Collection Overview (Attachment A) and Convalescent Plasma Implementation Checklist (Form 1) supplement the protocol.

This document is **intended to serve as an FDA reviewed protocol that will help ensure CCP collections:**

- Are rapidly available under an acceptable set of collection, manufacturing, and distribution practices.
- Are well-coordinated locally and nationally to promote an adequate inventory and expanded access to FDA approved patient treatment.
- Meet FDA and AABB criteria required for:
  - allogeneic blood donations, including consent, donor safety, and product safety, purity and potency.
  - eventual administration to a patient for transfusion under an FDA approved IND.
- Are distributed ~~only~~ to hospitals for use under an approved IND or a single patient [emergency IND](#).
- Are collected and labeled as a licensed\* FFP or PF24 blood component:
  - to expedite CCP availability for treatment protocols by utilizing the existing component preparation processes of licensed establishments, which represents the majority of collection establishments.
  - with the cautionary statement for administration under IND only and attributes for antibodies to COVID-19 (which serves as a quality check on CCP) if available prior to distribution.
  - OR use the alternative to label the collection as apheresis convalescent plasma using the appropriate ICCBBA code.

\*Registered (not licensed) establishments will determine the steps required for labeling and distribution of CCP collections, including the same attributes and cautions.

CCP requires an FDA approved IND for administration to a patient but *does not* require an IND for collection, manufacturing, and distribution. [Refer to [FDA's April 3<sup>rd</sup> Communication](#)]

This protocol is acceptable for use by AABB-accredited blood collection facilities. Facilities not accredited by AABB should consider alignment with AABB Standards to ensure consistency in CCP collections. AABB may issue additional requirements, including data collection requirements, for blood collectors providing CCP to hospitals for administration under approved INDs.

**Before collecting CCP, blood collection establishments should consider the following:**

### **Preparation for a CCP collection program**

- Develop SOPs for CCP collection and component preparation based on the information provided in this document and compliance with FDA regulations and AABB Standards. Identify compliance strategies necessary for CCP collections.
- Train staff on new SOPs, highlighting requirements that CCP collections meet all requirements for allogeneic donations, as well as additional requirements which are unique to CCP, such as documentation of testing for initial infection and recovery from infection (well and healthy on the day of donation), inventory management to easily identify CCP units, segregation in storage, shipping and labeling requirements, and distribution limited to hospitals with an approved IND.
- Provide education to staff describing the unique properties of CCP and the patients needing treatment with CCP.



- Discuss donor and staff safety and address concerns, providing information necessary to understand that CCP donors are allogeneic donors who are *no longer ill and have tested negative for COVID-19 before arriving at the donor center, whenever possible.*
- Prepare the Blood Establishment Computer System and labeling processes:
  - Select ICCBBA codes according to your collection process.
  - Identify special attributes and required cautionary statement.
  - Define limitations and criteria for distribution.
- Ensure recordkeeping procedures capture CCP donor eligibility and collection information, as required for all allogeneic blood donors.

### Donor Recruitment

Blood collection establishments should establish a donor recruitment plan for recovered COVID-19 donors suitable to local conditions to ensure the donor eligibility criteria are met and collections are adequate for use with approved patient treatment nationally.

Coordinate with the available local resources:

- Contact the public health departments, local hospitals, and health care providers that have treated COVID-19 patients to develop a partnership to recruit recovered patients as volunteer CCP donors.
- Develop appropriate process and messaging whereby treating clinicians and public health employees reach out to recovered patients already discharged from care and newly recovered patients as they are discharged from care.
- Encourage local partners to provide recovered patients with “hard copy” documentation for both the patient’s initial positive diagnostic test AND a negative test for SARS-CoV-2 at the time of recovery. This documentation must be provided to the blood collection establishment and may be hand carried. Refer to donor eligibility.
- Contact local media to deliver public service announcements requesting recovered COVID-19 patients contact blood collection establishments.

**Donor Eligibility Criteria and Documentation** – refer to [FDA’s April 3<sup>rd</sup> Communication](#), unless otherwise noted:

- Documentation of SARS-CoV-2 infection (diagnosis and recovery) as follows:
  - diagnostic test (e.g., nasopharyngeal swab) at the time of illness, OR
  - a positive serological test for SARS-CoV-2 antibodies after recovery, if prior diagnostic testing was not performed at the time COVID-19 was suspected.
  - Written documentation may be hand carried by the potential donor.
- Recovery of donor:
  - Complete resolution of symptoms at least 28 days prior to donation (eligible as allogeneic donor under the [precautionary measures in the FDA’s March 11<sup>th</sup> communication](#)), OR
  - Complete resolution of symptoms at least 14 days prior to donation, AND negative results for COVID-19 either from one or more nasopharyngeal swab specimens or by a molecular diagnostic test from blood.
  - Symptom free less than 14 days\* AND 2 negative test results on different days (collection may not have peak antibody levels). [*\*This option is not included in FDA’s April 3<sup>rd</sup> Communication*]
  - A partial list of available tests can be accessed at <https://www.fda.gov/medical-devices/emergency-situations-medical-devices/emergency-use-authorizations>.
- Donor recovery from COVID-19 prior to donation based on testing and resolution of symptoms is necessary for:
  - the safety of other donors and staff
  - as evidence that the potential donor is healthy and well on the day of donation, as required by donor eligibility criteria [if less than 28 days have elapsed since the donor’s last symptom(s).] [FDA’s March 11<sup>th</sup> considerations](#) do not include a negative test for COVID-19 for such a donor if collected 28 days after the last symptom. However, a facility may elect to apply more stringent criteria at any time.

- Defined SARS-CoV-2 neutralizing antibody titers (e.g., greater than 1:80)
  - If neutralizing antibody titers cannot be obtained in advance, consider storing a retention sample from the convalescent plasma donation for determining antibody titers at a later date.
- Donors must be male or females who are nulliparous or negative for HLA antibodies [based on test result following most recent pregnancy]. This TRALI risk mitigation strategy is consistent with AABB Standards for AABB accredited blood collectors.
- The CCP donor must also meet all allogeneic blood donor eligibility criteria on the day of donation.
- The CCP donor may donate plasma once every 28 days as permitted by allogeneic donor eligibility criteria. Each medical director must determine when more frequent plasma donations are appropriate and set a policy to support both donor safety and the availability of CCP. The decision regarding the best course of action should be based on local considerations which will continue to vary widely. FDA has not provided specific comments on shortening the donation interval.

**Donor Collection** – refer to [FDA’s April 3<sup>rd</sup> Communication](#), unless otherwise noted:

Prior to donation, donor consent must be obtained (along with the AABB Donor History Questionnaire).

- Consistent with existing regulation, specific consent is required if additional samples are collected for testing by an investigational test OR for research purposes.
- CCP will be collected by apheresis and labeled as a licensed FFP or PF24 component. Production from whole blood can also be considered.
- Blood collection establishments may follow their current policies for retrieval and quarantine. Refer to [FDA’s March 11<sup>th</sup> optional precautionary measures](#).

### Convalescent Plasma Processing

- Attachment A depicts the processing pathways available. Blood collection establishments should follow existing SOPs for collection of licensed FFP and PF24.
- CCP is an allogeneic collection for which all FDA regulations apply, including testing, processing, storage, and traceability [Refer to the [FDA’s April 3<sup>rd</sup> Communication](#)]. Convalescent plasma products should include a tie tag making it possible to identify the unit for segregated storage of CCP inventory.

**Labeling CCP as FFP or PF24 with attributes** – refer to [FDA’s April 3<sup>rd</sup> Communication](#):

- Blood collection establishments will collect apheresis plasma suitable as an FFP or PF24 component and distribute these units to hospitals.
- The hospital’s issuance of the unit to a patient for treatment of COVID-19 must be done under an established IND pathway and may include establishing an acceptable result on a SARS-CoV-2 antibody assay to qualify the unit for use as CCP. However, it may be necessary to make CCP available for transfusion before the antibody level is known.
- Such a CCP collection would be labeled as FFP or PF24 with cautionary statement (antibody level is included *if possible but not required before distribution*).

The labeling of these licensed blood components **must**:

- **May** include the attribute indicating the antibody test result for the collection: “This product contains SARS-CoV-2 antibodies measured using an investigational assay” if available and the result may be placed on the tie tag.
- Must include the cautionary statement, which may be placed on the tie tag, “Caution: New Drug--Limited by Federal (or United States) law to investigational use.”
- May use ISBT **Attribute** Codes:
  - Use the appropriate ISBT attribute codes for convalescent plasma collections on the tie tag if desired.
  - These are evolving and facilities should consult the ICCBBA website, at [www.icbba.org](http://www.icbba.org), for current options.

**Alternative Labeling of FFP or PF24 Collections as CCP units using ICCBBA product codes:**

Blood collection establishments may elect to label the product described above with the Convalescent Plasma component name. Such a product would be unlicensed but could be shipped across state lines for administration under an FDA approve IND (the IND number may be placed on the tie tag). Refer to the [FDA’s April 3<sup>rd</sup> Communication](#).

Label requirements and 4x4 Label Example:

- Must include the statement “Caution: New Drug—Limited by Federal (or United States) law to investigational use.”
- SARS-CoV-2 antibody assay results if available.
- Ensure FDA registration number replaced the license number and other appropriate information for interstate shipping, if applicable.
- Remove the reference to the Circular of Information.



Separate bag codes are not currently available. When splitting COVID-19 convalescent plasma donations, use division codes. Information for labeling plasma products can be found in the [United States Industry Consensus Standard for the Uniform Labeling of Blood and Blood Components Using ISBT 128](#).

**Product Suitability** – refer to [FDA’s April 3<sup>rd</sup> Communication](#):

- All product suitability requirements apply, and the unit may only be released to a facility with an approved IND.
- Product volume will vary and does not determine dose at time of administration.

**National Product Registry:**

Following production of CCP, blood establishments should register products available for national use at [www.aabb.org/covid19registry](http://www.aabb.org/covid19registry).

**RESOURCES** – links to:

**FDA Communications:**

1. [Investigational COVID-19 Convalescent Plasma - Emergency INDs – April 03, 2020](#)
2. [Updated Information for Blood Establishments Regarding the Novel Coronavirus Outbreak – March 11, 2020](#)

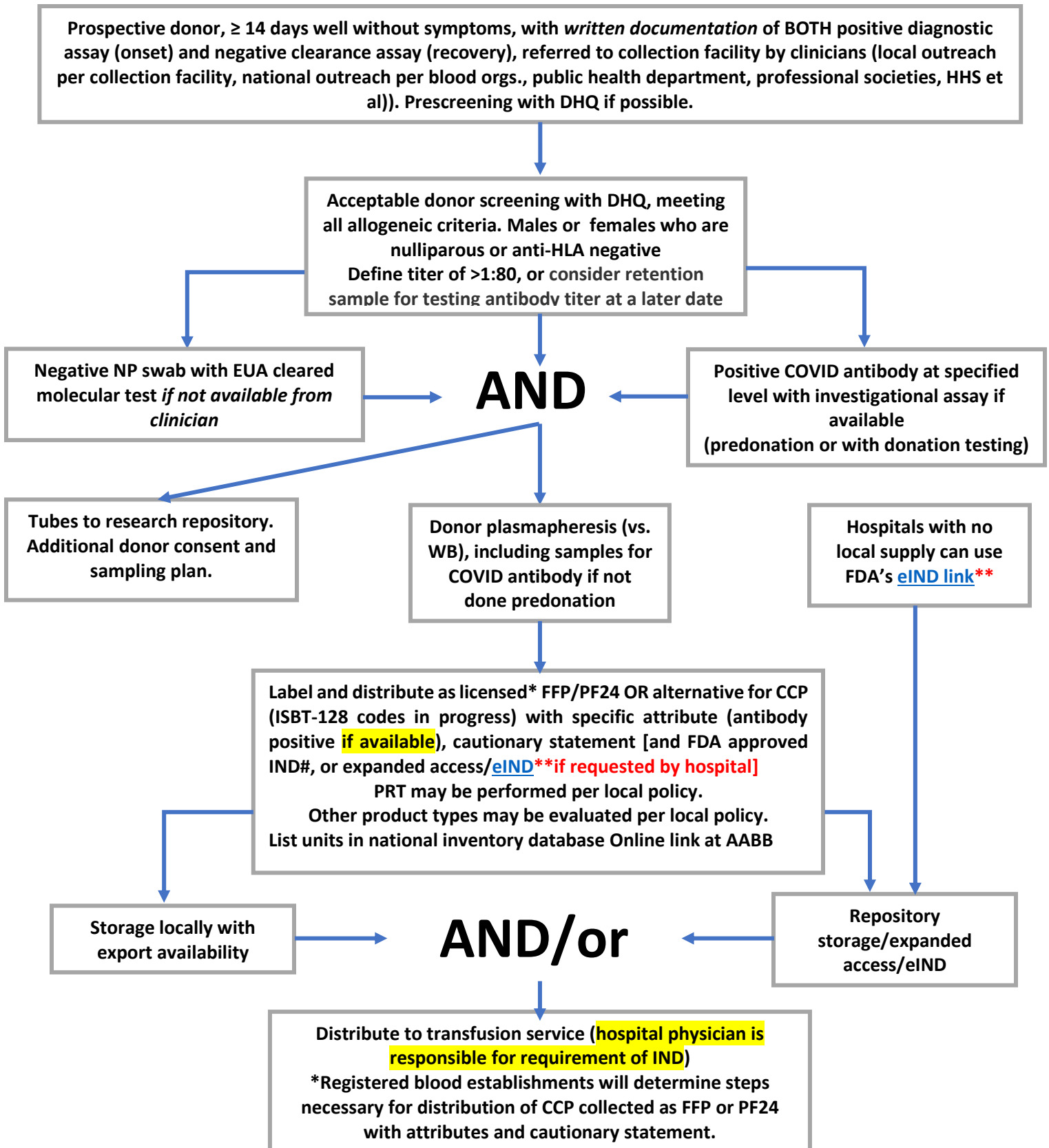


3. Partial list of available tests: <https://www.fda.gov/medical-devices/emergency-situations-medical-devices/emergency-use-authorizations>
4. Investigational COVID-19 Convalescent Plasma - Emergency INDs Frequently Asked Questions – March 26, 2020

**Other resources:**

5. [ICCBBA website: www.iccbba.org](http://www.iccbba.org)
6. [United States Industry Consensus Standard for the Uniform Labeling of Blood and Blood Components Using ISBT 128](#)
7. [Cerus website](#) and [package inserts](#) for those electing to implement PRT
8. **ADDITIONAL RESOURCES will be posted on [AABB's COVID-19 Convalescent Plasma Resources](#) webpage as new information becomes available.**

**ATTACHMENT A - COVID-19 Convalescent Plasma Collection Overview**



## Form 1: COVID-19 Convalescent Plasma Implementation Checklist

This checklist template should be modified to reflect the center's policies and processes.

### Preparation

- Develop overarching procedure for convalescent plasma using the guidance provided in the document and Attachment A
- Define product manufacturing workflow
- ISBT code implementation
- Product label creation
- Staff training on new SOPs, donor eligibility, product segregation, shipping and labeling requirements, and order management
- Facilitate internal education for collection, manufacturing, and distribution requirements
- Process defined for recordkeeping of all steps (donor qualification through distribution)

### Donor Eligibility and Collections

- Process defined for donor recruitment
- Process defined for donor screening (allogeneic + additional requirements and documentation)
- Donor consent for collection and, if applicable, investigation/research

### Convalescent Plasma Processing

- Process defined for convalescent plasma manufacturing and storage, (pathogen reduction, if performed)
- Process defined for segregating convalescent plasma from other frozen inventory

### Labeling, Release and Distribution

- Process defined to ensure products are labeled appropriately
- Process defined to limit distribution to hospital with IND
- Process defined for cGMP and Quality Assurance
- Process defined for the receipt and fulfillment of customer orders for convalescent plasma