

Today

The first mission of the « Jean Julliard » French Armed Forces Blood Transfusion Center is the blood supply of our Armed Forces in overseas but also in our military hospitals in Toulon and Paris areas. CTSA is based in Paris area (Clamart, Hauts de Seine) and another facility performing blood collection and processing is located in Toulon.



CTSA ensures collection, processing, storage, distribution of every single blood product. Due to the specific constraints of blood supply in overseas, CTSA focuses on production and availability of suitable blood products for traumatic haemorrhage on battlefield.

CTSA is investing in research and development to maintain its expertise and always provide the best blood product regarding efficiency, safety and ease of use.



PLYO :

The Plasma made for emergency care of civilian and military wounded.

How to donate?

In addition to daily blood drive organized in military units or in Ministry of Defence sites, it is possible to donate directly in both CTSA facilities, in Clamart and Toulon.



Two kinds of donation are possible:

- Whole blood donation, (10 minutes long), no appointment needed
- Plasma or platelets apheresis (45 to 90 minutes long), appointment needed.

CTSA daily needs

- 110 whole blood donations
- 7 plasma apheresis
- 4 platelets apheresis.

Three real specific cases

First class soldier 28 years old february 2013 25 Blood products	Chief brigadier 23 years old June 2013 7 blood products	Sergeant 24 years old October 2013 49 blood products
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CTSA Clamart

1, rue lieutenant Raoul Battany
92140 Clamart
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Monday to Friday, 8:30 am to 4:30 pm

CTSA Toulon

Boulevard Sainte-Anne
83000 Toulon
+33 (0) 4 83 16 22 61
Monday to Friday, 8:30 am to 4:30 pm



The Association of Defence partner companies has close ties with the CTSA for several years. This association led many operations in favour of wounded soldiers in overseas and patients treated in military hospitals: specific donation days, communication tools, awareness of parliamentarians, media, highest authorities and «defence community» in general.



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A little bit of history



During World War II, the Surgeon General Jean Julliard, in charge of French Armed Forces blood supply during the Italian campaign, used freeze-dried plasma produced by the United States. After the war, he decided to produce this kind of plasma with François Hénaff, a veterinary surgeon specialized in cold treatments. Indeed, freeze-dried plasma is first deep-frozen, and then heated under high vacuum. That is the sublimation of ice which goes directly from solid to vapour phase without liquid phase.



The first production of French Freeze-dried plasma started in 1949. During the Indochina War, 40.000 units have been distributed. From 1950 to 1987, the French Armed Forces Blood Transfusion Center (CTSA) was the first European producer of freeze-dried plasma.

From 2010, the « PLYO » undergoes a pathogen inactivation process (Intercept technology) active on most of pathogens (virus, bacteria and parasites). In 2012, the product is named lyophilised plasma also known by the acronym PLYO.



PLYO, the best treatment for haemorrhagic shock

Haemorrhage is the leading cause of preventable death on battlefield. Failure of haemostasis, called «coagulopathy» appears very precociously in 30% of severe cases and maintains the bleeding with mortality estimated around 40%.



The management of haemorrhagic shock is early transfusion of RBCs, plasma and platelets. Reconstituted in less than 6 minutes, PLYO is perfectly suitable for an immediate transfusion.

PLYO is the plasma in case of emergency in both civilian and military world.

- PLYO can be used without knowing patient's blood type.
- It is a specific treatment of the coagulopathy seen in haemorrhagic shock.



- PLYO is available anywhere, at any time and in all circumstances.
- PLYO has proven its efficiency on battlefield (Mali, Afghanistan, Central African Republic...) including in foreign armed forces (US special forces) and within military hospitals in France.



Its use is recommended in all vital emergencies, in both military and civilian world.

The preparation of the PLYO

Plasma is collected from regular apheresis donors in military units, on sites of the Defence Ministry or in CTSA's facilities (Clamart and Toulon).



To obtain a universal plasma, efficient and safe, plasma from 10 different donors, from blood type A, or B, or AB, are mixed all together and then aseptically filled in unit vial.

The pathogen inactivation process and hepatitis E virus screening reinforce the safety of this product. Donors are selected regarding their coagulation factor levels in order to ensure the efficiency of the final product.

PLYO comes in different packages: either a cardboard box, or a small green bag for operational use. Both packages contain 1 vial of water for injection and 1 vial of plasma in powdered form to be reconstituted in less than 6 minutes. PLYO can be stored at room temperature up to 2 years.

