

How to keep safety blood programme linked Global health problems

Japan

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In this area of global economy where people move around the world, transmitted diseases cannot be contained within a country.

Hence, the safety of donated blood can only be achieved with a rigorous

- donor monitoring process
- product tracking process

Case: Dengue Fever

Dengue fever is caused by the **dengue virus**, transmitted via mosquito.


Symptoms:

- a high **fever, headache**, vomiting,
- **muscle and joint pains**, and a **skin rash**.

Sometimes,

- **bleeding**,
- **low levels of blood platelets** and **blood plasma leakage**,
- **into dengue shock syndrome**, where **dangerously low blood pressure** occurs.

Area: Dengue is **common** in more than **110 countries**. Each year between **50 and 528 million people** are infected and **approximately 10,000 to 20,000 die**.



Dengue Fever in Japan

- **Very rare** (only 200 patients a year)
- **No patients who are infected inside Japan had been found for 60 years**

Dengue Fever Outbreak in Japan (2014)


- Aug 20, a woman, who had no record of going abroad, was hospitalized due to a high fever
- Aug 25th, the case was reported to Ministry of Health
- Aug 26th, she was diagnosed as Dengue fever
- Aug 27th, Ministry of Health sent an alert to all municipalities and Japan Red Cross.
- Aug 27th, two friends of the woman patient were also diagnosed as Dengue fever
- The three patients claimed that they had many mosquito bites at Yoyogi park (Tokyo) a few days ago.

How the Japan Red Cross responded to the situation

1. **Forgo the donation from the donors who potentially were infected with Dengue virus**

Ask the donors whether he/she has visited the Yoyogi parks in the past 4 weeks.

If yes, JRC forgoes the donation from the person.



How the Japan Red Cross responded to the situation

2. Ask the donors to report back to JRC, if he/she has some symptoms of Dengue fever (high fever, headache, and skin rash) for 14 days after the donation.

- Track down the hospital the donor's blood is provided
- Recall the blood from the hospital
- Conduct a test to assess whether the blood is infected
- If the test result is positive (infected) and the blood was already used for a patient, the patient should be notified and monitored closely

Summary

In Japan, a process to ensure the blood safety has been well developed. And it was successfully deployed in a timely manner (only in a few days after the initial report).

This is because of a well-managed collaboration between JRC and Japanese Ministry of Health.