

Brazil Leads Production of Yellow Fever and Rabies Vaccines

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Exports of yellow fever vaccines by Brazil's Fundação Oswaldo Cruz (Fiocruz) have grown no less than 560% in the last three years, going from 5 million doses in 2002, to an expected 28 million doses this year, reports the manager of the Market Relations Department at Fiocruz, Cristiane Frensch Pereira.

Pereira says Brazil has become the world's biggest exporter of yellow fever vaccines since it began exporting in 1986. The foundation's Biomanguinhos laboratory has an installed capacity to produce up to 38 million doses of the vaccine annually, says Pereira.

"Today we export to 54 countries, mainly in Asia and Latin America," explained Pereira, as Fiocruz prepared a lot of 4.5 million doses that will go to Peru this week.

Rabies Vaccine

The Butantã Institute, a research center linked to the São Paulo State Health Department, is initiating commercial production of the first national rabies vaccine effective in treating humans.

Besides being less expensive, the vaccine is more efficient than the vaccines that Brazil has imported up to now. The first doses will be available at health posts within three months.

According to Neuza Frazatti, the coordinator of the study that led to the production of the new vaccine, the domestic product offers still another advantage.

"It is a little bit more efficient. But its great advantage is not its efficacy in terms of protection. It is its purity, since it does not contain serum," she explained.

The traditional vaccine is composed of a mixture based on animal serum extracted from cattle fetuses. This introduces a risk, even though it is a very small one, of contamination by the "mad cow" virus.

The Butantã researchers replaced animal serum with a vegetable base that resulted in a product with greater efficiency and a lower cost.

The vaccine that is currently used in health posts comes from France and costs US\$ 8. The vaccine that the Butantã Institute is beginning to manufacture costs US\$ 5.

Since Brazil's annual demand for rabies vaccine amounts to three million doses, the savings will amount to US\$ 9 million. According to Dr. Frazatti, even with the small profit earned by selling vaccines to the Ministry of Health, the Institute will still make enough to be able to invest in new technologies.

The scientist stressed the importance of seeking treatment at a health post, if one is bitten, scratched, or licked by dogs, cats, or other hot-blooded creatures, such as bats.

"Nowadays, it is inadmissible for someone to die of rabies, especially with such a good vaccine available," she pointed out.

She emphasized that the French vaccine is considered one of the best in the world and will continue to be available at health posts until the Butantã vaccine is ready.

"A bite, scratch, or lick by an unfamiliar animal warrants a visit to the doctor. In São Paulo there is the Pasteur Institute, specialized in rabies. In other cities, go to any health post, which will always have a professional to provide guidance," she said.

Rabies is a disease transmitted by a virus present in the saliva of hot-blooded animals that suffer from the disease. After 30-60 days, the virus reaches the person's central nervous system, causing paralysis, convulsions, and hallucinations. The disease, which has no cure, is fatal.

Frazatti went on to comment that, even when someone is bitten by a vaccinated, domestic animal, he or she should go to the health post to receive orientations about vaccination.

"The animal will simply be placed under observation, and the person will be set at ease by receiving a professional opinion," she stated.

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