

# Role of animal serum in vaccines

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**In news-** The Government recently clarified that Bharat Biotech's Covaxin does not contain newborn calf serum and that the calf serum is not an ingredient of the final vaccine product.

## ***About animal serum usage in vaccines-***

- The newborn calf serum is used for **preparation and growth of vero cells** which are used in production of vaccines.
- The **blood is collected from the calf within three to ten days of its birth.**
- This is very commonly used to make vaccines as the cattle blood is easier to source than other animals, and hence this is standard practice.
- These vero cells are then washed with water, chemicals to make them free of the newborn calf serum.
- The cells are then infected with disease-causing virus, bacteria or other pathogens in the laboratory, but do not themselves become an ingredient of the vaccine.
- The virus thereafter is killed or inactivated.
- The killed virus is then used to make the final vaccine.
- This technique has been used for decades in Polio, Rabies, and Influenza vaccines.
- The use of horse serum as an antibody supplement in diphtheria vaccine is more than 100 years old.