

# The Future of Vaccinations

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## Vaccine schedule changes



As we gain more knowledge regarding the length of immunity produced by vaccinations, vaccines improve to provide a longer [duration of immunity](#), and better methods to test immunity are developed, we will see changes in the recommended vaccine schedule. Most vaccines will not be given annually, and vaccine rotation will be more common e.g., vaccinate against disease A one year, against disease B the next year, disease C the third year, and then repeat the rotation. Vaccine schedules will be more individually tailored to the animal. Some veterinarians are already changing their recommended vaccination schedules.

## More monovalent vaccines

Since the length of immunity to different diseases varies, some vaccines will need to be given more often than others. Monovalent vaccines will make it possible to vaccinate against only those diseases to which the animal is susceptible, without including unnecessary components. For example, immunity to [canine distemper](#) is long, but for [leptospirosis](#), it is relatively shorter. Instead of giving a combination vaccine available today, which contains distemper, parvovirus, hepatitis, and leptospirosis, a vaccine containing only leptospirosis could be given, avoiding unnecessary vaccination with the other viruses.

## New methods of vaccination

There are several oral vaccines in use today. Oral rabies vaccine is used to vaccinate wildlife. Vaccine manufacturing companies are focusing on the development of oral vaccines for other diseases in domestic animals as well.

Vaccines may be developed which slowly release [antigens](#) over a period of months to years. This would result in a continual stimulation of the [immune system](#), thus making annual or biennial (every 2 years) vaccinations unnecessary.

## Improved and safer vaccines

Recombinant technology is the wave of the future. More and more vaccines will be made by this method, which will result in safer and more efficacious vaccines.

## Vaccines against new diseases

Recombinant technology may make it possible to vaccinate against noninfectious diseases such as cancers and juvenile onset diabetes. Vaccines may also be developed to protect pets from parasitic diseases. Even a 'spay vaccine' is being considered.

## Summary

In the next few years, we are likely to see many changes in the types of

vaccines we use, how often we vaccinate, methods of vaccination, and for which diseases we will have vaccines. This will be an exciting time, and we will do our best to keep you up-to-date on new developments.

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