

### General considerations

- There are few data available on the vaccination of immunocompromised<sup>1</sup> cats, and sometimes studies produce controversial results.
- This fact sheet is therefore mainly based on expert opinion. For references and details, please see the guidelines on this topic ([www.abcdcatsvets.org](http://www.abcdcatsvets.org)).
- Important considerations:
  - It is unclear if vaccinations are effective in immunocompromised cats, due to a reduced immune response.
  - Modified live vaccine strains might be pathogenic in immunocompromised cats.
  - Vaccination and the resulting immune stimulation might lead to a worsening of certain underlying diseases (such as FIV infection or chronic kidney disease).
- The degree of immunocompromise and assessment of the cat's individual risk of exposure to infectious agents should be determined by the veterinarian.
- The vaccination protocol for cats with long-term immunocompromise depends on the underlying disease and/or treatment. See table overleaf.



- *Vaccination of cats with acute disease or short-term immunocompromising treatment should generally be postponed until recovery or end of treatment. However, vaccination might still be recommended in situations with high infectious pressure (e.g. in a shelter environment). Passive immunisation (transfer of antibodies) can be an alternative in these situations.*

<sup>1</sup> In this fact sheet, the terms immunocompromised/immunocompromise are considered alternate wording for immunosuppressed/immunosuppression and immunodeficient/immunodeficiency.

## Vaccination of immunocompromised cats

### FACT SHEET

Condition or situation that could be associated with immunocompromise	Measure FPV antibodies*	Recommended vaccination protocol
Acute disease or short-term immunosuppressive treatment	No**	(1); alternatively: (2)
General anaesthesia/peri-operative period	Potentially***	(1); if vaccination cannot be avoided (e.g. trap-neuter): (3)
Long-term glucocorticoid therapy	Yes	If cat is on low-dose anti-inflammatory glucocorticoid treatment: (3) If cat is on high-dose or long-term immunosuppressive glucocorticoid treatment: (4); alternatively: (2)
Long-term cyclosporine therapy	Yes	Primary vaccination series: (4); alternatively: (2) Booster vaccination (if cat otherwise healthy): (3)
Congenital immunodeficiency disorders	Yes	(3)
Feline immunodeficiency virus (FIV) infection	Yes	(5); (6); (7)
Feline leukaemia virus (FeLV) infection	Yes	(5); (6); (8)
Tumours	Yes	If otherwise healthy and no current chemotherapy: (3)
Chemotherapy for tumours or immune-mediated diseases	Yes	(4); alternatively: (2)
Diabetes mellitus	Yes	If well controlled: (3) If poorly controlled: (1) until improvement; alternatively: (2)
Chronic kidney disease (CKD)	Yes	(7)
Asplenia	Yes	(3); In case of elective splenectomy: (9)
Senior cats (>11 years)	Yes	Primary vaccination series: (10) Booster vaccination: (3)

### Notes for table

- (1) Postpone vaccination until recovery/end of treatment.
- (2) Consider administering passive immunisation – i.e. transfer of antibodies against FPV, feline calicivirus (FCV), and feline herpesvirus (FHV) – if available, in case of high infectious pressure.
- (3) Vaccinate as for clinically healthy cats.
- (4) Postpone vaccination until at least 3 months after the end of treatment.
- (5) Keep retrovirus-infected cats strictly indoors.
- (6) Only consider vaccination if the cat is clinically healthy.
- (7) Base decision to vaccinate on risk-benefit ratio, e.g. avoid vaccinating indoor-only adult cats (unless the cat lacks FPV antibodies).
- (8) Consider annual booster of core vaccines.
- (9) Complete vaccination at least 2 weeks before surgery.
- (10) Give 2 injections of primary vaccination series at a 3-to-4-week interval (including MLV and rabies vaccines) OR perform FPV and rabies antibody measurement after the first injection to verify if protection is adequate.

\* To avoid unnecessary vaccination against feline panleukopenia virus (FPV) in case antibody levels are adequate.

\*\* Vaccination should be avoided even if no antibodies are present; therefore measuring FPV antibodies is not useful in this situation.

\*\*\* Depending on the situation, antibody measurement might be useful in adult cats that require vaccination ensuring that unnecessary vaccinations are avoided.