

Word-Formation Processes in English for Veterinary Medicine

**** 1. Compound Nouns ****

1

In English, there are three main ways of putting two nouns together:

- 1. noun + 's + noun** (the so called "English Possessive):
William's car, my son's name, the board's decision, London's zoo, yesterday's papers, and so on;
- 2. noun + preposition + noun:** *a round of talks, an item of news, a barrel of oil¹, the theory of relativity, the middle of the meeting, letters from home, prevention against rabies, the zoo in/of London, and so on;*
- 3. noun + noun** →→→→ **compound nouns**

The choice of structures depends on what the dictionary suggests – sometimes only one structure is possible or is the most commonly used (e.g. *blood test; diseases in cats* but also *cat diseases; insertion of a needle into a vein; nail trimming; pet food; the duration of pregnancy; the terms of reference, scratching post²; sign of aggression, weight loss³, and so on).*

A **compound word** (simply called a **compound**) is a new word made up of two or more other words – that is, formed by joining two or more existing words.

It means that each part of a compound must be able to occur on its own as a word.

Here follows some examples of compound nouns:

¹ Note that the noun+noun structure in such a case – i.e. *an oil barrel* – refers to the container without its content.

² **Equivalent in Italian:** "tiragraffi".

³ **Equivalents in Italian:** "dimagrimento", "perdita di peso".

- *animal behavior(u)r*: from *animal* (n) + *behavio(u)r* (n)
- *antigen skin tests*⁴: from *antigen* (n) + *skin* (n) + *tests* (n)
- *behavior(u)r modification methods*: from *behavio(u)r* (n) + *modification* (n) + *methods* (n)
- *blood vessels*: from *blood* (n) + *vessels* (n)
- *BSE*⁵ *epidemic*: from *BSE* (proper name) and *epidemic* (n)
- *cat colo(u)rs*: from *cat* (n) + *colo(u)rs* (n)
- *cat markings*: from *cat* (n) + *markings* (n)
- *cat points*⁶: from *cat* (n) + *points* (n)
- *disease control*⁷: from *disease* (n) + *control* (n)
- *family group*: from *family* (n) + *group* (n)
- *FDA*⁸ *researchers*: from *FDA* (proper name) + *researchers* (n)
- *food allergies*: from *food* (n) and *allergies* (n)
- *goldfish*: from *gold* (adj / n) + *fish* (n)
- *life cycle*: from *life* (n) and *cycle* (n)
- *messenger RNA*: from *messenger* (n) and *RNA* (n, initialism)
- *paperwork*: from *paper* (n) and *work* (n)
- *pet population problems*: from *pet* (n) + *population* (n) + *problems* (n)
- *sandfly*⁹: from *sand* (n) + *fly* (n)
- *SARS*¹⁰ *epidemic*: from *SARS* (proper name) and *epidemic* (n)

The final part of a typical compound is the **head (also called the **modified**) of the construction, determining its word-class**

⁴ **Equivalents in Italian**: "test cutaneo antigenico", "test antigenico a reazione cutanea", "prick test".

⁵ BSE, bovine spongiform encephalopathy. **Equivalents in Italian**: "BSE", "encefalopatia spongiforme bovina", "morbo della mucca pazza".

⁶ "Areas of hair differently colored than on rest of body in Siamese, Himalayan, and similar cats; usually found on face (mask), ears, feet, and tail" (cfr. McBride Douglas F., 2002: *Learning Veterinary Terminology*, Mosby., pp. 361, 375).

⁷ Such a compound is present in the proper name *Centers for Disease Control and Prevention* as well as in its EU equivalent - the *European Center for Disease Control and Prevention*.

⁸ FDA, Food and Drug Administration. **Equivalents in Italian**: "ente statunitense che sovrintende il controllo dei prodotti alimentari, farmaceutici e cosmetici prima che vengano immessi sul mercato", "AIFA, Agenzia Italiana del Farmaco".

⁹ **Sandfly** (also written **sand fly**) is a colloquial name for any species or genus of flying, biting, blood-sucking dipteran (fly) encountered in sandy areas. **Equivalents in Italian**: "flebotomo", "mosche della sabbia".

¹⁰ **Severe Acute Respiratory Syndrome (SARS)** is a viral respiratory disease of zoonotic origin that surfaced in the early 2000s caused by the first-identified strain of the SARS coronavirus. **Equivalents in Italian**: "SARS", "grave sindrome respiratoria acuta".

and much of its semantic properties, and is preceded by the **modifier**.

Here follows an example of the nouns most frequently modified by the C-noun *vaccine* between October 2020 and September 2021:

| Oct–Dec 2020 | Jan–Mar 2021 | Apr–June 2021 | July–Sept 2021 |
|----------------------|----------------------|----------------------|---------------------|
| vaccine candidate | vaccine rollout | vaccine dose | vaccine dose |
| vaccine trial | vaccine dose | vaccine rollout | vaccine mandate |
| vaccine distribution | vaccine distribution | vaccine passport | vaccine passport |
| vaccine development | vaccine supply | vaccine hesitancy | vaccine rollout |
| vaccine dose | vaccine appointment | vaccine supply | vaccine hesitancy |
| vaccine rollout | vaccine passport | vaccine clinic | vaccine requirement |
| vaccine news | vaccine candidate | vaccine appointment | vaccine card |
| vaccine maker | vaccine programme | vaccine production | vaccine clinic |
| vaccine approval | vaccine shot | vaccine distribution | vaccine supply |
| vaccine developer | vaccine hesitancy | vaccine manufacturer | vaccine booster |

Top 10 nouns most frequently modified by vaccine in the Oxford Monitor Corpus of English, October 2020 to September 2021

11

As to the spelling of compounds, there are three forms (examples in blue):

- **hyphenated compounds**, such as *Blue-Tongue disease*¹², *meat-and-bone meal*¹³, and so on;

¹¹ See "Vax: Word of the Year 2021. A Report into the Language of Vaccines", <https://languages.oup.com/word-of-the-year/2021/>.

¹² "Bluetongue disease" is a non-contagious, insect-borne, viral disease of ruminants, mainly sheep and less frequently cattle, goats, buffalo, deer, dromedaries, and antelope. It is caused by the Bluetongue Virus (BTV), transmitted by the midge *Culicoides imicola*, *Culicoides variipennis*, and other culicoids. Swelling of the lips and tongue gives the tongue its typical blue appearance, though this sign is confined to a minority of the animals. **Equivalents in Italian:** "febbre catarrale dei bovini", "Bluetongue", "malattia della lingua blu".

¹³ **Meat-and-bone meal** (also called **MBM**) is a product of the rendering industry. It is typically about 48–52% protein, 33–35% ash, 8–12% fat, and 4–7% water. It is primarily used in the formulation of animal feed to improve the amino acid profile of the feed. Feeding cattle on MBM is thought to have been responsible for the spread of BSE (mad cow disease); therefore, in most parts of the world, MBM is no longer

- **open compounds**, such as *blood test* or *blood analysis*, *Blue Tongue disease*, *bone marrow*, and so on;
- **solid compounds**, such as *heartworm*, *hookworm*, *roundworm*, *tapeworm*, *whipworm*; *healthcare*, *Bluetongue disease*, *jellyfish*, *workshop*, and so on.

Here follows some other examples (in blue) of compound nouns:

- *beef cattle rearing*¹⁴: open compound noun in the form of a three-noun sequence;
- *blackface sheep breeds*¹⁵: open compound noun in the form of a two-noun sequence;
- *blood clot*: open compound noun in the form of a two-noun sequence;
- *blood clot causes*: open compound noun in the form of a three-noun sequence;
- *bone classification*¹⁶: open compound noun in the form of a two-noun sequence;
- *bone growth*: open compound noun in the form of a two-noun sequence;
- *healthcare professionals / providers / workers*: solid compound;
- *kennel cough*¹⁷ /kɒf/: open compound noun in the form of a two-noun sequence;
- *racehorse*¹⁸: solid compound noun in the form of a two-noun sequence.

The **logical relations between two or more nouns side by side** include, but are not limited to, the following:

allowed in feed for ruminant animals. However, it is still used to feed monogastric animals. **Equivalent in Italian**: "farine di origine animale".

¹⁴ **Equivalent in Italian**: "allevamento di bovini da carne".

¹⁵ "The Blackface breed is the most numerous breed in Britain accounting for over 1.7 million ewes, representing 11% of the British pure-bred flock [...]. The vast majority are found in Scotland. The outstanding qualities of the breed are survivability, adaptability and versatility, with the ability to fit into any farming situation. They are one of the hardiest sheep breeds in the country and are the backbone of the Scottish sheep industry" (see <http://www.scottish-blackface.co.uk/>).

"Blackface" is an example of solid compound adjective (→→→→ see "Notes on Compound Adjectives in EVM", Unit 4a, a.y. 2025/26).

¹⁶ Bones are classified according to their shape: long, flat short, and irregular.

¹⁷ Also known as "canine infectious respiratory disease", formally "canine infectious tracheobronchitis", it is an upper respiratory infection affecting dogs. Kennel cough is so named because the infection can spread quickly among dogs in the close quarters of a kennel or animal shelter. **Equivalent in Italian**: "tosse canina".

¹⁸ **Equivalent in Italian**: "cavallo da corsa".

- the first noun answers the question 'what kind of?' (e.g. compare *finger fish*¹⁹ and *fish finger*²⁰; other examples: *elbow dysplasia*, *heart murmur*, *Health Service*);
- the second noun is about the first noun (e.g. *Food Safety and Inspection Services*);
- the second noun comes from the first noun (e.g. a *CDC*²¹ *report*);
- the first noun makes clear where and/or when the action, exemplified by the second noun, happens: (e.g. *US Salmonella Outbreak*, "The *2014 Ebola epidemic* is the largest in history, affecting multiple countries in West Africa [...]").

Warning 1: when the first noun of a compound is a numerical expression (in blue/italics in the example below), it is singular. Look at the following examples:

- a *five-year* plan
- a *forty-hour* working week
- a *six-million-dollar* research project
- a *three-month* course
- a *three-month* internship
- a *two-day* event
- Aaron is a *five-year* Australian shepherd
- Blue is a *ten-month* puppy

⇒⇒⇒⇒ see Unit 4a, "Notes on Compound Adjectives in EVM",
• a.y. 2025/2026"

Warning 2: this word-building process may also act as a tool to express plural quantities of an uncountable noun – such as:

- blood test/s, blood analysis/es
- exposure control/s
- malaria outbreak/s
- morbidity rate/s
- surveillance level/s

¹⁹ More commonly known as *starfish* or *sea star*; **equivalent in Italian:** "stella marina".

²⁰ More commonly known as *fish stick*; **equivalent in Italian:** "bastoncino di pesce".

²¹ CDC, Centers for Disease Control and Prevention. **Equivalent in Italian:** "Centri per il Controllo e la Prevenzione delle Malattie".

- yeast cell/s
- research facility/ies

⇒⇒⇒⇒ see Unit 2a, "Notes on Nouns in EVM, part 2",
a.y. 2025/2026"

Warning 3: a longer compound made up of a sequence of two or more lexical words, where nouns or compound nouns are often intertwined with qualifiers and adverbs, can be referred to as **lexical chain**. Be careful both in interpreting the correct logical relation between each item and in translating such chain into Italian. Let's practice with the following examples in blue:

- 2019-2020 Season Influenza Virus Vaccine;
- Adjuvanted inactivated subunit influenza vaccine²²;
- Egg-drop syndrome²³;
- FDA off-label drug use marketing policy;
- Veterinary Feed Directive Distributor Notification;
- [...] Research indicates that the first probable infections of BSE in cows occurred during the 1970s with two cases of BSE being identified in 1986. BSE possibly originated as a result of feeding **cattle meat-and-bone meal** that contained **BSE-infected products** from a **spontaneously-occurring case of BSE or scrapie-infected sheep products**. Scrapie is a prion disease of sheep. There is strong evidence and general agreement that the outbreak was then amplified and spread throughout **the United Kingdom cattle industry** by feeding **rendered, prion-infected, bovine meat-and-bone meal** to young calves. [...] ²⁴;
- stress-induced cardiomyopathy-related deaths.

⇒⇒⇒⇒ see Unit 4a, "Notes on Compound Adjectives in EVM",
a.y. 2025/2026"

²² <https://www.ecdc.europa.eu/en>

²³ One of the important viral diseases of birds, notably chickens, ducks, geese and swans, it is characterised by a sudden drop in production of eggs as well as its eggshell quality in apparent healthy laying birds. Also called "EDS '76", it was first identified in the Netherlands in 1974 and the virus was first isolated in Northern Ireland in 1976. **Equivalent in Italian:** "egg-drop syndrome", "EDS", "sindrome della diminuzione nell'ovodeposizione".

²⁴ <https://www.cdc.gov/prions/bse/about.html>