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MeSH TERMBASE PROJECT

Virus Diseases

C02 3rd level (C02.081.885 and C02.597.880) 4th level (C02.081.270.200, C02.182.500.300 - C02.182.600.600 and C02.256.743.826 - C02.256.743.929) 5th level (C02.182.500.300.400, C02.782.580.600.680 - C02.782.580.830.825, C02.782.600.550.800 and C02.782.815.616.850) 6th level (C02.782.600.550.200.325 - C02.782.600.550.200.750)

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VOLUME I

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Firstly, I want to thank my parents for always supporting me and encouraging me.

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VOLUME I

1. INTRODUCTION

1.1. MeSH

MeSH is an abbreviation for Medical Subject Headings. The MeSH is a thesaurus of medical terms compiled by the US National Library of Medicine and it is used for indexing, cataloging, and searching biomedical and health-related information and documents. MeSH descriptors are arranged in both an alphabetic and a hierarchical structure. The medical terms were retrieved from the Index Medicus, which was a comprehensive bibliographic index of scientific journal articles focusing on medical science fields, published from 1879 to 2004. After that it was replaced by online databases. The first official list of subject headings published by the National Library of Medicine appeared in 1954 under the title Subject Heading Authority List. This information is explained in more detail on the website of MeSH: (http://www.nlm.nih.gov/mesh/intro_preface.html#pref_hist)
MeSH (referred to in this thesis as "Medical") was originally available in paper form and later also (and now exclusively) as an online resource. It can be found at http://www.nlm.nih.gov/mesh/MBrowser.html.

1.2. MeSH Termbase Project

The MeSH Termbase Project was initiated by Dr med Robert Vander Stichele in 1987 and has been carried out by students of the Department of Translation, Interpreting and Communication - and its predecessors - of Ghent University, in the context of their master thesis (cf. www.cvt.ugent.be/mesh.htm). The aim of the project is twofold: first, to build a MeSH-based bilingual thesaurus, English and Dutch, for translators, terminologists and other users interested in bilingual biomedical information, and second, to provide language support in biomedical information or document retrieval.
Older theses in the series always took the 1987 version of the MeSH as their starting point. The present thesis, however, is part of a new series in the project, which focusses on new terms that have been added in the more recent editions. In particular, the present study discusses terms from Chapter C02 of the MeSH, which is the chapter on virus diseases.
The thesis consists of two volumes. Volume I contains the discussion per concept, justifying the choices made when completing the terminological records. The aim of this part is to do a thorough assessment of the concepts, as well as the terms that designate these concepts in

English and in Dutch. Volume II consists of the terminological records themselves. The research abides by standard rules of terminology and terminography. The records are very detailed and also include data such as grammatical and morphological information (part of speech, inflection), precise descriptions, definitions with features of the terms, terms used in contexts, reliability and frequency of occurrence, semantic information (related terms, broader and narrower terms, (quasi-)synonyms), international terms, etc.

It is also interesting to look at the MeSH hierarchy of the terms in order to find connections and/or similarities between concepts.

1.3. GenTerm Method

The GenTerm method is used to record and store terminographical data. The name GenTerm is a combination of Gent (Ghent) and term base (cf. http://www.cvt.ugent.be/genterm.htm). The method involves the use of a uniform electronic record with a large number of fields. All the data relative to the same concept are united in one term record, which is in accordance with broadly received principles of terminology and terminography.

Terminology is a relatively young field of study, the first theory of terminology was formulated by Eugen Wüster. In the early 20th century, **Protopopescu 2** explains that at that time, terminology became a necessity because progress and the development of technology required new concepts to be named, as well as a certain level of agreement on the terms that were being used. **Cabré Castellvi 165** points out that Wüster developed a theory of terminology on the basis of his terminographic experience in compiling *The Machine Tool. An interlingual Dictionary of Basic Concepts* (Wüster 1968), this work was a systematically arranged French and English dictionary of standardized terms (with a German supplement) intended as a model for future technical dictionaries. **Cabreé Castellvi 166** also mentions Wüster's *General Theory of Terminology*, which provided a theoretical basis for guidelines for terminological work. In this book he suggested that vocabularies should be presented in a systematic or classified way and many later contributions were made to the General Theory of Terminology by followers of Wüster. This theory puts forward that a concept should be universal, independent of cultural differences and that the only possible variation is due to the difference in languages.

There have also been more recent views on establishing a theory of terminology, **Protopopescu 6** mentions a new perspective by **Cabré Castellvi**: “Cabré (2000: 50-53) introduces three conditions related to the communicative aspect of terminology: the natural languagecondition, the special communication condition and the specialization condition”.

The use of terminology is explained by **Nedobity 69:**

> Specialized languages are the tools for subject communication by which modern society conveys its achievements and experience from generation to generation and from people to people. The specialized languages are characterized by using clearly defined concepts to which preferably unambiguous terms are assigned. The concepts form systems of concepts in the individual subject fields. Together with their assigned terms they constitute the respective terminology, which reflects the state of human knowledge about the subject field in question. Terminologies have an influence on scientific, technical, and economic progress.

In the case of the MeSH project, the terminological research takes place in the field of medicine. As was stated before, the method that was used in this thesis is the GenTerm method.

Each separate GenTerm record consists of two different types of ‘sheets’: one translation sheet (VBL) and at least two language-definition-context sheets (TDC).

1.3.1. Translation sheet (VBL)

**<MeSH Heading>
<Scope Note>

<Vakgebied>
<UDC>
<Project>^^
<Werkcode>
<Update Werkcode>
<Begrip>
<Internat>
<**Nl-term**>
<Equival>
<**En-term**>
<Equival>
<Beeld>

<MeSH Heading>This is the entry as found in **Medical 2015**. Some descriptors are listed in inverted order by the use of a comma, such as Enteritis, Transmissible, of Turkeys. The

GenTerm method uses an asterisk (*) to indicate that the word order is inverted, for example: transmissible * enteritis * of turkeys. It should also be noted that **Medical 2015** often uses plural terms, whereas the GenTerm method prefers the singular.
<Scope Note>A description of the entry term provided by **Medical 2015**.
<Vakgebied>This is the area of expertise. In this dissertation the area of expertise was virus diseases.
<UDC>Stands for Universal Decimal Classification and represents the code used to classify the term.
<Project>This field contains a personal code assigned to each contributor to the MeSH Termbase Project; in the present study the code is MeSH E8 AaG 8 .
<Werkcode>The MeSH number that was used in the MeSH 1987 (not applicable in this thesis).
<Update Werkcode>The MeSH number used in the most recent version of MeSH. For this thesis, this was the 2015 edition.
<Begrip>A short description of the concept, written by the author in Dutch.
<Internat>If a Latin name exists for the term, it can be entered here.
<**Nl-term**>The primary Dutch translation and the Dutch synonyms for the term, in that order.
<Equival>This field contains possible remarks on minor differences between the synonyms. For example, it can be mentioned here if one term has a slightly broader or narrower meaning.
<**En-term**>The English MeSH term and its synonyms.
<Equival>Remarks on the English entry term or its synonyms.
<Beeld>When possible, a picture of the referent can be entered here.

1.3.2. Language-Definition-Context sheet (TDC-sheet)

This sheet is also called TDC-sheet (Dutch: Taal-Definitie-Contexten) and is filled in for the reference terms as well as for each full synonym.

<**English**> or <**Nederlands**>
<Trefwoord>
<Betrouwb>
<Woordsrt>
<Genus>
<Flexie>
<Colloc>
<Uitspraak>
<Afko/Symb>
<Extrainfo>
<Extrasyn>

<Verwant>
<Boven>^^
<Neven>^^
<Onder>^^

<Definitie>
<Commentaar>

<Contexten>
<Overige bronnen>

<English>/<Nederlands>The English/Dutch term

<Trefwoord>The term itself as it would be classified alphabetically

<Betrouwb>A specific code showing the reliability of the consulted sources:

nor = refers to a normative source, such as MeSH itself.

pri = primary source such as specialised literature.

sec = secondary source such as dictionaries and encyclopaedias.

pritra = translated primary source.

sectra = translated secondary source.

The number before these codes refers to the number of sources which list the term, the maximum of this number being three.

<Woordsrt>Part of speech. Terms are often compounds such as varicella zoster encephalitis. The part of speech is that of the head word of the compound. The symbols that are used are:

sub: noun

ver: verb

ver nom: nominalized verb

<Genus>this field is used to indicate the gender of the term. This was only done in the case of a Dutch noun. The symbols that were used are m for masculine, f for feminine and n for neuter

<Flexie>If there is a plural of the term, it is given here, prefixed with the code “plu”. If the noun or noun phrase is known to have no plural, “sine plu” is entered; when the plural was not found though it could be possible in theory “no plu found” was entered.

<Colloc>this field is used for collocations

<Uitspraak>In this field we find the phonetic transcription of the term. It is systematically entered for English etrms.

<Afko/Symb>If there is an abbreviation or a symbol for the term that is widely used, it can be found here.
<Extrainfo>This field is reserved for information that cannot be placed in any other field. An example would be spelling variations.
<Extrasyn>Synonyms that are less frequent are listed here. These synonyms are not discussed in further detail, i.e. no separate TDC sheet is drawn up for them..
<Verwant>Terms that are slightly different in meaning from the original term are listed here.
<Boven>Terms that belong to a higher level in the MeSH hierarchy
<Neven>Terms that belong to the same level in the MeSH hierarchy
<Onder>Terms that belong to a lower level in the MeSH hierarchy
<Definitie>This field contains a definition of the term found in a medical dictionary or encyclopedia
<Commentaar>This field contains remarks about the definition or, when no definition is found, it is mentioned here and sometimes a definition by the author can be included here.
<Contexten>Up to three cases of the term used in a context are listed here. All contexts preferably originate from primary sources since the contexts determine the reliability of a term.
<Overige bronnen>If the term was found in more than three secondary sources, the additional sources are listed here.

1.3.3. The Extended Translation Sheet

**<MeSH Heading>
<Scope Note>

<Vakgebied>
<UDC>
<Project>^^
<Werkcode>
<Update Werkcode>
<Begrip>
<Internat>
<**Nl-term**>^^
<Equival>
<**En-term**>^^
<Equival>
<Beeld>

VOOR VERDERE INFORMATIE ZIE: << >>
<**English**>
<Uitspraak>
<Verwant>

<Boven>^^
<Neven>^^
<Onder>^^
FOR MORE INFORMATION SEE: << >>

This sheet is filled in when a term has already been discussed by other students in previous dissertations. It combines the basic translation sheet with an extension which refers readers to the full terminological record of the descriptor with the language-definition-context sheets. As the present study contains only new terms, this type of record has not been used.

1.3.4. The Author Sheet

**<Projectcode>
<Datum>
<Auteur>
<Begeleider>
<Talen>

Each terminographer contributing to the MeSH Termbase Project fills in an author sheet.
<Projectcode>The individual terminographer's code as explained above.
<Datum>The date on which the finishing touches were put to the dissertation.
<Auteur>The first and last name of the person writing the dissertation.
<Begeleider>The supervisor of the dissertation.
<Talen>The languages that are dealt with.

1.3.5. The Bibliographical Sheet

**<Sorteerkop>
<BiblGegev>

This sheet is used to record all the consulted sources in alphabetical order
<Sorteerknop>The concise bibliographical reference used in the records and in the Discussion per Concept.
<BiblGegev>The complete bibliographical data.

1.4. Structure of this thesis

As explained above, this thesis consists of two parts: Volume I and Volume II.

Volume I deals with the Discussion per Concept of terms and consists of four chapters:

Introduction
Discussion per Concept
Conclusion
Bibliography

Volume II includes four appendices:

APPENDIX I: Terminological Records
APPENDIX II: English-Dutch Lexicon
APPENDIX III: Dutch-English Lexicon
APPENDIX IV: MeSH Tree 2015

1.5. Methodology

The research for this thesis adhered to a relatively fixed methodology. First, a number of English monolingual medical dictionaries and encyclopedias were consulted to determine the meaning of the English MeSH term that was investigated and often synonyms were found in the dictionaries as well. These included **Dorland's, International, Taber's, Mosby's, Stedman's** and **Churchill's.** I used two dictionaries by **Stedman's**, the first was **Stedman's Medical Dictionary 27th edition**, which is referred to as simply **Stedman's** in this thesis. The second was **Stedman's Medical dictionary for the Health Professions and Nursing 7th Edition**, which was referred to as **Stedman's II** in this thesis. The definitions found in these dictionaries were then compared to the Scope Note provided by **Medical** and the best definition was then entered into the terminological records. The synonyms were also carefully examined and researched. If I considered a synonym to be a full synonym, a separate TDC sheet was made for that term.

Next, I searched for contexts in which the terms were used. **PubMed** and **Google Scholar** proved to be the most useful sources to complete this task. These sources were also used when researching synonyms and they were also helpful to determine the frequency of the terms.

In order to find a Dutch translation, I consulted bilingual dictionaries such as **Kerkhof** and **Reuter**. When no translation was found, an informed guess was usually the first step to finding an adequate Dutch translation.

The Dutch equivalents were then researched in Dutch medical dictionaries such as **Pinkhof, Coëlho** and **Winkler Prins.** When I used the online version of **Pinkhof**, I referred to **Pinkhof I** and when I used the written version I refferd to **Pinkhof II**. To further determine the frequency and use of these translations, sources such as **NTvG** and **Google Scholar** were used. These were also the sources I used to find appropriate contexts for the terms.

1.6. Motivation

I decided to participate in the MeSH Termbase project because it is a useful project. The field of medicine is constantly evolving and new concepts, often starting out with new English names, need new translations so that the recently acquired knowledge can be shared among various users.

Knowing that my translations may be useful to other people in the field of medicine motivated me to thoroughly research my translations.

For these translations to be reliable, there were certain standards to be met and I enjoyed doing in-depth research on terms in order to fully comprehend them.

Finally, I was also interested in extending my knowledge in the field of medicine.

2. DISCUSSION PER CONCEPT

2.1. Rubulavirus Infections

C02.782.580.600.680	RUBULAVIRUS INFECTIONS	RUBULAVIRUSINFECTIES

According to both **Stedman's 1583** and **Dorland's 1657** rubulavirus is a genus of viruses of the subfamily Paramyxovirinae which can cause mumps in humans. The difference between the two definitions is that **Dorland's 1657** mentions that rubulavirus can cause disease in both humans and animals, whereas **Stedman's 1583** is not specific in this respect. The term rubulavirus is not to be confused with rubella, an entirely different condition.

The term rubulavirus infection itself produced 5,460 hits in **Google** and 56 in **Google Scholar**. From my findings I conclude that most of the **Google Scholar** hits (47) refer to a condition in swine, referred to as porcine rubulavirus infection. **Ramirez-Mendoza et al 237** state that porcine rubulavirus is characterized by "neurological signs, corneal opacity and high mortality in young pigs, and reproductive disorders in sexually mature pigs". Because of the corneal opacity which occurs in about 10% of the cases, porcine rubulavirus infection is also called blue eye disease. This synonym was not found in any medical dictionary, but was mentioned as a synonym by **The Center of Food Security and Public Health 2014-10-15**. Blue eye disease produced 173 hits on Google Scholar. Because porcine rubulavirus infections only occur in animals, I did not count it as a full synonym for rubulavirus infections.

There were no relevant spelling variations for the term rubulavirus infection or porcine rubulavirus infection. In the term blue eye disease a hyphen between "blue" and "eye" occurred in a few cases but the overall majority of references to this term were written in three separate words, without a hyphen. The term blue eye disease is not only used when referring to a disease in swine, but is also reported in agricultural commodities such as maize according to an article by **Ciegler and Kurtzman (PubMed 2014-10-16 Ciegler & Kurzmann, 5485085)**. I decided not to include blue eye disease in my terminological record either because the disease is almost exclusively associated with the narrower term porcine rubulavirus infection. For that reason it is not a full synonym of rubulavirus infection. I also did not find a Dutch equivalent for blue eye disease.

A translation for the term rubulavirus infection was not found in any Dutch medical dictionary, but I did find 4 hits for "rubulavirusinfectie" in **Google** that referred to the **UMLS 2015-05-08**. This translation is based on the Dutch MeSH translation. I would opt for 'rubulavirusinfectie' as the best possible translation for this term since rubula is derived from the Latin ruber, meaning red and Latin names often remain unchanged. Writing the term in one word is also in accordance with Dutch spelling rules that can be found on **Woordenlijst 2014-10-15**.

2.2. Severe Acute Respiratory Syndrome

C02.782.600.550.200.750	SEVERE ACUTE RESPIRATORY SYNDROME	SARS

Severe acute respiratory syndrome or SARS is a relatively new disease, which means that only medical dictionaries that were issued since the first discovery of the disease (2002) were relevant to consult. **The Textbook of Pulmonary Diseases 398** provides a broad definition of SARS, listing phases as well as symptoms and signs suggestive of SARS. **Medlex 2014-11-10** states that this is because of the novelty of the disease and because at present no specific test for SARS exists. SARS is therefore usually considered a diagnosis of exclusion. When the definition for SARS was being made by **Stedman's II 1530** the cause for SARS was still unsure. **Stedman's II 1530** mentions that SARS is most likely caused by a coronavirus (a certain degree of uncertainty is also present in the scope note provided by **Medical 2014-11-14**), whereas **Dorland's 1848** definition positively states that it is caused by a coronavirus. Coronaviruses were previously thought to cause mainly the common cold, says **Stedman's II 1530**.

The definitions I found in **Dorland's 1848** and **Stedman's II 1530** correspond for the most part.

SARS produced 18,400,000 hits on **Google** and 361,000 on **Google Scholar**. Severe acute respiratory syndrome produced 1,900,000 hits on **Google** and 1,570,000 on **Google Scholar**, making it a relatively well-documented term in medical science.

There is little discussion in English about the term SARS itself. No synonyms are given in any of the consulted medical dictionaries. The term SARS CoV is used when researchers refer to the coronavirus causing SARS.

The Textbook of Pulmonary Medicine 400 reports several stages defined by **Centers for Disease Control and Prevention updated interim case definition for SARS** in which SARS may manifest itself:

- Early illness
  - Presence of two or more of the following features: fever (might be subjective), chills, rigors, myalgia, headache, diarrhea, sore throat, rhinorrhea.
- Mild to moderate respiratory illness
  - Temperature > 100.4 F or 38 C and at least one lower respiratory illness (for example, cough, dyspnea, difficulty breathing).
- Severe respiratory illness
  - Meets clinical criteria of mild to moderate respiratory illness, and
  - One or more of the following findings: radiographic evidence of pneumonia, or acute respiratory distress syndrome, or necropsy findings consistent with pneumonia, or acute respiratory distress syndrome without an identifiable cause.

I found a number of Dutch translations for SARS in both secondary sources and primary sources. The first translation, with the most hits in primary sources, is 'SARS'. The term is suggested by **Pinkhof I 2014-11-02** and is found in numerous scientific articles. It is always written in capital letters since it is an abbreviation.

The translation, 'ernstig acuut luchtwegensyndroom' is also suggested by **Pinkhof I 2014-11-02** but is very uncommon in scientific circles, for that reason I included this term in the <extrasyn> field in my terminological records. The third translation I encountered is similar to the second, 'ernstig acuut ademhalingssyndroom'. These last two translations are attempts at translation of severe acute respiratory syndrome and it is worth noting that they are frequently used by media reporting on SARS outbreaks in both Belgium and The Netherlands, for example **De Telegraaf 2014-10-21** and **De Standaard 2014-10-21**. In primary sources, however, they are extremely rare since neither produces any hits on **Google Scholar.**

The following table outlines the hits found for the Dutch translations on **Google** and **Google Scholar.** As was previously stated, the abbreviation SARS is the most widespread Dutch term used in medical science.

	Google	Google Scholar
ernstig acuut luchtwegensyndroom	399	0
ernstig acuut ademhalingssyndroom	974	0
SARS	278,000	961

To narrow down the seraches of SARS to Dutch I selected "Zoeken in pagina's in het Nederlands" in **Google** and **Google Scholar.**

2.3. Severe Dengue

C02.081.270.200	SEVERE DENGUE	DENGUE HEMORRAGISCHE KOORTS

Severe dengue, or dengue hemorrhagic fever is a more severe form of dengue with a mortality rate of 50 percent, especially in children.

Severe dengue is a term that is quite common in scientific contexts, producing 4,740 hits on **Google Scholar**. Nevertheless, medical dictionaries tend to refer to the term "dengue hemorrhagic fever" or its synonyms when describing this disease. Through consultation of **International 1066, Dorland's 486, Stedman's 472, Churchill's 695** I encountered a number of synonyms for dengue hemorrhagic fever including hemorrhagic dengue, Bangkok hemorrhagic fever, Philippine hemorrhagic fever and Thai hemorrhagic fever. The geographical differences can be explained by manifestations of the same disease in different locations.

Dengue shock syndrome is often mentioned together with dengue hemorrhagic fever. This is not a full synonym for dengue hemorrhagic fever, however, it may arise in patients with dengue hemorrhagic fever. I chose not to include dengue shock syndrome as a synonym in my terminological records because the meaning of the term does not fully correspond with

dengue hemorrhagic fever. **Dorland's 486** definition of hemorrhagic dengue provides more relevant information about dengue shock syndrome, which supports the argument that it is not a full synonym:

> A severe form of dengue, characterized by hemorrhagic manifestations such as thrombocytopenia and hemoconcentration. The World Health Organization distinguishes four types according to severity: grade I, fever, constitutional symptoms, and positive tourniquet test; grade II, grade I plus spontaneous bleeding into skin, gums, gastrointestinal tract, and other sites; grade III, grade II plus circulatory failure and agitation; and grade IV, profound shock with undetectable blood pressure and pulse. Grades III and IV are also known as dengue shock syndrome.

As it is said in this definition dengue shock syndrome comprises the last two and most severe grades of hemorrhagic dengue. This phenomenon is also mentioned in the scope note provided by **Medical 2014-11-26** for severe dengue. For dengue shock syndrome there are synonyms such as dengue hemorrhagic shock syndrome and hemorrhagic fever syndrome, found in **Churchill's 1846** and **International 2793**. Another synonym called dengue hemorrhagic fever shock syndrome (DHFS) is found in **Mosby's 452**. The descriptions of these definitions are somewhat similar when it comes to description of the symptoms, but they tend to focus on different aspects of the disease, for example **International 2793** is the only one to mention the most common location of the disease (Southeast Asia) and **Mosby's 452** briefly outlines treatment.

Both dengue hemorrhagic fever and dengue shock syndrome are also commonly referred to in medical science as DHF and DSS.

The English spelling of the term is fairly unequivocal, except that there is also a British spelling "haemorrhagic fever", found for example in the description of dengue in **Oxford Medical Companion 190**. The use of "ae" for "e" is a common British alternative spelling. This spelling is not negligible and is also included in my terminological records because there are 148,000 hits for it on **Google**.

Pinkhof I 2014-11-26 does not suggest a translation for dengue hemorrhagic fever, in fact **Pinkhof II 333** did not translate the English terms dengue haemorrhagic fever and dengue shock syndrome, which are both included in the Dutch description of dengue. So I researched the translated terms online and found that dengue hemorragische koorts provided most hits on **Google Scholar**.

This table shows the frequency of the synonyms and variants in spelling in both the English and Dutch terms.

	Google	**Google Scholar**	**PubMed**
(EN) severe dengue	86,100	4,740	1,365
(EN) dengue hemorrhagic fever	351,000	19,500	1,492
(EN) hemorrhagic dengue	28,800	1,280	90
(EN) dengue haemorrhagic fever			
(NL) dengue hemorragische koorts	1,330	20	0
(NL) hemorragische dengue	298	4	0

In both Dutch and English medical scientific contexts it is often the case that DHF and DSS are mentioned together, for example in the article written in English by **Aye et al**:

> Many individuals, adults or children, who die during the course of dengue hemorrhagic fever (DHF)/dengue shock syndrome (DSS) do so in facilities with advanced critical care resources **(PubMed 2014-10-30 Aye et al. 24767772).**

And in an article written in Dutch by **Kager et al 450:**

> Dengue-hemorragische-koorts (DHK) en dengue-shocksyndroom (DSS) zijn ernstige manifestaties van dengue. De oorzaak is niet geheel opgehelderd, maar de ‘virus enhancement’-theorie wordt algemeen aanvaard.

In Dutch there seems to be no real consensus with respect to the spelling. In many cases dengue shocksyndroom is written with a hyphen between dengue and shocksyndroom. The same applies for dengue hemorragische koorts where the hyphen occurs between dengue and hemorragische. In accordance with Dutch spelling I see no reason to write a hyphen between the two words.

2.4. Simian Acquired Immunodeficiency Syndrome

C02.782.815.616.850	SIMIAN ACQUIRED IMMUNODEFICIENCY SYNDROME	SAIDS

To understand this term it is important to note the simple difference between simian immunodeficiency virus (SIV) and simian acquired immunodeficiency syndrome (SAIDS). SIV is a virus and it causes SAIDS, which is the syndrome. This is similar to the relationship between the human immunodeficiency virus (HIV) and the acquired immunodeficiency syndrome (AIDS). I did not find a definition for the term as a whole, but I did manage to compile definitions for separate terms.

According to **International 2613**, simian stands for: "Of or relating to monkeys or apes".

The definition **Dorland's 1820** provides for AIDS is as follows:

> The most severe manifestation of disease due to infection with human immunodeficiency virus (HIV). The criteria established by the Centers for Disease Control and Prevention for the diagnosis of AIDS include (1) presence of certain opportunistic infections indicating an underlying defect in cell-mediated immunity in the absence of known causes of underlying immunodeficiency or other host defense defects; or (2) CD4+ cell count of less than 200/mL; or (3) CD4+ cell percentage of less than 14 per cent.

This definition, however, deals with AIDS in humans because it lists HIV as the cause.

The link between HIV and SIV is that at one point, a strain of SIV was transmitted from monkeys to humans and this gave rise to HIV and consequently AIDS in humans.

To track down the origins of SAIDS, we need to track down the presence of SIV in primates. Interestingly, **Van Heuverswyn & Peeters 339** state that SIV only occurs naturally in Old World primates in Africa. The first case of SIV was diagnosed in a rhesus monkey in 1985. According to **Collins 1088,** Old World primates are:

> monkeys of the family *Cercopithecidae,* including macaques, baboons, and mandrills. They are more closely related to anthropoid apes than are the New World monkeys, having nostrils that are close together and nonprehensile tails.

SIV is widespread amongst these primates and in many cases, none of its strains appear to cause severe illnesses in its natural host. SIV does cause an AIDS-like illness in individuals from another species. For example, an AIDS-like illness may occur in a rhesus monkey after that individual has been infected with a strain of SIV from sooty mangabeys.

According to **Heyes et al 2015-03-31** and **Pawar et al,** the symptoms of SAIDS are very similar to the symptoms we find in AIDS because SIV also eliminates the CD4+ T cell population and it induces severe diarrhea and anorexia. In fact, AIDS-like diseases in monkeys are so similar to human AIDS that they have been used to study AIDS and AIDS treatment in humans **(PubMed 2015-03-31, Pawar et al. 18366326).**

SAIDS is also called simian AIDS, sometimes written with a hyphen (e.g. in **PubMed 2014-02-11 Degenhardt et al. 19165326**).

I did not find any translations for simian acquired immune deficiency in Dutch, but I did find other diseases that contained the word simian, such as simian B-disease: **Kerkhof 181** translates this term as "apenherpes B-virus". On the basis of this result, I researched the term "apenaids", but did not find evidence for the term in scientific medical texts on this subject. On the website of **VRT Taal 2015-03-29**, I found that the correct spelling of the Dutch term was "apenaids". This term is listed on the site as a compound with "aids". When AIDS is used in a Dutch compound, it is no longer written in capital letters. I did find a hit for "apen-AIDS" on **Kennislink 2015-05-19**. The use of the hyphen is allowed by **Woordenlijst 2015-05-13** when it improves the readability of the word.

Figures for the various English solutions, and possible Dutch equivalents are found in the table below.

	Google	**Scholar**	**PubMed**
(EN) simian acquired immune deficiency syndrome	3,280	495	23
(EN) simian acquired immunodeficiency syndrome	13,400	976	3691
(EN) simian AIDS	23,800	3,780	78
(EN) SAIDS	442,000	8,290	752

(NL) "SAIDS"+aids+apen/ Zoeken in het Nederlands	335	5	/
(NL) apenaids	1680	1	/

This table shows that simian acquired immunodeficiency syndrome is more frequent than simian acquired immune deficiency syndrome, which is also mentioned as an entry term by **Medical 2015-05-19**.

I experienced some difficulty researching SAIDS in Dutch since most of the hits for the Dutch term "SAIDS" have nothing to do with the disease that is researched in this paper: on many occasions the hit refers to a writer named Edward Said. I filtered with further search words in an attempt to narrow down the search.

The sole hit on **Scholar Google** I found for apenaids does not refer to a medical text that would have been useful in this paper, instead, the term apenaids was used in a book by the Belgian writer Herman Brusselmans. The term also occurs in several Dutch and Flemish newspapers.

I did find a relevant Dutch hit for SAIDS in a literature study for a thesis by **Van Duijn 7** published by the faculty of veterinary sciences of Ghent University. The study examines the link between SIV and HIV in the context of AIDS research. In this case, SAIDS is used as an acronym.

I would argue that SAIDS is the best possible Dutch translation because it is found in primary sources.

2.5. Smallpox

C02.256.743.826	SMALLPOX	POKKEN

Through my research I have found that smallpox is a well-documented term. Definitions for smallpox were found in almost every English medical dictionary consulted (**Dorland's 1714, Oxford Medical Companion 906, Mosby's 1448, Taber's 2016, Stedman's 1649, International 2625 and Stedman's II 1550**) and are relatively consistent.

Smallpox was a dreaded scourge in the past, but is now fully eradicated according to **International 2625**, however, there is some disagreement concerning the last reported case. **Stedman's 1649 and WHO 2014-11-26** state that the last case was reported in Somalia in 1977, while **International 2625, Churchill's 1734** and **Stedman's II 1550** claim that the last case worldwide occurred in 1975. Smallpox is caused by the variola virus. This virus is unique among orthopoxviruses in that it is an exclusively human pathogen.

All dictionaries were consistent in mentioning variola as a synonym for smallpox. There are several types of smallpox, I chose to focus my research on variola major and variola minor since this is a common distinction made in medical science. Alastrim is a commonly used synonym for variola minor. Many scientists use variola major as a synonym for smallpox. In this thesis, however, I have decided not to do so because according to my research variola major is merely the most common form of smallpox and therefore not a full synonym for smallpox. The full synonym for smallpox is simply variola.

Another rudimentary distinction that could be investigated are the differences between ordinary, modified, flat, and hemorrhagic smallpox mentioned by both **Dorland's 1714** and **International 2625**. Note that these last 4 types of smallpox are subdivisions of variola major according to **Centers for Disease Control and Prevention 2014-11-26.**

As previously stated, variola major is the more severe variant of smallpox with a case-fatality rate of 20 – 30%. This variant predominated throughout the 19th century. Variola minor or alastrim is a less severe form of the disease and was first identified in South Africa in the late 19th century and then spread to America and other continents according to the **Encyclopedia of Microbiology 291**.

Under both terms smallpox and variola I have found many variants in the medical dictionaries I consulted. I found the most in **International 2625 (smallpox)** and **International 3098 (variola)** accompanied by a short description, I selected several variations:

- Inoculation smallpox: smallpox contracted from the deliberate, direct transmission of blister fluid from a person with the disease to the skin of a healthy person. Before the development of vaccination (with vaccinia or cowpox), the procedure was widely used to prevent subsequent severe, disfiguring smallpox.
- Ordinary smallpox: the most common type of smallpox. At the end of the incubation and prodromal periods, fever drops and a maculopapular rash erupts in a centrifugal pattern. Within 14 – 18 hours, the rash becomes vesicular, the, within days, pustular.

Scabs form as the pustules dry, and pitted scars remain when scabs fall off. Mortality ranges from 1 to 50% in unvaccinated persons. Also called *variola vera*

- Variola hemorrhagica pustulosa: a form of hemorrhagic smallpox in which the hemorrhages appear within the pustules as well as between them
- Variola major: *smallpox*.
- Variola minor: *alastrim*.

Note that there are several regional variants that refer to the same kind of smallpox. Some examples include American smallpox, Sanaga smallpox and West Indian smallpox. This is because the disease was exported to different regions of the world at different times.

Another term which frequently occurs together with smallpox in medical dictionaries is variolation which refers to the treatment of the disease. **Churchill's 2052** describes variolation as the process where an uninfected person is inoculated with the variola virus, more specifically the **Encyclopedia of Microbiology 767** states that it is a procedure where dried pus was introduced from smallpox pustules into healthy individuals. The process is now obsolete according to **Stedman's 1931** but was formerly used for protection against natural smallpox. The term also exists in Dutch, it is called "variolatie".

This table shows the relative frequency of the terms and the synonyms in both English and Dutch.

	Google	**Google Scholar**	**PubMed**	**NTvG**
(EN) smallpox	1,440.000	213,000	9,100	/
(EN) variola	222,000	34,000	1,614	/
(NL) pokken	134,000	2,920	/	4,188
(NL) variola	11,000	146	/	254

Even though all dictionaries mentioned variola as a synonym for smallpox, it is still far less common in medical articles than smallpox.

In searching a Dutch translation, I have found similar results to the English term smallpox. Smallpox is translated to pokken but the terms variola, variola major, variola minor and alastrim remain identical in Dutch. In Dutch, variola and its variants are almost exclusively

found in articles that predate the 1970's and just like in English, pokken is much more common than variola (derived from the Latin varius).

Kerkhof 304 also lists both smallpox and variola as translation for the Dutch term pokken. Interestingly, the English term smallpox is translated by **Kerkhof 182** as both pokken and variola minor. The term variola major is used as by **Kerkhof 330** a Dutch translation for smallpox, hemorrhagic/malignant. When I looked up variola as a Dutch term in **Kerkhof 330**, I could only find the two variants, variola major and variola minor and not variola itself.

2.6. Superinfection

C02.597.880	SUPERINFECTION	SUPERINFECTIE

Superinfection is a well-documented term and most medical dictionaries I consulted contain a definition for the term. However, not all definitions list the same criteria for a superinfection. For example **Stedman's 1730** simply defines it as "a new infection in addition to one already present". This definition does state that the second infection must be caused by a similar pathogen as the first. To fully grasp the meaning of the term, it is important to define it correctly first so that the relation with similar terms, such as secondary infection, reinfection, hyperinfection and coinfection is absolutely clear.

According to **Pinkhof I 2014-11-29**, a superinfection occurs when a person is infected twice by the same pathogen, while not being immune to the first infection. A clear example of superinfection is HIV-1 superinfection, described by **Blish et al**: "Human immunodeficiency virus type 1 (HIV-1) superinfection occurs when an individual chronically infected with one strain of HIV-1 becomes infected with a second strain." **(PubMed 2014-12-07, Blish et al. 18842728).** This example is in accordance with the definition that is provided by **IATE 2015-03-16** as well: reinfection by the introduction of organisms of the same species as those already causing the infection.

The difference with a secondary infection is that a secondary infection occurs during or after treatment of another pre-existing infection and is caused by a different pathogen than the pathogen that caused the initial infection, as stated in **Dorland's 935**.
An example of a secondary infection is an ear infection or bacterial pneumonia after a viral upper respiratory infection according to **Medline Plus 2014-12-07** and **the National Institute on Deafness and other Communication Disorders 2015-03-16.**

The difference between superinfection and coinfection is the timing of the infections. **Dorland's 382** states that coinfection is a simultaneous infection by separate pathogens,

The line between reinfection and superinfection is not always equally clear. This is mostly due to the fact that reinfection can mean two things according to **Dorland's 1621**: it defines reinfection as follows: "a second infection by the same pathogenic agent, or a second infection of the same person or organ by a different pathogenic agent." This definition does not clarify whether the second infection occurs when the first infection has been successfully treated or whether it occurs during treatment. This issue also presents itself in the definition listed by **Merriam Webster 2014-12-07**: "infection following recovery from or superimposed on infection of the same type." In the second meaning, reinfection can mean the same thing as superinfection. In the first meaning, it is a different kind of infection. Once again, the timing of the infection plays an important role in the definition of the terms.

Consequently, I found articles in medical science that referred to superinfection as a synonym for reinfection, such as **Ronen et al:**

> HIV superinfection (reinfection) has been reported in several settings, but no study has been designed and powered to rigorously compare its incidence to that of initial infection. Determining whether HIV infection reduces the risk of superinfection is critical to understanding whether an immune response to natural HIV infection is protective **(PubMed 2014-12-07, Ronen et al. 24009513).**

It is notable that many of these instances relate to infections with HIV.

Smith, D.M. et al 438 give an explanation for the variable use of reinfection and superinfection, they state that reinfection is often used because some feel that the super in superinfection may imply that the second infection is stronger, which may or may not be the case. **Smith, D.M. et al 438** feel that the term reinfection may also be confusing because it may imply that the first virus had been cleared before the second infection occurred.

Because of this ambiguous use of the term reinfection, I did not consider it to be a synonym for superinfection.

In this table with synonyms and variants we see that the term superinfection is quite common:

	Google	**Google Scholar**	**PubMed**	**NTvG**

(EN) superinfection	430,000	52,300	4,705	/
(EN) reinfection	542,000	85,700	6,215	/
(NL) superinfectie	4,840	139	/	85
(NL) surinfectie	2,590	22	/	1

In English, there is a common abbreviation for superinfection, namely SI. It is found in many medical articles.

The most logical translation for superinfection is listed by both **Pinkhof I 2014-11-29** and **Reuters 628**; superinfectie. **Pinkhof I 2014-11-29** also lists surinfectie as a synonym for superinfectie. This synonym occurs in several medical articles, but interestingly, it has no counterpart in the English language though it does exist in French. According to **IATE 2015-04-01** the French term is "surinfection".

The Dutch counterpart for (EN) reinfection is re-infectie and is also described by **Pinkhof I 2014-11-29**. The term is not listed as a synonym for superinfectie or surinfectie, clearly suggesting that it is not a synonym and that re-infectie in Dutch can only occur following recovery, which corresponds with the first definition given by **Merriam Webster 2014-12-07** for reinfection.

In Dutch, the abbreviation SI does not occur.

Kerkhof 190 does not list a Dutch equivalent term for the English term superinfection, but gives an explanation instead: "herhaalde infectie door een verwekker". This explanation is somewhat ambiguous and unclear when we compare it to the complexities explained in the above discussion. In its Dutch-English part, **Kerkhof 321** does list the term superinfectie in Dutch, but gives hyperinfection as the English translation.

Dorland's 890 gives the following definition for hyperinfection:

> Infection by exceptionally high numbers of organisms in immunocompromised individuals, used especially of infection by high numbers of helminths as a result of autoinfection.

This makes clear that hyperinfection is not synonymous with superinfection: a superinfection may or may not be a hyperinfection (depending on the number of infecting organisms); and a hyperinfection may or may not be a superinfection (depending on whether it is an infection with the same agent or not).

2.7. Tick-borne Diseases

C02.081.885	TICK-BORNE DISEASES	TEKENBEETZIEKTEN

The term tick-borne diseases is provided with the following scope note in **Medical 2015-03-21**:

> Bacterial, viral, or parasitic diseases transmitted to humans and animals by the bite of infected ticks. The families Ixodidae and Argasidae contain many bloodsucking species that are important pests of man and domestic birds and mammals and probably exceed all other arthropods in the number and variety of disease agents they transmit. Many of the tick-borne diseases are zoonotic.

Tick-borne diseases is a collective term for diseases that can be transmitted by ticks or tick bites. This means that tick-borne diseases are vector-borne diseases since they are caused by organisms that transmit pathogens and parasites from one infected person (or animal) to another, causing serious diseases in human populations, as is stated by the **WHO 2014-05-12**. The term tick-borne diseases encompasses a whole range of diseases, a number of which are listed in the **MeSH Tree 2015-03-12** under tick-borne diseases but there are many more. One of the illnesses listed is Lyme disease, which is one of the most commonly reported tick-borne diseases.

The spelling of the word varies in English. In the article written by **Davidson** from 1941, the term is written as tick borne diseases without a hyphen and with a space in between the words **(PubMed 2015-03-04 Davidson, 17647756).** Another, more current variant is tickborne diseases, which is used in an article from 1997 by **Fritz et al (PubMed 2015-03-04 Fritz et al. 9180183).** Nevertheless, the spelling tick-borne disease(s) occurs most and is the term used in **Medical 2015-03-12** and in medical dictionaries.

I did not find any direct hits for tick-borne disease in **Dorland's,** but I did find terms such as "a tick-borne protozoal disease" in **Dorland's 531**. In **Taber's 922** I initially encountered

similar problems when looking for exact hits for tick-borne disease. In **Taber's 922** I found "tick-borne viral diseases", but later on, on page 1276 I found an exact hit for the term I was looking for.

Tick-borne diseases are found in many places across the globe and most often occur in forests, bushes, and semi-desert grasslands. Tick-borne diseases occur in both humans and animals and can be deadly. It was stated in **Medical 2015-03-12** that many of the tick-borne diseases were zoonotic, this means that they can only be transmitted from animals to humans.

The figures below show the relative frequency of the synonyms and their Dutch equivalents in both the plural and the singular forms.

	Google	**Scholar Google**	**PubMed**
(EN) Tick-borne disease(s)	Plu: 387,000 Sin: 250,000	Plu: 16,200 Sin: 8,220	Plu: 1846 Sin: 577
(NL) tekenziekte(n)	Plu: 3,660 Sin: 3,300	Plu: 2 Sin: 5	/
(NL) tekenbeetziekte(n)	Plu: 6,600 Sin: 1,730	Plu: 1 Sin: 6	/
(NL) door teken overgedragen ziekte(n)	Plu: 16,100 Sin: 4,700	Plu: 15 Sin: 3	/
(NL) door teken overdraagbare ziekte(n)	Plu: 720 Sin: 474	Plu: 6 Sin: 2	/
(NL) ziekte(n) overgedragen door teken	Plu: 331 Sin: 53	Plu: 0 Sin: 0	/
(NL) door teken overgebrachte ziekte(n)	Plu: 543 Sin: 629	Plu: 5 Sin: 1	/
(NL) ziekte(n) overgebracht door teken	Plu: 344 Sin: 170	Plu: 4 Sin: 1	/

I found out that the concept of tick-borne disease(s) is often defined in Dutch, consequently, I encountered many different options containing small differences in spelling or word order when looking for a Dutch translation. The translation "door teken overgedragen ziekten" had the most hits on **Google Scholar.** The word order of this phrase can be changed and that also leads to different hits. For example, "ziekten overgedragen door teken" produced no hits on **Google Scholar** and "door teken overdraagbare ziekten" produced 6 hits on **Google Scholar.** I included these small variations in word order in the field Extrainfo in my terminological records.

There are, however, even more options for finding a translation for tick-borne diseases. Another option is "door teken overgebrachte ziekte(n)", and another variant with a different word order is "ziekte(n) overgebracht door teken". Both these variants are not significantly successful in **Google** or **Google Scholar**.

When looking at specific tick-borne diseases, for example at tick-borne encephalitis, I encountered translations such as tekenencefalitis. This Dutch term was quite common (15,200 **Google,** 20 **Google Scholar**). In a similar way, I researched the term tekenziekte(n). The term is used on **Google** (2690 hits), but has significantly less hits on **Google Scholar**, nevertheless it can also be considered as a translation for tick-borne disease(s). The Dutch "tekenbeetziekte" is also a valid translation, however, **Dorresteijn & Kouwenberg 1014** say that "tekenbeetziekte" is a term that is used in popular speech. An argument against this is that this term is found in a reliable Dutch source; **Coëlho 888-889**.

I did not find many exact hits in Dutch secondary sources because the term is mostly explained in Dutch, for example, **Merck 871** mentions "ziektes die overgebracht worden door teken" which is not entirely similar to the term I listed in my terminological records. Similarly, **Elseviers Medische Encyclopedie 406** mentions "de rol die teken vervullen bij het overbrengen van infectieziektes".

Tekenziekte seems the most straightforward translation and is also found in a Dutch secondary source, the same goes for tekenbeetziekte. Door teken overgedragen ziekten produced the most hits on **Google Scholar** and "door teken overgebrachte ziekten" has the

most hits on **Google**. In conclusion I would argue that tekenbeetziekte is the best translation because it was slightly more common in more reliable sources such as **NTvG**.

2.8. Torovirus Infections

C02.782.600.550.800	TOROVIRUS INFECTIONS	TOROVIRUSINFECTIES

Torovirus is a relatively new virus that belongs to the Coronaviridae, which is the same family as the SARS virus. The scope note from **Medical 2015-03-26** tells us that torovirus infections are infections with viruses of the genus Torovirus, which belongs to the family Coronaviridae. The scope note is not very specific as to who is affected by the infection or what the symptoms are.

I found a definition for torovirus in three medical dictionaries; **Dorland's 1940, Saunders 1148** and **Stedman's 1847** and all definitions have similarities and differences.

Dorland's 1940:

> a genus of viruses of the family Coronaviridae having a tubular nucleocapsid that may bend into an open torus; organisms cause gastrointestinal disease. It includes Berne and Breda viruses, as well as human and porcine toroviruses.

Saunders 1148:

> a genus in the *Coronaviridae* family that includes Berne Virus, recovered from horses in Switzerland, and Breda virus, recovered from diarrheic calf feces in the United States. Virions are enveloped and contain an elongated helical nucleocapsid with a single-stranded negative sense RNA genome. The capsid is bent into an open torus or doughnut-shaped structure.

Stedman's 1847:

> A genus in the family Coronaviridae that causes enteric infections in animals.

Both **Dorland's 1940 and Stedman's 1847** state the symptoms of the illness caused by the infection, gastrointestinal disease in **Dorland's 1940** and an enteric infection in **Stedman's 1847**. There is no real mention of symptoms in the definition provided by **Saunders 1148,**

except that the Breda virus was recovered from diarrheic calves. The main difference between **Stedman's 1847, Saunders 1148** and **Dorland's 1940** is that the first two claim that the torovirus solely affects animals (**Saunders** is more specific in this respect than **Stedman's**), whereas **Dorland's 1940** claims it affects both humans and animals. When we analyze the definition by **Saunders 1148** in more detail we find that they mention the Berne and Breda virus variants, which relate to horses and calves, whereas **Stedman's 1847** does not specify which animals are affected. **Dorland's 1940** is also more specific about which animals can be affected by this disease, namely horses, calves and swine.

The affected animals that are listed in the definition by **Dorland's 1940** are also mentioned by **Zhou et al**, who adds that toroviruses have been detected in faecal samples from cows, horses, pigs, humans and turkeys. The paper also states that toroviruses are predominantly prevalent in young animals and humans **(PubMed 2014-11-29, Zhou et al. 24903213).** There was also a survey for torovirus infections in New Zealand cats which was done by **Smith et al.** This study from 1997 concluded that there was no evidence of toroviruses or torovirus-like particles in the faeces of the cats that were tested.

Four types of toroviruses are recognized by the **International Committee on Taxonomy of Viruses (ICTV) 2014-12-08. Maestre et al 1** also mention them as: bovine torovirus, porcine torovirus, human torovirus and equine torovirus. Acoording to this source, torovirus infection causes diarrheal illnesses and gastrointestinal diseases in both humans and animals.

In the cases of calves and horses, **Dorland's 1940** respectively refers to the Breda and Berne viruses. **Woode et al 223** explain that the name Breda was given to the virus variant after the town in Iowa from which area it was isolated. It is often abbreviated to BRV.

The term Berne virus has a similar origin; it was discovered as the first of the toroviruses from a horse in 1972 in Bern, Switzerland. This term is the prototype member of this genus and it is often abbreviated as BEV. BEV is also referred to as equine torovirus according to **Maestre et al 2**.

The only difference between the Berne virus and equine torovirus is the name itself. The **ICTV 2014-12-08** renamed the Berne virus into equine torovirus in 1999 **ICTV 2014-12-08** and Breda virus was changed to bovine torovirus in the same year. There are abbreviations for every variant of the torovirus: bovine torovirus can be abbreviated to BToV, porcine torovirus to PToV, human torovirus to HToV and equine torovirus to EToV.

The infection in swine takes place shortly after weaning, when immunological protection has declined, according to **Kroneman et al (PubMed 2015-02-19, Kroneman et al. 9557628).** According to **Zhou et al,** torovirus infections are generally asymptomatic, however, their presence may worsen disease consequences in concurrent infections with other enteric pathogens. **Maestre et al 1** claim that the equine torovirus Berne virus (BEV) induces apoptosis in infected cells at late times post infection.

In accordance with Dutch spelling, the most likely Dutch translation is torovirusinfectie, written in one word and without a capital, just like 'rubulavirusinfectie' earlier in this thesis. I found 3 hits on **Google** for torovirusinfectie, and none on **Google Scholar**. Two of these **Google** hits referred to the **UMLS 2015-05-13** and one referred to the **Index Dierenarts 2015-05-19**. I counted them as secondary sources. On **Vetline.nl 2015-05-20** I found a hit for "boviene torovirus infecties". The spelling is not correct in this example so it is not included in my terminological records.

2.9. Transmissible Enteritis Of Turkeys

C02.782.600.550.200.325	ENTERITIS, TRANSMISSIBLE, OF TURKEYS	OVERDRAAGBARE KALKOENENTERITIS

Transmissible enteritis of turkeys is a disease that is caused by a turkey coronavirus, **Loa et al 57** state that this term is frequently abbreviated to TCV.

Boynton 3 states that several terms are synonymously used to describe turkey coronaviral enteritis (TCE): mud fever, Bluecomb disease of turkeys, transmissible enteritis of turkeys, and TCV enteritis of turkeys all supposedly refer to the same disease. This is, however, not entirely true. Mud fever is not a full synonym for transmissible enteritis of turkeys because in most cases it refers to an entirely different condition which will be explained later in this thesis.

In a similar way, **Velayudhan et al** state that mud fever and coronaviral enteritis are synonyms for blue comb disease. The say that all these terms refer to a highly infectious disease affecting turkeys of all ages **(PubMed 2014-12-12, Velayudhan et al. 14667027).** However, it must be kept in mind that mud fever and coronaviral enteritis do not occur exclusively in turkeys. Coronaviral enteritis can also occur in other animals such as calves and

ostriches according to **Frank & Carpenter 103.** The same can be said about transmissible enteritis since mice have also been diagnosed with transmissible enteritis as was shown by **Sun et al 2015-04-23**. Only when the term transmissible enteritis is specified to turkeys can it become a full synonym for transmissible enteritis of turkeys.

Mud fever has several meanings. The first meaning in **Dorland's 693** pertains to a type of leptospirosis seen in Germany and Russia, affecting workers in flooded fields or in swamps. It is also called autumn fever, marsh fever, and swamp fever. The second meaning in **Dorland's 693** is related to horses, "a disease of horses consisting of dermatophilosis, leptospirosis, and greasy heel". Neither of these meanings refers to turkey coronaviral enteritis or any of its synonyms.

International 1069 describes mud fever as

> Leptospirosis caused by *Leptospirosainterrogans*serovar*grippotyphosaro,* occurring principally among workers in flooded fields or other muddy workplaces.

International 1069 does not mention a second meaning and also fails to mention a connection with transmissible enteritis of turkeys.

Saunders 746 also mention mud fever in their veterinary dictionary. They argue that mud fever is a condition of horses affected by dermatophilosis, leptospirosis and greasy heel. Again there is no link to transmissible enteritis of turkeys or any of the synonyms I discussed. **Medical 2015-04-12** itself also regards mud fever as an alternative term for canicola fever, a different condition. For these reasons, I do not consider mud fever as a synonym for transmissible enteritis of turkeys.

It is worth to note that the term bluecomb itself is not a synonym for transmissible enteritis of turkeys because it also affects other animals so it is not specific enough. Strictly speaking, I only found one exact hit in secondary sources for the term bluecomb (disease) of turkeys in **International 813**. I did find the term "bluecomb" in **Saunders 143**. Both these hits refer to turkey coronavirus enteritis. Interestingly, **International 813** also mentions bluecomb disease of chickens, which backs up the claim that bluecomb is not specific enough to be used as a synonym for transmissible enteritis of turkeys. Also **Medical 2015-04-12** specifies bluecomb by adding 'of turkeys' at the end. This is necessary because bluecomb occurs in different

species of fowl, for example it also occurs in chickens. The term bluecomb of turkeys is widely used as a synonym for transmissible enteritis of turkeys.

Merriam Webster 2014-12-13 lists 'blue comb' as one of the meanings of mud fever. The other two meanings correspond with what I found in **Dorland's 693** and **International 1069**.

Saunders 396 also provide a definition for turkey coronaviral enteritis that corresponds to transmissible enteritis of turkeys:

> Acute, highly infectious disease of turkeys of all ages characterized by inappetence, wet droppings, weight loss and heavy mortality is caused by a coronavirus. Called also bluecomb disease.

The relative frequency of the competing synonyms and variants is shown in the table below:

	Google	**Google Scholar**	**PubMed**
(EN) transmissible enteritis of turkeys	6,400	78	5
(EN) bluecomb of turkeys	1,320	54	2
(EN) blue comb of turkeys	5	2	0
(EN) turkey coronaviral enteritis	323	43	6

This table shows that the MeSH term is the favoured synonym and also that bluecomb is mostly spelled in one word.

Finding a reliable translation for this disease name was not easy. In Dutch, mud fever is translated to modderkoorts, but this translation only pertains to the first two meanings of mud fever I found in **Dorland's 693.** When combining my search for "modderkoorts" with "kalkoenen" I found no relevant hits.

I found two virtually identical hits on **Google** for "overdraagbare enteritis van kalkoenen", but they look like giving a literal machine translation of transmissible enteritis of turkeys and there are no other sources to confirm this term.

I found three secondary hits for "overdraagbare kalkoenenteritis" that referred to the **UMLS 2015-04-24;** in the absence of other evidence**,** I would argue that this is the best possible translation.

2.10. Transmissible Gastroenteritis Of Swine

C02.782.600.550.200.400	GASTROENTERITIS, TRANSMISSIBLE, OF SWINE	OVERDRAAGBARE VARKENSGASTRO-ENTERITIS

When comparing the different definitions that I found for transmissible gastroenteritis of swine, I found that they focus on different aspects of the disease. These are the definitions I found:

> **International 1184**: A non-inflammatory disease of the small intestine of swine, caused by a coronavirus, and characterized by atrophy of the intestinal villi. Abbreviation: TGE
>
> **Dorland's 764:** a viral disease of swine caused by the porcine transmissible gastroenteritis virus, occurring chiefly during the winter and characterized by severe diarrhea and acute inflammation of the gastric mucosa, which may lead to ulceration and hemorrhage. The mortality rate among piglets is very high.
>
> **Saunders 1156:** a highly infectious disease of baby pigs caused by a coronavirus. It is manifested by vomiting and diarrhea, severe dehydration and a high mortality rate. In older pigs the syndrome is similar but less severe and many pigs survive – others are infected but show no clinical signs. Called also TGE

Dorland's 764 remarks that the disease is caused by the porcine transmissible gastroenteritis virus, whereas **International 1184** and **Saunders 1156** say that it is caused by a coronavirus. I looked up porcine transmissible gastroenteritis virus and I found out that the **ICTV 2015-04-02** uses this term as an alternative name for transmissible gastroenteritis virus. In fact, it was

renamed to transmissible gastroenteritis virus in 1998. Both porcine transmissible gastroenteritis virus and transmissible gastroenteritis virus are listed under Coronaviridae.

Unlike **International 1184** and **Saunders 1156**, **Dorland's 764** does not mention the abbreviation that is widely used in medical science for this term, TGE.

Not all definitions are equally specific as to which swine are most vulnerable to the disease. The definition provided by **Saunders 1156** is most specific in this respect because it says that the disease causes a high mortality rate in baby pigs. They also state that in older pigs the effects of the disease are less severe and that the mortality rate is lower. The fact that others are infected but show no clinical signs is also important and is only mentioned by **Saunders 1156.**

Similarly, **Dorland's 764** state that the mortality rate among piglets is very high, but unlike **Saunders 1156** they do not say that the symptoms such as severe diarrhea are less severe in older pigs. An important detail that is only mentioned in **Dorland's 764** definition is that the disease mainly occurs during the winter. The definition I found in **International 1184** is the shortest and least specific.

In the term base **IATE 2015-02-04,** I found transmissible gastroenteritis of pigs instead of swine**.**. There is a slight distinction between these two terms so I listed this term as an extrasyn for transmissible gastroenteritis of swine in my terminological record. According to the **Cambridge Dictionary 2015-05-15**, swine has become an old-fashioned word for pigs in British usage but is still a common word for the domesticated pig in American English.

The difference between TGE and TGEV is that TGE stands for transmissible gastroenteritis and TGEV stands for the virus, transmissible gastroenteritis virus. Interestingly, these abbreviations also occur in medical scientific texts to refer to porcine transmissible gastroenteritis, for example, **Zhou et al 36**, for example, write "the causative agent of porcine transmissible gastroenteritis (TGE)".

Interestingly, the second definition that is given for transmissible gastroenteritis by **Saunders 1156** refers to turkey coronaviral enteritis:

> A disease of turkeys caused by a coronavirus. It affects birds of all ages and is characterized by wet droppings and weight loss.

The table below shows the relative frequencies of the competing synonyms and the possible Dutch equivalents:

	Google	**Scholar google**	**PubMed**	**NTvG**
Transmissible gastroenteritis of swine	4,090	763	56	/
Porcine transmissible gastroenteritis	15,800	2,010	114	/
Transmissible gastroenteritis of pigs	2,200	130	0	/
(NL) overdraagbare gastro-enteritis bij varkens	249	0	/	0
(NL) overdraagbare varkensgastro-enteritis	2 + 1 spelt wrongly	0	/	0

This table shows that porcine transmissible gastroenteritis is more common than transmissible gastroenteritis of swine on all search engines. However, I could not find the term in any of the medical dictionaries I consulted. In keeping with the instructions of the MeSH Termbase Project, I have also retained the MeSH term transmissible gastroenteritis of swine as the English reference term.

Most of the hits I found for the Dutch translation overdraagbare gastro-enteritis bij varkens come from translation websites such as **Glosbe** and **Linguee** and they all refer to the same sentence from the Europarl corpus; in essence, then, the 249 hits represent only one translated source.

The 2 hits I found for "overdraagbare varkensgastro-enteritis" refer to the **UMLS 2015-04-24** so this translation should also be considered; the same translation (but spelt wrongly, see below) is found in **IATE 2015-04-26**. This means that the second translation has two net hits, both of them from secondary sources.

In Dutch, gastroenteritis is spelled "gastro-enteritis", because according to **VRT Taal 2015-04-02,** compounds with "gastro" are spelled as one word, except when the vowels clash, which is the case in this term. This means that the term "overdraagbare varkensgastroenteritis" suggested by **IATE 2015-04-02** is not correct in terms of spelling. In accordance with the rules, the spelling should be "overdraagbare varkensgastro-enteritis".

In deciding which translation is best I would argue that 2sec weighs a little bit heavier than one pritra source and so in conclusion "overdraagbare varkensgastro-enteritis" is the best translation in my opinion.

2.11. Tropical Spastic Paraparesis

C02.182.600.600	PARAPARESIS, TROPICAL SPASTIC	TROPISCHE SPASTISCHE PARAPARESE

These are the definitions I found for tropical spastic paraparesis:

> **Dorland's 1379:** chronic progressive myelopathy.
>
> **Dorland's 1220** chronic progressive myelopathy: gradually progressive spastic paraparesis associated with infection by human T-lymphotropic virus 1, characterized by progressive difficulty in walking and weakness of the lower limb, sensory disturbances, and urinary incontinence, with no evidence of spinal compression or involvement of motoneurons. Called also HTLV-1–associated m. and tropical spastic paraparesis.
>
> **Taber's 1593:** a gradually progressive disease of the spinal cord caused by infection with human T-cell lymphotropic virus–I. SYN: *HTLV-1–associated myelopathy*. Symptoms include back pain with gradual loss of motor function in one or both legs, ataxia, and urinary incontinence.

These two definitions are very similar, they both mention that the disease gradually progresses and is caused by an infection with human T-cell lymphotropic virus-1. Both definitions also mention HTLV-1-associated myelopathy as a synonym.

Interestingly, **Dorland's 1220** is the only medical dictionary in which I was able to find the term chronic progressive myelopathy. I researched the term in more detail in medical articles and found out that this term might not be very specific. For example, **Jacobson et al** state that

"An increasing spectrum of diseases has been shown to be associated with the human T-cell lymphotropic virus type I (HTLV-I), most notably a chronic, progressive myelopathy termed HTLV-I--associated myelopathy/tropical spastic paraparesis" **(PubMed 2015-05-21, Jacobson et al. 8489210).** Because of the use of the indefinite article "a" in front of chronic progressive myelopathy, one might think that there might also be other chronic progressive myelopathies than tropical spastic paraparesis. Similar information is found in an article by **Al Shoeibi**: "Its main neurologic manifestation is a chronic progressive myelopathy that is referred to HTLV-I Associated Myelopathy (HAM) in Japan and Tropical Spastic Paraparesis (TSP) in Caribbean."**(PubMed 2015-05-21 Al Shoeibi et al. 24470862)** and in an article by **Szymocha et al 2015-05-21**: "Human T-cell lymphotropic virus type 1 (HTLV-1) is the causative agent of a chronic progressive myelopathy called tropical spastic paraparesis/HTLV-1-associated myelopathy (TSP/HAM)."**(PubMed 2015-05-21 Szymocha et al. 10864655).** For this reason I included chronic progressive myelopathy in the <verwant> field in my terminological records.

Medical 2015-04-30 lists tropical spastic paraplegia as one of the entry terms for tropical spastic paraparesis but I do not consider it to be a full synonym because **Casseb 1** states that "In 1985, Roman et al. used the term tropical spastic paraparesis (TSP) for the first time, modifying the term ''tropical spastic paraplegia'' as was used in South India in 1969, because only a few cases were completely paraplegic."

The difference between paraparesis and paraplegia is that, according to **Merriam Webster 2015-04-29**, paraparesis is partial paralysis of the lower limbs. According to **Stedman's 1313**, paraparesis can also be weakness affecting the lower extremities. Paraplegia, however, is paralysis of the lower half of the body. For that reason I do not consider tropical spastic paraplegia as a full synonym.

The term "tropical spastic paresis" is also used in medical science articles, but it is much less frequent. The difference between paraparesis and paresis, according to **International 2095**, is that paresis is a general term for "weakness as distinct from total paralysis, with reduction in muscle power". This makes it a hypernym of paraparesis. According to **International 2088**, paraparesis is a specific type of paresis affecting the lower limbs and lower half of the trunk.

The combination of the terms HTLV-1-associated myelopathy/tropical spastic paraparesis is very common, as is the abbreviation for both terms HAM/TSP. According to **Makdoembaks 94**, HLTV-1 was first associated with tropical spastic paraparesis in 1985:

Translation: In 1985 HTLV-1 was associated with tropical spastic paraparesis and in 1986 this illness was described as 'HTLV-1-associated myelopathy'.

HTLV-1 stands for Human T-cell Lymphotropic Virus type 1. According to **Medical 2015-04-30**, it causes adult T-cell leukemia, T-cell lymphoma, is involved in mycosis fungoides, and tropical spastic paraparesis.

The relative frequency of the competing synonyms and variants is shown in the table below

	Google	**Scholar**	**PubMed**	**NTvG**
(EN) tropical spastic paraparesis	86,600	10,500	2,027	/
(EN) HTLV-1 associated myelopathy	39,800	4,790	538	/
(EN) HTLV-I associated myelopathy	35,500	6,270	888	/
(EN) HTLV-1-associated myelopathy/tropical spastic paraparesis	21,600	2,070	312	/
(EN) HTLV-I-associated myelopathy/tropical spastic paraparesis	16,900	2,350	335	/
(NL) tropische spastische paraparese	1,670	97	/	9
(NL) HTLV-1-geassocieerde myelopathie	43	0	/	0

(NL) HTLV-I-geassocieerde myelopathie	3	1	/	1
(NL) met HTLV-I samenhangende myelopathie	2	3	/	2

I encountered some variations when researching the term "HTLV-1-associated myelopathy" because in some instances the term is written with Arabic numeral 1, with the Roman numeral I. I have included these alternative spellings in the table above because they produced different results in terms of number of hits. Both variations occur frequently in primary sources and in terms of meaning they are full synonyms. In secondary sources such as **Dorland's 1220** and **Taber's 1415** the term is written with the number 1. I mentioned the variation with "I" in the extrainfo field in my terminological records.

The fairly straightforward translation "tropische spastische paraparese" is found in both primary and secondary sources and is the most frequent Dutch term. Translations closer to HTLV-1-associated myelopathy varied. I found hits for "HTLV-1-geassocieerde myelopathie", "HTLV-I-geassocieerde myelopathie" and "met HTLV-I samenhangende myelopathie". The first term produced the most hits on **Google**, but both other terms occurred more in primary sources.

2.12. Vaccinia

C02.256.743.929	VACCINIA	VACCINIA

Vaccinia is a widely documented term that I managed to find in most medical dictionaries. The definitions for vaccinia are fairly similar to each other and also correspond to the scope note provided by **Medical 2015-03-20**.

Vaccinia is often associated with cowpox. The term vaccinia originates from the Latin vacca, which means 'cow'. **Riedel** states that vaccinia was discovered as a cure for smallpox by Edward Jenner in 1798. Jenner's discovery was particularly important because it is widely regarded as the foundation of immunology **(PubMed 2015-05-03, Riedel 16200144).** Vaccinia is often used interchangeably with cowpox, however, it has emerged that the viruses

causing the diseases are very closely related but not entirely identical. The **ICTV 2015-03-20** also lists the vaccinia virus as distinct from the cowpox virus in their current taxonomy.

According to the **Encyclopaedia Brittanica 2015-03-10**, researchers discovered during the 1980's that rodents were also a natural reservoir for the vaccinia virus, and that rodents, not cattle, were responsible for most cowpox infections in humans.

Encyclopaedia Brittanica 2015-03-10 further explains that:

> the vaccinia virus used in modern vaccines, though descended from cowpox, differs genetically from the existing cowpox virus; this difference may be a result of documented contamination of earlier vaccine cultures with variola virus, creating a hybrid that still confers immunity to smallpox infection. Vaccinia, by the strictest definition, does not occur in nature but enters the body during vaccination; though this usually produces a self-limiting, local ulcer like cowpox infection, it can cause a systemic smallpox-like disease in patients whose immunity is compromised, and it has—though rarely—been found to cause encephalitis.

Huygelen also believes there is a difference between the viruses and that the disease was transferred by rodents. He states that:

> the active principle of the smallpox vaccine is vaccinia virus, which in many respects, differs from that of natural cowpox; the term "cowpox" has been used for more than a century and a half to designate the vaccine; it appears itself to be a misnomer, because it is most probably caused by a virus of rodents, which only occasionally infects bovines or other species, especially cats. The origin of vaccinia remains doubtful, but a plausible explanation is that it is derived from horse-pox **(PubMed 2015-05-03, Huygelen, 9027132).**

This theory that vaccinia is derived from horse pox is corroborated by **Riedel**, who states that Jenner was convinced that he was working with a virus of equine origin, which was occasionally transmitted from the horse to the cow by the personnel on the farms **(PubMed 2015-05-03, Riedel 16200144).**

Smith notes that during the entire nineteenth century and the first half of the twentieth century methods were not available to characterize viruses at the molecular and genetic levels. Therefore, the vaccines used all over the world became diverse and this also makes it harder to pinpoint the origin of the original vaccine that was used by Jenner in the early 1800's. He

goes on to mention that phylogenetic analysis indicated that a certain horse pox virus is more closely related to vaccinia viruses than cow pox viruses **(PubMed 2015-04-30, Smith, 23760373).** But this does not prove that vaccinia was derived from horse pox.

Nowadays vaccination against variola (smallpox) is no longer practiced because the disease is exterminated. Infecting people with vaccinia also included some risks, as the side effects can cause the following types of vaccinia. These are the various forms I found in **International 3085**.

International 3085:

- Chronic progressive vaccinia: VACCINIA NECROSUM
- Vaccinia gangrenosa: VACCINIA NECROSUM
- Generalized vaccinia: a systemic infection which may occur about ten days after smallpox vaccination. The vaccinia virus appears in the bloodstream and a widespread vesicular rash erupts but leaves no scars. Also called *vaccinid, vacciniola*
- Vaccinia necrosum: a severe complication of smallpox vaccination characterized by progressive necrosis at the vaccination site and at metastatic sites due to unchecked viral growth. It usually occurs in immunologically deficient subjects. Also called *vaccinia gangrenosa, progressive vaccinia, chronic progressive vaccinia*
- Progressive vaccinia: VACCINIA NECROSUM

Tegnell et al 506 provide a more detailed description of some of the side effects of vaccinia infection.

> Vaccinia infection may spread to eczema (eczema vaccinatum), some of these patients showing generalized illness with fever and swollen lymphatic glands.
>
> Immunosuppressed patients could be stricken by a progressing vaccinia infection with pocks over all surfaces of the body (vaccinia gangrenosa). This disease was often grave, with a high mortality. The disease was very rare, the incidence was 0.4–6.9 per million vaccinated.

Generalized vaccinia infection was usually a rather mild illness with pustules in many locations. The pustules heal in the same way as those following vaccination. The incidence was 140–400cases per million vaccinated.

The most common complication was spread of the virus to adjoining lymph nodes, with swelling and sometimes melting.

There were also more severe complications in the form of encephalitis (postvaccinial encephalitis). The incidence was 3.5–10 cases per million vaccinated, with a mortality rate of 10–35%. Vaccinia also has the potential to spread between people in close contact.

The term is included in several translation dictionaries, **Reuter 705** lists koepokken, vaccinia and vaccina as possible translations for vaccinia and **Kerkhof 203** translates vaccinia as "koepokkenvirusbesmetting bij de mens".

Pinkhof II 1423 also lists vaccina as synonym for vaccinia in Dutch, but the term is extremely rarely used. In Dutch there is also a certain ambiguity concerning this term. Vaccinia is/was used for the disease as it appears in cattle (i.e. cowpox) and then later to refer to the human reaction to vaccination. The second meaning is the one that is mentioned in **Medical 2015-05-19**.

2.13. Varicella Zoster Encephalitis

C02.182.500.300.400	ENCEPHALITIS, VARICELLA ZOSTER	VARICELLA-ZOSTERENCEFALITIS

To understand this term, it is key to point out the difference between varicella, varicella zoster virus and herpes zoster.

The varicella-zoster virus (VZV) is described by **Dorland's 853** as human herpesvirus 3: "a virus of the genus Varicellovirus that is the etiologic agent of chickenpox and herpes zoster." **Dorland's 853** writes the term with a hyphen, just like **Stedman's 1930, Churchill's 2051, International 3097, Taber's 2295** and **Miller-Keane 344.** Only **Mosby's 312** spells varicella zoster without a hyphen. In medical articles, the two spelling variants both occur frequently.

The varicella-zoster virus is the cause of two diseases; herpes zoster and varicella. There is a significant difference between the two illnesses because of the latency of the varicella-zoster

virus. The initial infection with varicella-zoster virus (VZV) causes the acute, short-lived illness chickenpox, also called varicella, which generally occurs in children and young adults. Once an episode of chickenpox has resolved, the virus is not eliminated from the body and can go on to cause herpes zoster often many years after the initial infection, as is explained by **Kennedy (PubMed 2015-05-05, Kennedy, 12211045). Sigaloff & De Fijter 391** note that herpes zoster is more common in patients with deficient cellular immunity, such as HIV-infected individuals or transplant recipients.

Hokkanen et al 239 note that there is a difference between herpes zoster encephalitis and varicella encephalitis in terms of frequency, they say that encephalitis occurs in up to 5% of patients hospitalized because of herpes zoster and in less than 0.05% of adult patients hospitalized because of varicella, but the same term (HZE) is used for both conditions in their paper. This corresponds with the definition for chickenpox given by **Medicinenet 2015-05-06**, where it is said that inflammation of the brain, or encephalitis, can occur in immunocompromised individuals, although the risk is higher with herpes zoster.

Appelbaum et al 224 note that varicella is essentially a disease of childhood and the complication of encephalitis also occurs most frequently in this period. In their series of cases 95 per cent of the patients were not more than eleven years of age. This is in contrast with herpes zoster, which occurs in adult and elderly patients. **Wetzel et al 1612** point out that herpes zoster encephalitis (HZE) develops in approximately 5% of patients hospitalized because of herpes zoster and as was established by **Weinberg**, herpes zoster is a disease that predominantly affects the elderly. **Weinberg** goes on to say that the association between aging and vulnerability to VZV reactivation is apparent in the epidemiology of the disease: of the estimated 1 million cases of herpes zoster in the United States each year, approximately 50% occur in individuals aged 50 years or older **(PubMed 2015-05-05, Weinberg, 18021864).** I included the term varicella encephalitis in my terminological records because **Medical 2015-05-05** seems to use the term in the same context as herpes zoster. This is an interesting phenomenon which I included in the <equival> field in my terminological records because the causal agent of varicella zoster and herpes zoster is the same.

Just like **Dorland's 853**, the Scope note by **Medical 2015-05-05** gives herpesvirus 3 as a synonym for varicella-zoster virus. The entry term on **Medical 2015-05-05** "human herpesvirus 3 encephalitis" is very uncommon, it has 10 hits on **Google** and none on **Google Scholar**.

Medical 2015-05-05 lists "herpes zoster meningoencephalitis" as an entry term for varicella zoster encephalitis, but I do not consider it as a full synonym because of the difference between encephalitis and meningoencephalitis. Encephalitis is an inflammation of the brain, whereas meningoencephalitis is a medical condition that simultaneously causes inflammation of the brain (encephalitis) and the meninges.

According to **Oxford English Dictionary 2014-12-24**, the plural of encephalitis is "encephalitides".

This table shows the synonyms and variants in spelling for varicella zoster encephalitis:

	Google	**Scholar Google**	**PubMed**	**NTvG**
(EN) varicella-zoster encephalitis	3,550	327	38	/
(EN) herpes zoster encephalitis	5,610	443	6	/
(EN) varicella encephalitis	5,530	681	7	/
(EN) varicella-zoster virus encephalitis	12,600	606	5	/
(EN) VZV encephalitis	4,280	705	5	/
(NL) varicella-zosterencefalitis	8	1	/	1
(NL) VZV-encefalitis	9	2	/	0
(NL) herpes-zosterencefalitis	3	0	/	0

In **Google**, the most hits are found for the term varicella-zoster virus encephalitis, **Medical 2015-05-05** lists this term as VZ virus encephalitis, but the abbreviation that is commonly used in medical science is VZV encephalitis.

The Dutch spelling for the term varicella-zoster virus given by **Pinkhof II 1428** is written in one word; varicellazostervirus (VZV). This means that **Pinkhof II** follows the rules of Het Groene Boekje, which is correct. The term is described as "verwekker van varicella en herpes zoster, een typisch herpesvirus".

Reuter 708 translates varicella as waterpokken and **Reuter 316** gives gordelroos, zona, zoster and herpes zoster as possible Dutch translations for herpes zoster. **Reuter 228** even provides a Dutch translation for the term varicella encephalitis; waterpokkenencefalitis. Unfortunately, this term has no hits on **Google.**

The difference between encephalitis and meningoencephalitis is also present in Dutch dictionaries, **Pinkhof I 2015-05-05** explains that encephalitis is "een hersenontsteking, al dan niet gepaard met meningitis (meningo-encefalitis) of myelitis (encefalomyelitis)". **Reuter 415** provides "ontsteking van de hersenen en hersenvliezen, meningo-encefalitis and encefalomeningitis" as Dutch translations for meningoencephalitis.

Most primary sources were found in Dutch for VZV-encefalitis, which is an abbreviated form of the term. There was only one hit for varicella-zosterencefalitis, which corresponds most to the original term I found in **Medical 2015-05-06**.

2.14. Vesicular Stomatitis

C02.782.580.830.825	VESICULAR STOMATITIS	VESICULAIRE STOMATITIS

The term vesicular stomatitis is made up of two terms that can be explained separately; according to **Churchill's 2081**, vesicular means "pertaining to or composed of a vesicle or vesicles". **Churchill's 1789** says that stomatitis means "any generalized inflammatory disease of the oral mucosa, comprising that of the tongue, palate, cheeks, gums, lips and floor of the mouth".

Medical 2015-05-07 provides the following description:

> A viral disease caused by at least two distinct species (serotypes) in the VESICULOVIRUS genus: VESICULAR STOMATITIS INDIANA VIRUS and VESICULAR STOMATITIS NEW JERSEY VIRUS. It is characterized by vesicular

> eruptions on the ORAL MUCOSA in cattle, horses, pigs, and other animals. In humans, vesicular stomatitis causes an acute influenza-like illness.

The definition I found in **Stedman's 1702** is the one I chose to include in my terminological record because it corresponds most with the scope note found in **Medical 2015-05-07**:

> a vesicular disease of horses, cattle, swine, and occasionally humans caused by a Vesiculovirus (vesicular stomatitis virus) in the family Rhabdoviridae; in horses and cattle the disease usually causes mouth vesicles which, in cattle cannot be differentiated clinically from those of foot-and-mouth disease. (^Stedman's^ 1702)

There are some small differences between this definition and the scope note. **Medical 2015-05-07** mentions that vesicular stomatitis causes an influenza-like illness in humans, which is an important detail. **Medical 2015-05-07** is also more specific in terms of the virus that causes vesicular stomatitis. **Medical 2015-05-07** claims that vesicular stomatitis is caused by the vesicular stomatitis Indiana virus and vesicular stomatitis New Jersey virus, which is confirmed by **McCluskey et al (PubMed, 2014-11-27, McCluskey et al, 23883666)**, whereas **Stedman's 1702** simply states that vesicular stomatitis is caused by a vesicular stomatitis virus. Next to that, **Stedman's 1702, Merck Manual EN 2014-03-12** and **Dorland's 1776** all mention foot-and-mouth disease in their definition of vesicular stomatitis. **Dorland's 1776** says that a distinction must be made between vesicular stomatitis and foot-and-mouth disease. **Stedman's 1702** and **Merck Manual EN 2014-03-12** are more specific because they both mention the important fact that in horses and cattle vesicular stomatitis usually causes mouth vesicles which, in cattle cannot be differentiated clinically from those of foot-and-mouth disease. This issue with the diagnosis is problematic because foot-and-mouth disease is much more devastating and infectious disease than vesicular stomatitis. In one of the Dutch articles written by **Van Delft 1**, it is also mentioned that the symptoms of vesicular stomatitis are very similar to "mond-en-klauwzeer", the Dutch translation for foot-and-mouth disease.

Martinez & Wertz provide more information on the difference between the two strains of vesiculovirus that cause vesicular stomatitis:

> There are two major serotypes of VSV, Indiana (VSIV) and New Jersey, which are distinguished by neutralizing antibodies against the G protein. In addition to their antigenic structures, the Indiana (GI) and New Jersey (GNJ) glycoproteins also differ in the number and composition of amino acids (only 50% identity), in posttranslational

> modifications, and in folding. Correspondingly, Indiana and New Jersey strains are not equally important regarding VSV pathogenesis. Outbreaks caused by New Jersey strains are more frequent and more severe than those caused by Indiana strains **(PubMed 2015-05-07, Martinez & Wertz, 15731252).**

Several medical dictionaries also mention a condition caused by a herpes simplex virus called herpetic stomatitis. **Dorland's 1776** for example names it as the first meaning of vesicular stomatitis. There are two major problems with this. Firstly, herpetic stomatitis is caused by a herpes simplex virus and not by a vesiculovirus. Secondly, the term herpetic stomatitis refers to a condition that is solely present in humans. This is apparent in the scope note from **Medical 2015-05-07** for herpetic stomatitis:

> Stomatitis caused by Herpesvirus hominis. It usually occurs as acute herpetic stomatitis (or gingivostomatitis), an oral manifestation of primary herpes simplex seen primarily in children and adolescents.

The term vesicular stomatitis has a broader meaning than this because it primarily relates to an illness found in domestic animals such as cattle, swine and horses.

Vesicular stomatitis is included in several English-Dutch translation dictionaries, but the results vary. Interestingly, the most obvious Dutch translation, "vesiculaire stomatitis" is not included in the dictionaries even though the term is fairly frequently used on **Google** (2620 hits) and also produced 5 hits on **Scholar Google**.

All translations given by **Reuter 619** (afteuze stomatitis, gingivostomatitis herpetica and stomatitis herpetica) refer to illnesses that occur uniquely in humans. In conclusion these options are not the right translations for the term that is being investigated here.

Kerkhof 205 also describes vesicular stomatitis as "mondslijmvliesontsteking met blaasjes" and does not mention the term "vesiculaire stomatitis" in Dutch. The fact that **Kerkhof 205** uses the term "mondslijmvliesontsteking" might suggest that this is again a description of an illness found uniquely in humans because according to **Van Dale 2015-05-11,** it is common in Dutch to use the term "muil" when talking about an animal. An argument against this, is that the Dutch term "mond" is also used when talking about horses.

Next to that, **Pinkhof I 2015-05-11** also lists "vesiculaire stomatitis met exantheem" as a synonym for "hand-voet-mondziekte". "Exantheem" is the same as rash according to **Van Dale EN 2015-04-05**. The problem with this translation is that "hand-voet-mondziekte" has

similar symptoms as "vesicular stomatitis" but the illnesses are caused by different viruses. Moreover, "hand-voet-mondziekte" occurs only in humans, it is caused by the coxsackievirus A16 and an enterovirus according to the **Rijksinstituut voor Volksgezondheid en Milieu 2015-05-11**. For that reason it must not be confused with "mond-en-klauwzeer", which is caused by a picornavirus.

Because of these inconsistencies in Dutch translation, I would argue that "vesiculaire stomatitis" is the best translation for vesicular stomatitis.

2.15. Viral Encephalitis

C02.182.500.300	ENCEPHALITIS, VIRAL	VIRALE ENCEFALITIS

The first thing to establish about viral encephalitis is that it is an umbrella term for cases of encephalitis that were caused by a virus. There are several viruses that can cause encephalitis. The most common ones are the herpes simplex virus and the varicella-zoster virus. Interestingly, the terms herpes simplex encephalitis and varicella zoster encephalitis are also present in **Medical 2015-07-05**. According to **Téllez de Meneses et al**., viral encephalitis caused by the herpes simplex virus leads to the most severe cases **(PubMed 2015-05-07, Téllez de Meneses, 24072056)**.

Kramer points out that although viral encephalitis affects all age groups, the overall incidence is significantly higher in children **(PubMed 2015-05-08, Kramer, 23830656). Silva** notes that a diagnosis of viral encephalitis could be a challenge to the clinician, since almost 70% of viral encephalitis cases are left without an etiologic agent identified **(PubMed 2015-05-08, Silva et al 24141509)**. **Misra et al** claim that this number is 60% **(PubMed 2015-05-08, Misra et al 18754956)**. However, geographical regions can be used to determine certain causative agents. For example, many cases of viral encephalitis are caused by arboviruses and the various arboviruses have characteristic geographical distributions; for instance, in the United States, the California serogroup of viruses (including the La Crosse virus) are the most common cause of viral encephalitis.

Medical 2015-05-07 gives no specific symptoms for viral encephalitis, **Misra et al** mention that the clinical presentation of viral encephalitis is nonspecific and includes fever, varying degrees of alteration in sensorium with or without focal neurological deficits and/or seizures. But because the etiological agents for viral encephalitis are hard to determine, these

symptoms may as well be due to a variety of other infective and noninfective causes **(PubMed 2015-05-08, Misra et al 18754956)**. This is repeated by **Kramer**, who lists stupor and coma, seizures and respiratory failure as the most common symptoms for which patients with encephalitis need to be hospitalized **(PubMed 2015-05-08, Kramer, 23830656).**

Kramer provides information about the most common pathogens that cause viral encephalitis. Here are two:

> In recent multicenter studies performed in Europe, North America, Australia, and New Zealand, the most common pathogen to be implicated continues to be herpes simplex virus (HSV), consistently accounting for more than 40% to 50% of cases where a cause is determined, and 10% to 20% overall.
>
> Varicella zoster virus (VZV) is now recognized as the most common cause of encephalitis among immunocompromised patients, occurring as a complication of human immunodeficiency virus (HIV)/AIDS, hematopoietic stem cell transplantation, and the use of corticosteroids or other immunosuppressive drugs **(PubMed 2015-05-08, Kramer, 23830656).**

The entry term given by **Medical 2015-05-07**, viral encephalomyelitis refers to a slightly different condition because according to **Dorland's 613**, encephalomyelitis means "inflammation involving both the brain and the spinal cord". Similarly, **Pinkhof I 2015-05-12** uses the Dutch "encefalomyelitis" to mean "ontsteking van hersenen en ruggenmerg". For these reasons I did not count encephalomyelitis as a full synonym for viral encephalitis.

The plural form of encephalitis is encephalitides according to **the Oxford English Dictionary 2015-05-12**. The term viral encephalitides is used by **Misra et al** in the following sentence: "There is no comprehensive data regarding late unprovoked seizures in different viral encephalitides." **(PubMed 2015-05-08, Misra et al 18754956)**. It must be said that this plural form is not always used, for example in the following sentence by **Silva**, one would expect the plural term to be used: "This paper will focus on some specific viral encephalitis" **(PubMed 2015-05-08, Silva et al 24141509).**

I do not consider viral encephalitis and viral meningitis to be synonyms because **Merck Manual EN 2015-05-07** states that virus infections can cause an inflammation of the meninges (viral meningitis), of the brain (viral encephalitis), of the bone marrow (myelitis) or of the spinal nerve roots (radiculitis). Viral encephalitis often occurs together with viral

meningitis. Viral encephalitis is more severe because it affects the brain directly and not so much the meninges.

This table shows the frequency of the term viral encephalitis and its synonyms.

	Google	**Google Scholar**	**PubMed**	**NTvG**
(EN) viral encephalitis	265,000	26,800	3634	/
(NL) virale encefalitis	925	32	/	0
(NL) virale hersenontsteking	3,170	2	/	0

I found a Dutch translation for viral encephalitis in **Reuter 228**: virale encefalitis. This translation is straightforward and it is also sufficiently often used in scientific contexts, so I would argue that this is the best translation.

Kerkhof 74 translates encephalitis as hersenontsteking. I researched the Dutch term virale hersenontsteking and found out that the term is more popular on **Google**, but has significantly less hits in scientific contexts.

Pinkhof I 2015-05-07 indirectly mentions the Dutch "virale encefalitis" by saying the following: "men onderscheidt bacteriële en aseptische (virale en niet-infectieuze) encefalitis".

3. CONCLUSION

In this dissertation I discussed 15 terms that all pertained to the chapter C02 virus diseases. All the terms I discussed were full discussions.

The first thing I found out was that the terms I investigated varied greatly in terms of frequency and documentation. Some terms such as smallpox were easy to find in both primary and secondary sources. For terms such as these, an accurate Dutch translation could often be found in a bilingual dictionary such as **Kekhof** or **Reuter**. Despite being slightly dated, **International** often provided the most relevant information for the English terms. In many instances, **International** listed the most synonyms and provided the most relevant information of all the English medical dictionaries. It was also useful to consult more recent dictionaries such as **Dorland's** when looking up recent diseases such as SARS. The Dutch monolingual dictionaries I found most useful were **Coëlho** and **Codex Medicus**.

Terms such as rubulavirus infections and torovirus infections often posed more difficulty when trying to find an accurate description of the condition. On several occasions, the scope note was useful to understand the meaning of the term. The scope note was also useful as a comparison for the definitions I found in the dictionaries.

When information on an English term was scarce, for example rubulavirus infection, it was often even more difficult to find a reliable translation in Dutch. In several cases it was not possible to find a Dutch definition. In those instances, I made suggestions for definitions based on my research.

In several instances, certain synonyms only occurred in certain dictionaries, an example of this would be chronic progressive myelopathy, which is listed as a synonym for tropical spastic paraparesis in **Dorland's** but nowhere else. To verify this synonym, I checked the meaning in relevant contexts such as articles on **PubMed**. **PubMed** contained many articles for the terms I researched, but I also obtained a substantial amount of sources from **Google Scholar** when researching English terms. When looking for relevant contexts in Dutch, I encountered a considerable amount of articles on **NTvG** that contained the terms I was looking for.

In conclusion, this dissertation helped me develop skills in terms of information gathering and critical thinking, whilst simultaneously providing me with a feeling of accomplishment.

4. BIBLIOGRAPHY

>Adams et al.
>Physical and morphological characterization of transmissible enteritis virus of turkeys./ Adams et al.
In: Avian Diseases,Vol. 14, No. 2 (May, 1970), pp. 392-399 [online]
http://www.jstor.org/discover/10.2307/1588762?uid=28383&uid=3737592&uid=2&uid=3&uid=67&uid=5911848&uid=28382&uid=62&sid=21104866738221

>Adams N.R. et al.
>Intestinal lesions in transmissible enteritis of turkeys./ Adams N.R. et al.
Avian Diseases Vol. 14, No. 2 (May, 1970), pp. 392-399
http://www.jstor.org/stable/pdf/1588483.pdf?acceptTC=true

>Adams, N.R. & Hofstad, M.S.
>Isolation of Transmissible Enteritis Agent of Turkeys in Avian Embryos./ Adams, N.R. & Hofstad, M.S.
In: Avian Diseases,Vol. 15, No. 3 (Jul. - Sep., 1971), pp. 426-433
[online] http://www.jstor.org/stable/pdf/1588719.pdf

>Adamson, P.B.
>The Bu'butu Lesion in Antiquity./ P.B. Adamson
In: Med Hist. 1970 Jul; 14(3): 313–318.
[online] http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1034064/pdf/medhist00134-0105.pdf

>Alam et al
>Risk factors for complicated varicella infection in pediatric oncology patients at a tertiary health care facility in Pakistan./ Alam et al
In : J Infect Dev Ctries 2014 Feb 13;8(2):215-20
[online] http://www.jidc.org/index.php/journal/article/view/24518632/1005

>Alcantara S.
>Thrombocytopenia is strongly associated with simian AIDS in pigtail macaques./ S.Alcantara
J Acquir Immune Defic Syndr 2009;51:374–379 [online]
http://microbiol.unimelb.edu.au/research/virology/kent/kentpdf/103AlcantaraJAIDS09.PDF

>Alderink, F.J.
>Vesicular stomatitis epidemic in Colorado: clinical observations and financial losses reported by dairymen./ F.J. Alderink,
In: Preventive Veterinary Medicine, 3 (1984/5) 29-44
[online] http://ac.els-cdn.com/0167587784900229/1-s2.0-0167587784900229-main.pdf?_tid=a105d5f8-8dd5-11e4-b0f6-00000aab0f6b&acdnat=1419691119_f3ca53d5d0af872927df845b2431033d

>Anton et al.
>Cooperation between transmissible gastroenteritis coronavirus (TGEV) structural proteins in the in vitro induction of virus-specific antibodies./ Anton et al.
In: Virus Research 46 (1996) 111-124

[online] http://ac.els-cdn.com/S0168170296013901/1-s2.0-S0168170296013901-main.pdf?_tid=44b352d6-84a6-11e4-8eff-00000aacb35d&acdnat=1418681218_a02dff9d235604c8980bca071615a9b8

>Appelbaum et al
>Varicella Encephalitis./ Appelbaum et al.
In: The American Journal of Medicine Volume 15, Issue 2, August 1953, Pages 223–230
[online] http://ac.els-cdn.com/0002934353900746/1-s2.0-0002934353900746-main.pdf?_tid=20189830-f32a-11e4-8f8d-00000aab0f27&acdnat=1430832478_d9146092564c42a15457493430e04c88

>Asbeck
>Handboek Dwarslaesierevalidatie Pagina 66 [online]
https://books.google.be/books?id=nUCPZJTLFusC&pg=PA66&lpg=PA66&dq=%22HTLV-1+geassocieerde+myelopathie%22&source=bl&ots=jOHLkNcphr&sig=TDuvK3wm085jNvWiPJB6TSFSioM&hl=nl&sa=X&ei=ssQ-Ve35OcHlaO_dgOgB&ved=0CDYQ6AEwBQ#v=onepage&q=%22HTLV-1%20geassocieerde%20myelopathie%22&f=false

>Bauters et al.
>Een bijzondere vorm van aspiratie pneumonitis: de vuurspuwerslong./ Bauters et al.
UZ Gent [online]
https://biblio.ugent.be/input/download?func=downloadFile&recordOId=325153&fileOId=2013522

>Belman
>Tick-Borne Diseases./ Belman
In: Seminars in Pediatric Neurology, Vol 6, No 4 (December), 1999: pp 249-266
[online] http://ac.els-cdn.com/S1071909199800242/1-s2.0-S1071909199800242-main.pdf?_tid=bf236254-711e-11e4-8d8c-00000aacb35f&acdnat=1416533939_e0cafc25fa006e38d15690711f6c31eb

>Benetto, L., Scolding, N.
>Inflammatory post-infectious encephalomyelitis./ L. Benetto, N. Scolding
In: J Neurol Neurosurg Psychiatry 2004; 75
[online] http://jnnp.bmj.com/content/75/suppl_1/i22.full.pdf+html

>Biology Online
>Biology Online
[online] http://www.biology-online.org

>Boerman, R.H.
>Virale herseninfecties./ R.H. Boerman
In: Tijdschrift voor Neurologie en Neurochirurgie 2003 vol. 104 nr. 1-200 [online]
http://www.google.be/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&ved=0CCYQFjAB&url=http%3A%2F%2Fwww.ariez.nl%2FDownloadFile.lynkx%3Fguid%3Dd2b795c5-1b5e-4153-b9d3-d70b45636197&ei=g2gAVc3NE4S0PauXgJAD&usg=AFQjCNF833KnVovyKUE1dAzuNIgZtLO-tA&bvm=bv.87920726,d.ZWU&cad=rja

>Bol, P.
>Severe Acute Respiratory Syndrome (SARS)./ P. Bol
In: Nederlands Tijdschrift voor Tandheelkunde 2003; 110: 335-337. [online]
http://www.cyclopaedia.nl/link?u=http%3A%2F%2Fwww.ntvt.nl%2Fartikel%2F110%2F8%2Fsevere-acute-respiratory-syndrome-sars%3Fdownload%3D1&b=Severe_acute_respiratory_syndrome

>Boluyt et al.
>Richtlijn 'Volumesuppletie bij kritisch zieke pasgeborenen en kinderen tot 18 jaar' van de Nederlandse Vereniging voor Kindergeneeskunde./ Boleuyt et al.
In: Nederlands Tijdschrift voor Geneeskunde 2006;150:2421-6
[online] http://www.ntvg.nl/system/files/publications/2006124210001a.pdf

>Boutsen, S. & Vannoppen
>Helpt onze hulp tegen honger?/ S. Boutsen & Vannoppen
In: MOPaper nummer 1 – november 2006
[online] http://www.mo.be/sites/default/files/MO-paper_Honger.pdf

>Boynton, O'Hara Tye
>Serologic and Genotypic Studies of the Spike Lycoprotein of Turkey Coronavirus./ O'Hara Tye Boynton
University of Georgia
[online] https://getd.libs.uga.edu/pdfs/boynton_tye_o_200512_ms.pdf

>Brown et al.
>Spiking Mortality of Turkey Poults: 1. Experimental Reproduction in Isolation Facilities
In: Avian Diseases 41:604-609, 1997./ Brown et al.
[online] http://www.jstor.org/stable/pdf/1592151.pdf

>Bühre, L.M.D. et al.
>Fièvre boutonneuse, opgedaan op een camping in Zuid-Frankrijk./ L.M.D. Bühre et al.
In: Nederlands Tijdschrift voor Geneeskunde 1985; 129: nr 26
[online] https://www.ntvg.nl/system/files/publications/1985112400001a.pdf

>Cabré Castellvi
>Theories of Terminology./ M.T. Cabré Castellvi
Terminology 9:2 (2003), 163–199. [online]
http://web.a.ebscohost.com/ehost/pdfviewer/pdfviewer?sid=b860efe0-b9e4-4c50-a36f-121a95acad8b%40sessionmgr4002&vid=1&hid=4107

>Cambridge Dictionary
>Cambridge Dictionary
[online] http://dictionary.cambridge.org/

>Carver et al.
>Mortality Patterns Associated with Poult Enteritis Mortality Syndrome (PEMS) and Coronaviral Enteritis in Turkey Flocks Raised in PEMS-Affected Regions./ Carver et al.
In: Avian Diseases 45 :985-991, 2001
[online] http://www.jstor.org/stable/pdf/1592878.pdf?acceptTC=true

>Casseb
>Is Human T Cell Lymphotropic Type 1 (HTLV-1)-Associated Myelopathy/Tropical Spastic Paraparesis (HAM/TSP) Syndrome a Neglected Disease?/ Casseb
In: Plosntds November 2009, Volume 3, Issue 11 [online]
http://www.plosntds.org/article/fetchObject.action?uri=info%3Adoi%2F10.1371%2Fjournal.pntd.0000487&representation=PDF

>Cavanagh et al.
>Detection of a coronavirus from turkey poults in Europe genetically related to infectious bronchitis virus of chickens./ Cavanagh et al.
In: Avian Pathology (2001) 30, 355–368
[online] http://www.tandfonline.com/doi/pdf/10.1080/03079450120066368

>Center for Disease Control and Prevention
>Center for Disease Control and Prevention
[online] http://www.cdc.gov/dengue/clinicalLab/caseDef.html

>Center for Food Security and Public Health
>Center for Food Security and Public Health [online]
http://www.cfsph.iastate.edu/DiseaseInfo/disease.php?name=blue-eye-disease&

>Churchill's
>Churchill's illustrated medical dictionary / eds. E. Lovell Becker et al. – New York etc. - Churchill Livingstone, 1989. – 2120 p.

>Claes P. et al.
>Casus van de maand Een Pijnlijk Reissouvenir./ P. Claes et al.
In: Tijdschrift Voor Geneeskunde. 01/2007; 63(17):809-811. [online]
www.researchgate.net/publication/243131878_Een_pijnlijk_reissouvenir/file/3deec5281d119146f9.doc

>Codex Medicus
>Codex Medicus / R.O.B. Gans & P.E.Y. Van Schil et al. – dertiende druk. - Doetinchem : Elsevier, 2009.

>Coëlho
>Coëlho zakwoordenboek der geneeskunde / eds. A.A.F. Jochems et al. – 28ste druk. – Doetinchem : Elsevier Gezondheidszorg, 2006. – 976 p.

>Coen, Natacha
>Selectieve inhibitie van flavivirus (dengue koorts virus en gele koorts virus) replicatie./ Natacha Coen 67 p.
[online] https://rega.kuleuven.be/cmt/jn/thesis/eindwerkverhandeling-denv-finaal.pdf

>Collins
>Collins English Dictionary / Sinclair & Wilkes et al. Glasgow: HarperCollins, 1991. - 1791 p.

>Coutinho, Roel
>De geplaagde mens./ Roel Coutinho 200 p. [online]

http://books.google.be/books?hl=nl&lr=&id=Md0cAwAAQBAJ&oi=fnd&pg=PT3&dq=%22ademhalingssyndroom%22&ots=670Sn_WWmg&sig=PgUKaijmZboJIziMV4__SqUWFjE#v=onepage&q=%22ademhalingssyndroom%22&f=false

>Da Silva-Voorham
>Dengue: een toenemend risico voor reizigers naar tropische en subtropische landen./ Da Silva-Voorham
In: Nederlands Tijdschrift voor Geneeskunde. 2009;153:A725 [online]
www.researchgate.net/profile/Julia_Maria_Da_Silva_Voorham/publication/40756322_Dengue_a_growing_risk_to_travellers_to_tropical_and_sub-tropical_regions/links/00b49539ab8c5bcafd000000.pdf

>Darbyshire J.H.
>Organ culture in avian virology: A review./ J.H. Darbyshire
In: Avian Pathology, 7:3, 321-335,
[online] http://www.tandfonline.com/doi/pdf/10.1080/03079457808418287

>De Castro-Costa et al.
>HTLV-I Negative Tropical Spastic Paraparesis./ De Castro-Costa et al.
In: Arq Neuropsiquiatr 2001;59(2-A):289-294
[online] http://www.scielo.br/pdf/anp/v59n2A/a31v592a.pdf

>De Jong, M.
>Onbegrensde Invloeden./ M. De Jong
In: Nederlands Tijdschrift Voor Medische Microbiologie 2010;18:nr3 [online]
http://www.nvmm.nl/system/files/2010,%2018e%20jaargang%20september%202010%20-%20nummer%203.pdf#page=23

>De Standaard
>Alarm voor onbekende luchtwegenziekte, De Standaard [online]
http://www.standaard.be/cnt/dst17032003_013

>De Telegraaf
>Tweede mers-besmetting in Nederland, De Telegraaf, [online]
http://www.telegraaf.nl/gezondheid/22628913/__Tweede_mers-besmetting__.html

>Dea et al.
>Ultrastructure and Protein A-Gold Immunolabelling of HRT-18 Cells Infected with Turkey Enteric Coronavirus./ Dea et al.
In: Veterinary Mycrobiology, 20 (1989) 21-33
[online] http://ac.els-cdn.com/0378113589900047/1-s2.0-0378113589900047-main.pdf?_tid=dc33734a-8260-11e4-94fd-00000aacb361&acdnat=1418431505_15aff1b055495c329e0c44bcd8d4ceb2

>Delsing et al.
>Een ongewone oorzaak van meningo-encefalitis: Japanse encefalitis./ Delsing et al.
In: Ned Tijdschr Geneeskd. 2005;149:2423-7
[online] http://ig.extras.bsl.nl/bestanden/file_1197.pdf

>Den Ouden, H. et al.
>Denk aan Dengue./ H. Den Ouden et al.
In: Tijdschrift voor Infectieziekten vol 1 nr 5 2006
[online] http://lib.itg.be/open/POP/Dengue_2006tinf0199.pdf

>Dorland's
>Dorland's illustrated medical dictionary. / Dorland, W. A. Newman (William Alexander Newman), Philadelphia, PA : Saunders/Elsevier, 2012. – 2147 p.

>Dorresteijn & Kouwenberg
>Facialisparese bij kinderen; denk aan Lyme-ziekte
In: Nederlands Tijdschrift voor Geneeskunde 2001 26 mei;145(21)
[online] https://www.ntvg.nl/system/files/publications/2001110130001a.pdf

>Dziuk & Duke
>Cineradiographic studies of gastric motility in turkeys./ Dziuk & Duke
In: American Journal of Physiology Vol. 222, No. 1, January 1972.
[online] http://ajplegacy.physiology.org/content/222/1/159.full-text.pdf+html

>Elseviers Medische Encyclopedie
>Elseviers Medische Encyclopedie / Aalders & ten Winkel, Amsterdam; Brussel: Elsevier, 1986. 480 p.

>Encyclopaedia Britannica
>Encyclopaedia Britannica
[online] http://www.britannica.com

>Encyclopedia of Microbiology
>Encyclopedia of microbiology / Ed.-in-chief: Joshua Lederberg. London : Academic press, 2000. 4 volumes

>Encyclopedia.com
>Ehrlichiosis, Encycolpedia.com [online]
http://www.encyclopedia.com/topic/Ehrlichiosis.aspx

>Federaal agentschap voor de veiligheid van de voedselketen
>Veterinair gezondheidscertificaat voor uitvoer van melk en melkproducten, met inbegrip van kindermelk, vanuit België naar Algerije [online]
http://www.afsca.fgov.be/exportderdelanden/productendierlijkeoorsprong/_documents/EX.VTP.DZ.02.03.pdf

>Frank, R.K. and James W.C.
>Coronaviral Enteritis in an Ostrich (Struthio camelus) Chick./ R.K. Frank, & W.C. James
In: Journal of Zoo and Wildlife Medicine Vol. 23, No. 1 (Mar., 1992), pp. 103-107
[online] http://www.jstor.org/stable/pdf/20460276.pdf

>Furmanski & Hager
>RNA Tumor Viruses, Oncogenes, Human Cancer and AIDS: On the Frontiers of Understanding./ Furmanski & Hager
In: Springer Science & Business Media, 31 mrt. 1985

[online] https://books.google.be/books?id=HpFcxRVp--UC&pg=PA334&lpg=PA334&dq=aids+saids+difference&source=bl&ots=AY4z_-GHME&sig=8ePnA0ZlR1sFaL8htqdUmfxR9wc&hl=nl&sa=X&ei=RE4QVYn7HcTzPPONgKAP&ved=0CCkQ6AEwAQ#v=onepage&q=aids%20saids%20difference&f=false

>Galama
>Epidemieën zijn moeilijk beheersbaar./ Galama
[online] http://assortiment.bsl.nl/files/d7a51614-aa2d-4593-bc00-1d7590ad83a3/bijblijven20107hoofdstuk1.pdf

>Galama, J.M.D.
>Zijn opduikende zoönosen beheersbaar?/ J.M.D. Galama,
In: Nederlands Tijdschrift voor Geneeskunde 2005 26 maart;149(13)
[online] http://www.ntvg.nl/system/files/publications/2005106800001a.pdf

>Gao et al.
>Origin of HIV-1 in the chimpanzee Pan troglodytes./ Gao et al.
In: Nature Vol 397, 4 February 1999 437-441
[online] http://fire.biol.wwu.edu/cmoyer/zztemp_fire/biol201_W99/chimp_hiv.pdf

>Gelinck, L.B.S.
>'Severe acute respiratory syndrome' (SARS): epidemiologie, kliniek, diagnostiek en preventie./ L.B.S. Gelinck
In: Nederlands Tijdschrift Geneeskunde 2003 26 juli;147(30)
[online] https://www.ntvg.nl/system/files/publications/2003114490001a.pdf

>Ghekiere
>Taalpatronen bij personen met afasie in het kader van encefalitis: review en casestudy./ Ghekiere
Universiteit Gent, Faculteit Geneeskunde en Gezondheidswetenschappen 2011
[online] http://lib.ugent.be/fulltxt/RUG01/001/788/006/RUG01-001788006_2012_0001_AC.pdf

>Glosbe
>Glosbe.com
[online] https://glosbe.com/

>Gomaa et al.
>Virus shedding and serum antibody responses during experimental turkey coronavirus infections in young turkey poults./ Gomaa et al.
In: Avian Pathology, 38:2, 181-186
[online] http://www.tandfonline.com/doi/pdf/10.1080/03079450902751863

>Google Scholar
>Scholar Google [online search engine]
http://scholar.google.com

>Google
>Mainstream Google [online search engine]

http://www.google.com

>Goslinga Jan
>Een bijdrage tot de kennis van de experimentele tuberculeuze superinfectie bij de cavia (1960) [online]
http://dissertations.ub.rug.nl/faculties/medicine/1960/j.goslinga/?pLanguage=en&pFullItemRecord=ON

>Groot Bruinderink, G.W.T.A. et al.
>Veterinaire risico's en mogelijkheden voor recreatief medegebruik van een robuuste verbinding tussen de Oostvaardersplassen en het Horsterwold./ G.W.T.A. Groot Bruinderink et al.
In: Alterra-rapport 1554, ISSN 1566-7197
[online] http://www.flevoland.nl/wat-doen-we/grote-projecten/oostvaarderswold/documentatie-oostvaarders/onderzoeken/natuur-en-ehs/Alter_veterinaire_risicos2007.pdf

>Gryson, L.
>Micro organismen en wonden./ L. Gryson
[online] http://www.hubrussel.net/wound-ex-site/Wound/Wound-ex-Bestanden-en-afbeeldingen/Wound-ex-Bestanden-en-afbeeldingen-Documenten/Micro-organismen-en-wonden.pdf

>Guy, S.J.
>Virus Infections of the Gastrointestinal Tract of Poultry./ S.J. Guy
In: 1998 Poultry Science 77:1166–1175
[online] http://ps.oxfordjournals.org/content/77/8/1166.full.pdf

>Hafler et al.
>Myelin basic protein and proteolipid protein reactivity of brain- and cerebrospinal fluid-derived T cell clones in multiple sclerosis and postinfectious encephalomyelitis./ Hafler et al.
In: The journal of Immunology 1987 vol:139 iss:1 pg:68 -72
[online] http://www.jimmunol.org/content/139/1/68.full.pdf+html

>Heyes et al.
>Quinolinic Acid Concentrations are Increased in Cerebrospinal Fluid of Rhesus Macaques (Macaca Mulatta) Naturally Infected with Simian Retrovirus Type./ Heyes et al.
In: Kynuerine and Serotonin Pathwasy Advances in Experimental Medicine and Biology Volume 294, 1991, pp 555-558
[online] http://link.springer.com/chapter/10.1007/978-1-4684-5952-4_65

>HIVplusmag
>HIVplusmag
[online] http://www.hivplusmag.com/treatment/2014/04/10/what-hiv-superinfection-and-how-do-i-prevent-it?page=full

>Hokkanen et al.
>Subcortical type cognitive impairment in herpes zoster encephalitis./ Hokkanen et al.
In: Journal of Neurology 1997, 244: 239-245 [online]
http://download.springer.com/static/pdf/527/art%253A10.1007%252Fs004150050078.pdf?aut

h66=1426003723_c566940912010c88ccc2831f2b7cdc8e&ext=.pdf

>Huisman, J.
>Infectieziekten ook in deze tijd nog een uitdaging./ J. Huisman
In: Nederlands Tijdschrift voor Geneeskunde 1989, 133, nr 45
[online] http://www.ntvg.nl/system/files/publications/1989122160001a.pdf

>Huisman, J.
>Honderd jaar Gezondheidsraad. IV. Infectieziekten./ J. Huisman
In: Nederlands Tijdschrift voor Geneeskunde 2002 12 oktober;146(41)
[online] http://www.ntvg.nl/system/files/publications/2002119450001a.pdf

>Bonneux, L.
>Dreigende grieppandemie: landelijke voorraad van oseltamivir geldverspilling./ L. Bonneux
In: Nederlands Tijdschrift voor Geneeskunde 2005 16 juli;149(29)
[online] http://www.ntvg.nl/system/files/publications/2005116190001a.pdf

>Hurst & Metha
>Acute cerebellar swelling in varicella encephalitis./ Hurst & Metha
In: Pediatric Neurology 1988;4:122-3
[online] http://ac.els-cdn.com/0887899488900549/1-s2.0-0887899488900549-main.pdf?_tid=3b1e8e84-8b09-11e4-bd9b-00000aacb361&acdnat=1419383429_52ae694b56023b7e3d410c574818e4b7

>Huyghe
>Exantheem bij kinderen: Verwachtingspatroon van de ouders wanneer ze op raadpleging komen bij de huisarts met een kind met vlekjes. Huyghe
KU Leuven, 54 p.
[online] http://www.icho-info.be/masterproefpdf/thesis/%7Be84e6576-205e-e7de-08c1-dc81e8d57441%7D_Huyghe-Lotte-scriptie.pdf

>IATE
>Inter Active Terminology for Europe
http://iate.europa.eu

>ICTV
>International Committee on Taxonomy of Viruses
[online] http://www.ictvonline.org/

>Index Dierenarts
>Index Dierenarts
[online] https://www.yumpu.com/nl/document/view/17003586/index-dierenarts-92-93/13

>International
>International dictionary of medicine and biology in three volumes / eds. E. Lovell Becker et al. – 3dl. - New York etc. : Churchill Livingstone, 1986.– 3200 p.

>Izumo et al.
>HTLV-1 associated myelopathy./ Izumo et al.
In: Neuropathology 2000; 20, S65–S68

[online] http://onlinelibrary.wiley.com/doi/10.1046/j.1440-1789.2000.00320.x/pdf

>Jamieson F.B. et al.
>Human Torovirus: A New Nosocomial Gastrointestinal Pathogen./ F.B. Jamieson et al.
In: The Journal of Infectious Diseases 1998;178:1263–9
[online] http://jid.oxfordjournals.org/content/178/5/1263.full.pdf+html

>Jeffery et al.
>HLA alleles determine human T-lymphotropic virus-I (HTLV-I) proviral load and the risk of HTLV-I-associated myelopathy./ Jeffery et al.
In: Proceedings of the National Academy of Sciences of the United States of America Vol. 96, pp. 3848 –3853, March 1999
[online] http://www.pnas.org/content/96/7/3848.full.pdf

>Kager, P.A.
>Virale hemorragische koorts./ P.A. Kager
In: Nederlands Tijdschrift voor Geneeskunde 1998 28 februari 142 (9)
[online] http://lib.itg.be/open/POP/Viralekoortsen_1998ntge0448.pdf

>Kamphuis et al.
>Seroprevalentie van humaan T-cellymfotroop virus type I op Curaçao en voorspellende variabelen voor die infectie./ Kamphuis et al.
In: Nederlands Tijdschrift voor Geneeskunde 1998 10 januari;142(2)
[online] http://www.ntvg.nl/system/files/publications/1998100890001a.pdf

>Kaplan et al.
>The Risk of Development of HTLV-I-Associated Myelopathy/Tropical Spastic Paraparesis among Persons Infected with HTLV-I./ Kaplan et al.
In: Journal of Acquired Immune Deficiency Syndromes 3:1096-1101 [online] http://journals.lww.com/jaids/Abstract/1990/11000/The_Risk_of_Development_of_HTLV_I_Associated.10.aspx

>Kennedy, P.G.E.
>Viral encephalitis: causes, differential diagnosis, and management./ P.G.E. Kennedy
In: Journal Neurology, Neurosurgery and Psychiatry 2004; 75
[online] http://jnnp.bmj.com/content/75/suppl_1/i10.full.pdf+html

>Kerkhof
>Woordenboek geneeskunde en biomedische wetenschappen E-N/N-E. / P.L.M. Kerkof. – vierde herziene druk. -Maarssen : Elsevier gezondheidszorg, 2006. – 382 p.

>Kievits & Adriaanse
>Sterke opmars van Lyme-ziekte./ Kievits & Adriaanse
In: Nederlands Tijdschrift voor Geneeskunde 2004 5 juni;148(23)
[online] https://www.ntvg.nl/system/files/publications/2004111620003a.pdf

>Kievits, F. & Adriaanse
>Pokkenvaccinatie langer werkzaam dan gedacht./ F. Kievits & Adriaanse
In: Nederlands Tijdschrift voor Geneeskunde 2003 13 september;147(37)

[online] http://www.ntvg.nl/system/files/publications/2003118130001a.pdf

>Kleinschmidt Demasters, B.K. et al.
>Patterns of varicella zoster virus encephalitis./ B.K. Kleinschmidt Demasters et al.
In: Human Pathology, Vol 27 nr 9 Sept 1996
[online] http://ac.els-cdn.com/S0046817796902208/1-s2.0-S0046817796902208-main.pdf?_tid=239e9ea4-8c56-11e4-92e5-00000aacb35d&acdnat=1419526412_c2d39c314e436aa551de93e10f4975c0

>Lammens, F.B.
>Herpes-vulvitis./ F.B. Lammens
In: Ned Tijdschr Geneeskd. 1983;127:1561-3
[online] https://www.ntvg.nl/sites/default/files/migrated/1983115610001a.pdf

>Langpap et al.
>Coronaviral enteritis of young calves: virologic and pathologic findings in naturally occurring infections./ Langpap et al.
In: American Journal of Veterinary Research [1979, 40(10):1476-1478]
[online] http://europepmc.org/abstract/med/230757

>Laude et al.
>Molecular biology of transmissible gastroenteritis virus./ Laude et al.
In: Veterinary Microbiology, 23 (1990) 147-154
[online] http://ac.els-cdn.com/037811359090144K/1-s2.0-037811359090144K-main.pdf?_tid=13ad29a6-84a5-11e4-91e8-00000aab0f27&acdnat=1418680706_ab34fa1128aac0f2e67322b68a2038ad

>Launes et al.
>Unilateral hyperperfusion in brainperfusion SPECT predicts poor prognosis in acute encephalitis./ Launes et al.
In: Neurology 1997;48: 1347-1351
[online] http://www.neurology.org/content/48/5/1347.full.pdf+html

>Lexic.us
>Lexic.us
[online] http://www.lexic.us/definition-of/transmissible_gastroenteritis_of_swine

>Li & Zhou
>Cellular models for disease exploring and drug screening./ Li & Zhou
In : Protein Cell 2010, 1(4): 355–362
[online] http://journal.hep.com.cn/pac/article/2010/1674-800X/1364

>Lieveld
>Stamcellen in de melkklier bij hond en rund./ Lieveld
Universiteit Gent, 63 p.
[online] http://lib.ugent.be/fulltxt/RUG01/001/788/976/RUG01-001788976_2012_0001_AC.pdf

>Lin T.L. et al.
>Characterization of turkey coronavirus from turkey poults with acute enteritis./ T.L. Lin et

al.
In: Veterinary Microbiology 84 (2002) 179–186
[online] http://ac.els-cdn.com/S0378113501004473/1-s2.0-S0378113501004473-main.pdf?_tid=3893e5e4-c0ea-11e4-9838-00000aacb35d&acdnat=1425307473_f4b730a50020f4ced0293c4d22583649

>Linguee
>Linguee.com
[online] http://www.linguee.com/

>Loa et al. -1
>Differential detection of turkey coronavirus, infectious bronchitis virus, and bovine coronavirus by a multiplex polymerase chain reaction./ Loa et al.
In: Journal of Virological Methods 131 (2006) 86–91
[online] http://www.sciencedirect.com/science/article/pii/S0166093405002454#

>Loa et al. -2
>Specific mucosal IgA in turkey poults infected with turkey coronavirus.
In: Veterinary immunology and immunopathology 88 (2002) 57-64./ Loa et al. -1
[online] http://www.biosino.org/feidian/SARS-bingduwenxian/Specific%20mucosal%20IgA%20immunity%20in%20turkey%20poults%20infected%20with%20turkey%20coronavirus.pdf

>London T. et al.
>Experimental Transmission of Simian Acquired Immunodeficiency Syndrome (SAIDS) and Kalopsi-like Skin Lesions./ T. London et al.
In: The Lancet, October 15 1983, 869-874
[online] http://www.sciencedirect.com/science/article/pii/S014067368390867X#

>Looije & Roelofs
>Arbeid en Arbo bij het beheer van natuurgebieden en in de bosbouw. Looije & Roelofs, 121 p.
[online] http://library.wur.nl/way/bestanden/clc/1821477.pdf

>Maestre et al
>Equine Torovirus (BEV) Induces Caspase-Mediated Apoptosis in Infected Cells./ Maestre et al.
In: Plos One June 2011, Volume 6, Issue 6. Maestre et al [online] http://www.plosone.org/article/fetchObject.action?uri=info%3Adoi%2F10.1371%2Fjournal.pone.0020972&representation=PDF

>Makdoembaks
>Progressieve myelopathie veroorzaakt door humaan T-cellymfotroop virus type I (HTLV-I) bij 3 patiënten in Nederland./ Makdoembaks
In: Nederlands Tijdschrift voor Geneeskunde 1998 10 januari;142(2)
[online] http://www.ntvg.nl/system/files/publications/1998100930001a.pdf

>Manten, G.T.R. et al.
>Waterpokken bij een zwangere met ernstige gevolgen voor moeder en kind./ G.T.R. Manten et al.

In: Ned Tijdschr Geneeskd 2003 11 oktober;147(41)
[online] https://www.ntvg.nl/system/files/publications/2003120290001a.pdf

>Marthas M.L. et al.
>Immunization with a live, attenuated simian immunodeficiency virus (SIV) prevents early disease but not infection in rhesus macaques challenged with pathogenic SIV. M.L. Marthas et al.
In: Journal of Virology August 1990 vol. 64 no. 8 3694-3700
[online] http://jvi.asm.org/content/64/8/3694.full.pdf

>Mattapallil et al
>Intestinal Intraepithelial Lymphocytes Are Primed for Gamma Interferon and MIP-1b Expression and Display Antiviral Cytotoxic Activity despite Severe CD41 T-Cell Depletion in Primary Simian Immunodeficiency Virus Infection. Mattapallil et al.
In: Journal of Virology August 1998 p. 6421-6429
[online] http://jvi.asm.org/content/72/8/6421.full.pdf+html

>Mclure & Schulz
>Origin of HIV./ Mclure & Schulz
In: BMJ Volume 298 13 May 1989 p 1267-1268
[online] http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1836501/pdf/bmj00231-0007.pdf

>Medical 2015
>[online] http://www.nlm.nih.gov/mesh

>Medicinenet
>Medicinenet
[online] http://www.medicinenet.com/script/main/art.asp?articlekey=2702

>Medicinfo.nl
>Medicinfo.nl
[online] http://www.medicinfo.nl/%7B5b99d816-dbcd-4e71-bf45-18fab50ddceb%7D

>Medisch Woordenboek
>Medisch Woordenboek
[online] http://www.medisch-woordenboek.nl/woord/superinfectie

>Medlexicon
>Medlexicon
[online] http://www.medilexicon.com/medicaldictionary.php?t=92636

>Medline Plus
>Medline Plus
[online] http://www.nlm.nih.gov/medlineplus/ency/article/002300.htm

>Medline
>Medline
[online] http://www.nlm.nih.gov/medlineplus/ency/article/007192.htm

>Meijer, J.B. & Van Putten
>Met tekenziekte besmet donorbloed teruggeroepen./ J.B. Meijer & Van Putten
In: Ned Tijdschr Geneeskd. 1997;141:1588
[online] https://www.ntvg.nl/system/files/publications/1997115880001a.pdf

>Melis K. et al.
>Chemische pneumonie bij kinderen./ K. Melis et al.
In: Nederlands Tijdschrift voor Geneeskunde 1990, 134, nr 16
[online] http://www.ntvg.nl/system/files/publications/1990108110001a.pdf

>Merck Manual EN
>Merck Manual Online
[online] https://www.merckmanuals.com/professional

>Merck Manual NL
>De Merck Manual Online Medisch Handboek
[online] http://www.merckmanual.nl/mmhenl/index.html

>Merck
>Merck Manual Medisch Handboek / eds. Marc H. Beers et al. – Houten / Diegem : Bohn Stafleu Van Loghum, 2005. – 1970 p.

>Merriam-Webster
>Merriam Webster Medical Dictionary [online]
http://www.merriam-webster.com

>Miller-Keane
>Miller-Keane encyclopedia and dictionary of medicine, nursing, and allied health / eds. Marie O'Toole, et al. – 7th ed. – Philadelphia etc. : Saunders, 2003. – 2262 p.

>Modern medisch woordenboek
>Modern medisch woordenboek / Patrice van Efferen. Rijswijk : Elmar, 1998. 547 p.

>Moens, Britta
>In vitro en ex vivo evaluatie van huidige en nieuwe anti-HTLV-1 therapeutische strategieën. KU Leuven [online]
http://www.kuleuven.be/onderzoek/onderzoeksdatabank/project/3M06/3M060430.htm

>Mosby's
>Mosby's medical, nursing, & allied health dictionary. / K.N. Anderson, L.E. Anderson, et al. – Missouri: Mosby, 1994. – 1973 p.

>Möstl, K.
>Coronaviridae, Pathogenetic and Clinical Aspects: An Update./ K. Möstl
In: Comp. lmmun. Microbiol. infect. Dis. Vol. 13, No. 4, pp. 169-180, 1990
[online] http://ac.els-cdn.com/0147957190900858/1-s2.0-0147957190900858-main.pdf?_tid=892d38b6-84a9-11e4-a9bf-00000aacb35e&acdnat=1418682621_835840eb87f6f32c5ac482551fd48c82

>Mpaka et al.
>Atypical Presentation Of Varicella-Zoster Virus Encephalitis In An Immunocompetent Adult./ Mpaka et al.
In: Heart & Lung Vol 37 nr 1
[online] http://ac.els-cdn.com/S0147956307000568/1-s2.0-S0147956307000568-main.pdf?_tid=14dfaacc-8c59-11e4-a145-00000aacb35d&acdnat=1419527675_81d778d5e3c67df41d14edf67285907d

>Naqi et al.
>The Intestinal Microflora of Turkeys: Comparison of Apparently Healthy and Bluecomb-Infected Turkey Poults./ Naqi et al.
In: Avian Diseases Vol. 15, No. 1 (Jan. - Mar., 1971), pp. 14-21
[online] http://www.jstor.org/stable/pdf/1588382.pdf

>National Institute on Deafness and other Communication Disorders
>National Institute on Deafness and other Communication Disorders
[online] http://www.nidcd.nih.gov/health/hearing/pages/earinfections.aspx

>Nedobity
>The General Theory of Terminology: A Basis For The Preparations Of Classified Defining Dictionaries./ W. Neobity
Journal of the Dictionary Society of North America, Number 5, 1983, pp. 69-75
[online] https://muse.jhu.edu/journals/dictionaries/v005/5.nedobity.pdf

>Neuvel et al
>Tekenbeetziekte of niet? Laat u niet beetnemen./ Neuvel et al
In: Nederlands Tijdschrift voor Geneeskunde. 2008 12 april;152(15)
[online] https://www.ntvg.nl/system/files/publications/2008108490001a.pdf

>Nicoll et al.
>Use of the polymerase chain reaction to detect herpes simplex virus DNA in paraffin sections of human brain at necropsy./ Nicoll et al.
In: Journal of Neurology, Neurosurgery, and Psychiatry 1991;54:167-168
[online] http://jnnp.bmj.com/content/54/2/167.full.pdf+html

>Nijsse & Jacobs et al.
>Acute virale (meningo-)encefalitis./ Nijsse & Jacobs et al.
In: Afdeling Neurologie J.L. Murk, afdeling Virologie 11 september 2012
[online] http://www.erasmusmc.nl/47445/674532/2253326/Meningo

>NTvG
>Nederlands Tijdschrift voor Geneeskunde
[online] www.ntvg.nl

>OED, elektronisch
>Oxford English Dictionary, elektronische versie
http://www.oed.com/

>Opstelten W. et al.
>Er heerst weer mazelen. W. Opstelten et al.

In: Nederlands Tijdschrift voor Geneeskunde. 2013;157: A6710
[online] http://www.ntvg.nl/system/files/publications/a6710.pdf

>Oxford Medical Companion
>The Oxford medical companion / red. John Walton, Jeremiah A. Barondess, Stephen Lock. Oxford [etc.] : Oxford University Press, 1994. 1.038 p.

>Parker et al
>Activated, HTLV-1-specific cytotoxic T-lymphocytes are found in healthy seropositives as well as in patients with tropical spastic paraparesis./ Parker et al
In: Virology 188, 628-636 (1992)
[online] http://ac.els-cdn.com/004268229290517S/1-s2.0-004268229290517S-main.pdf?_tid=bff00732-89f6-11e4-93e1-00000aacb35d&acdnat=1419265540_8eeec519f525922a73a63f9de76a35e8

>Pensaert et al
>Isolation of a porcine respiratory, non - enteric coronavirus related to transmissible gastroenteritis./ Pensaert et al
In: Veterinary Quarterly, 8:3, 257-261
[online] http://www.tandfonline.com/doi/pdf/10.1080/01652176.1986.9694050

>Pinkhof I
>Pinkhof Geneeskundig Woordenboek, elektronische versie
http://www.pinkhof.eu/UniLexIDS/pages/search.aspx

>Pinkhof II
>Pinkhof geneeskundig woordenboek / J.J.J. van Everdingen, A.M.M. van den Eerenbeemt et al. – twaalfde herziene en uitgebreide druk.– Houten/Diegem : Bohn Stafleu von Loghum, 2012. – 1522 p.

>Posher, M.E.
>Successful treatment of varicella zoster virus meningoencephalitis in patients with AIDS: report of four cases and review./ M.E. Posher
In: AIDS 1994 vol:8 iss:8 pg:1115-1117
[online] http://ovidsp.tx.ovid.com/sp-3.14.0b/ovidweb.cgi?WebLinkFrameset=1&S=ONOMFPGOIMDDAAGANCLKAEDCGOIGAA00&returnUrl=ovidweb.cgi%3fMain%2bSearch%2bPage%3d1%26S%3dONOMFPGOIMDDAAGANCLKAEDCGOIGAA00&directlink=http%3a%2f%2fgraphics.tx.ovid.com%2fovftpdfs%2fFPDDNCDCAEGAIM00%2ffs047%2fovft%2flive%2fgv039%2f00002030%2f00002030-199408000-00012.pdf&filename=Successful+treatment+of+varicella+zoster+virus+meningoencephalitis+in+patients+with+AIDS%3a+report+of+four+cases+and+review.&navigation_links=NavLinks.S.sh.22.1&link_from=S.sh.22|1&pdf_key=FPDDNCDCAEGAIM00&pdf_index=/fs047/ovft/live/gv039/00002030/00002030-199408000-00012&D=ovft&link_set=S.sh.22|1|sl_10|resultSet|S.sh.22.23|0

>Postma et al.
>SARS: begin van een lange mars?/ Postma et al.
In: Medisch Journaal, jaargang 32, no. 3

[online] http://www.mmc.nl/content/download/34792/217858/file/MJ%203-2003.pdf

>Postma, B.H. et al.
>Lyme-borreliose: soms ongrijpbaar, vaak behandelbaar./ B.H. Postma et al.
In: Medisch Journaal jaargang 36 nummer 2 2007 2014-12-05
[online] http://www.mmc.nl/content/download/34936/218792/file/MJ%202-2007.pdf

>Powell et al.
>Herpes zoster meningoencephalitis without rash: varicella zoster virus DNA in CSF. Powell et al.
In: Journal of Neurology, Neurosurgery and Psychiatry. Aug 1995; 59(2): 198–199
[online] http://www.ncbi.nlm.nih.gov/pmc/articles/PMC486008/pdf/jnnpsyc00020-0088.pdf

>Preblud, S.R.
>Age-specific risks of varicella complications./ S.R. Preblud
In: Pediatrics Vol. 68 No. 1 July 1981
[online] http://pediatrics.aappublications.org/content/68/1/14.full.pdf

>Prick et al.
>Opnieuw West-Nijl-virus in Nederland: een man met encefalitis na een reis in Canada./ Prick et al.
In: Ned Tijdschr Geneeskd 2003 17 mei;147(20)
[online] https://www.ntvg.nl/system/files/publications/2003109780001a.pdf

>Prins M. et al.
>De 14e Internationale Aidsconferentie Kennis, betrokkenheid en actie./ M. Prins et al.
In: Nederlands Tijdschrift voor Geneeskunde 2002 5 oktober;146(40)
[online] http://www.ntvg.nl/system/files/publications/2002118990001a.pdf

>Protopopescu
>Theories Of Terminology – Past And Present./ Daria Protopopescu
University of Bucharest, 7p. [online]
http://cis01.central.ucv.ro/revista_scol/site_ro/2013/LEXICOLIGIE/PROTOPOPESCU.pdf

>PubMed
>http://www.ncbi.nlm.nih.gov/pubmed

>Rahamat-Langendoen, J.C.
>Klimaatverandering beïnvloedt het vóórkomen in Nederland van ziekten overgebracht door teken, muggen en zandvliegen./ J.C. Rahamat-Langendoen
In: Nederlands Tijdschrift voor Geneeskunde 2008;152:863-8
[online] https://www.ntvg.nl/system/files/publications/2008108630001a.pdf

>Ramirez-Herrera
>Experimental Infection of Swine and Cat Central Nervous Systems by the Pig Paramyxovirus of the Blue Eye Disease./ Ramirez-Herrera
In: Journal of Veterinary Medicine B 44, 461-476 (1997)
[online] http://onlinelibrary.wiley.com/doi/10.1111/j.1439-0450.1997.tb00997.x/pdf

>Redfield, D.C. et al.
>Bacteria, arthritis, and skin lesions due to Kingella kingae./ D.C. Redfield et al.
In: Archives of Disease in Childhood, 1980, 55, 411-414
[online] http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1626854/pdf/archdisch00781-0091a.pdf

>Reuter
>Groot Medisch vertaalwoordenboek Engels-Nederlands / P. Reuter. – Houten : Bohn Stafleu von Loghum, 2008. – 734 p.

>Rijksinstituut voor Volksgezondheid & Milieu
>Rijksinstituut voor Volksgezondheid & Milieu [online]
http://www.rivm.nl/dsresource?objectid=rivmp:22694&type=org&disposition=inline

>Rijksoverheid
>Rijksoverheid [online]
http://www.rijksoverheid.nl/documenten-en-publicaties/brochures/2010/12/14/vesiculaire-stomatitis.html

>Rimmelzwaan, G.
>Bestrijden van klein venijn
[online] http://repub.eur.nl/pub/22449/101001_Rimmelzwaan,%20Guss%20F.pdf

>Saunders
>Saunders comprehensive veterinary dictionary / eds. D.C. Blood et al. – Londen etc. : Saunders, 1999. – 1380 p.

>Schouten, J. et al.
>Neurologische Complicaties bij HIV-infectie./ J. Schouten et al. [online]
http://www.google.be/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CB8QFjAA&url=http%3A%2F%2Fwww.meningitisamc.nl%2Fmedia%2Fuploads%2Fnl%2Ffileuploads%2Fbanners%2F5%2FProtocol_neuro_HIV_2013.pdf&ei=72sAVYv3DoO3PZHIgOgK&usg=AFQjCNH3yZxUt-wOj8--J1Ms3jMTRKxMoQ&bvm=bv.87920726,d.ZWU

>Schuit
>Tick Proteins in Borrelia Transmission and Tick Feeding./ Schuit
University of Amsterdam, 188 p.
[online] http://dare.uva.nl/document/2/97475

>Schuurman M.J. et al.
>Een jong kind met pulmonale tuberculose./ M.J. Schuurman
In: Nederlands Tijdschrift voor Geneeskunde 2014;158: A6618
[online] http://www.ntvg.nl/system/files/publications/a6618.pdf

>Sheets, J.W.
>Dr Roger McNeill and public health in the Highlands and Islands of Scotland./ J.W. Sheets
In: J R Coll Physicians Edinb 2011; 41 : 354-60
[online] http://www.rcpe.ac.uk/sites/default/files/sheets.pdf

>Sigaloff & De Fijter
>Herpes zoster-associated encephalitis in a patient undergoing CAPD: case report and literature review./ Sigaloff & De Fijter
In: Peritoneal Dialysis International, Vol. 27, pp. 391–394
[online] http://www.pdiconnect.com/content/27/4/391.full.pdf

>Smith D.M. et al.
>HIV Superinfection./ D.M. Smith et al.
In: Journal of Infectious Diseases. (2005) 192 (3): 438-444.
[online] http://jid.oxfordjournals.org/content/192/3/438.full.pdf+html

>Smith, C.H. et al.
>A survey for torovirus in New Zealand cats with protruding nictitating membranes./ C.H. Smith et al.
In: New Zealand Veterinary Journal, 45:2, 41-43
[online] http://www.tandfonline.com/doi/pdf/10.1080/00480169.1997.35987

>Stedman's II
>Stedman's Medical Dictionary for the Health Professions and Nursing / Stedman
Philadelphia: Wolters Kluwer Health/Lippincott Williams & Wilkins, 2012, 1827 p.

>Stedman's
>Stedman's medical dictionary / eds. Maureen Barlow Pugh et al. – 27th ed. – Philadelphia: Lippincott, Williams & Wilkins, 2000. – 2098 p.

>Steiner, I. et al.
>Viral encephalitis: a review of diagnostic methods and guidelines for management./ I. Steiner et al.
In: European Journal of Neurology 2005 vol:12 iss:5 pg:331
[online] http://doctor-ru.org/main/1800/1813.pdf

>Stelma F.F. & Galama, J.
>Dengue; epidemiologie, kliniek, diagnostiek en pathofysiologie. Een update./ F.F. Stelma & J. Galama
In: Nederlands Tijdschrift voor Microbiologie 19e Jaargang Maart 2011 Nummer 1
[online] http://www.nvmm.nl/system/files/2011,%20nummer%201-19e%20jaargang%20maart%202011.pdf#page=16

>Stinis
>Zwangerschap, infectieziekten en werk./ Stinis
In: Tijdschrift voor Bedrijfs- en Verzekeringsgeneeskunde September 2006, Volume 14, Issue 9, pp 473-479
[online] http://www.psychischenwerk.nl/datafiles/TBVartikelzwangerschap%2018-10-06.pdf

>Strengers
>Immunoglobulinepreparaten in relatie tot infectieziekten./ Strengers
In: Ned Tijdschr Geneeskd. 1995;139:1953-60
[online] https://www.ntvg.nl/system/files/publications/1995119530002a.pdf

>Sun et al
>Stress-Induced Corticotropin-Releasing Hormone-Mediated NLRP6 Inflammasome Inhibition and Transmissible Enteritis in Mice./ Sun et al
In: Gastroenterology 2013;144:1478 –1487
[online] http://www.sciencedirect.com/science/article/pii/S0016508513002874

>Taber's
>Taber's cyclopedic medical dictionary / eds. Donald Venes et al. – 20th ed. – Philadelphia: Davis, 2005. – 2788 p.

>Tegnell et al.
>Smallpox, eradicated but a growing terror threat./ Tegnell et al.
In: Clinical Microbiology and Infection, Volume 8 Number 8, 2002
[online] http://onlinelibrary.wiley.com/doi/10.1046/j.1469-0691.2002.00525.x/epdf

>Textbook Of Pulmonary Medicine
>Textbook of pulmonary medicine / Behera. New Delhi : Jaypee Brothers Medical, 2010. 2 volumes

>Thayer R. et al.
>Sequence relationships of type D retroviruses which cause simian acquired immunodeficiency syndrome./ R. Thayer et al.
In: Virology 157, 317-329 (1987)
[online] http://www.sciencedirect.com/science/article/pii/0042682287902741

>Toledo et al.
>Varicella-Zoster Virus Encephalitis in an AIDS Patient./ Toledo et al.
In: The Brazilian Journal of Infectious Diseases 2004;8(3):255-258
[online] http://www.scielo.br/pdf/bjid/v8n3/21624.pdf

>Touzé et al.
>Tropical Spastic Paraparesis/HTLV-I-Associated Myelopathy in Europe and in Africa: Clinical and Epidemiologic Aspects./ Touzé et al.
In: Journal of Acquired Immune Deficiency Syndromes 1996 - Volume 13 - Issue - pp S38-S45 [online]
http://journals.lww.com/jaids/Fulltext/1996/00001/Tropical_Spastic_Paraparesis_HTLV_I_Associated.8.aspx

>Truscott, R.B.
>Experimental Studies on Control of Transmissible Enteritis (Bluecomb) of Turkeys./ R.B. Truscott
In: Avian Diseases Vol. 5, No. 4 (Nov., 1961), pp. 440-445
[online] http://www.jstor.org/stable/pdf/1587775.pdf

>Tubloy et al.
>Immunogenicity of porcine transmissible gastroenteritis virus spike protein expressed in plants./ Tubloy et al.
In: Vaccine 18 (2000) 2023-2028
[online] http://ac.els-cdn.com/S0264410X99005253/1-s2.0-S0264410X99005253-main.pdf?_tid=e03bb6ea-84a5-11e4-956f-

00000aab0f27&acdnat=1418681049_5eff86b82ec2f72d2715081bf876ad2b

>UMC Utrecht
>UMC Utrecht [online] http://www.umcutrecht.nl/nl/Ziekenhuis/Professionals/Diagnostiek-aanvragen/Medische-Microbiologie/HTLV-1-2

>UMLS
>Unified Medical Language System
[online] http://doctor.am/glossary/umls/

>Van Buuren et al.
>Enkele gedachten over de opleiding van junior en senior coassistenten en assistent-artsen./ Van Buuren et al.
In: Nederlands Tijdschrift voor Geneeskunde 1970, 114, nr 42
[online] https://www.ntvg.nl/system/files/publications/1970117410001a.pdf

>Van Dale EN, elektronisch
>Van Dale Groot Woordenboek Engels-Nederlands, elektronische versie

>Van Dale NE, elektronisch
>Van Dale Groot Woordenboek Nederlands-Engels, elektronische versie

>Van Dale NN, elektronisch
>Van Dale Groot Elektronisch Woordenboek Hedendaags Nederlands.

>Van Delft
>Tandheelkunde; ziektes van de elementen en omliggende structuren in de paardenmond./ Van Delft, 2 p.
[online] http://www.edvc.nl/wp-content/uploads/2014/10/Abstract-VJD-2011.pdf

>Van den Berg, A.
>een verborgen angst voor de natuur./ A. Van den Berg
InnovatieNetwerk Groene Ruimte en Agrocluster, 59 p.
[online] http://library.wur.nl/ebooks/1745851.pdf

>Van den Brande
>Kindergeneeskunde voor kinderverpleegkundigen./ Van den Brande p. 480 [online] https://books.google.be/books?id=xieCdq12sisC&pg=PA480&lpg=PA480&dq=%22varicella+encefalitis%22&source=bl&ots=CvJtB8suDP&sig=rqH0XhGKII7xEkeNX8HSxRNZ3BY&hl=nl&sa=X&ei=ZL5IVfnuO4PpaqX8gLgB&ved=0CB4Q6AEwAA#v=onepage&q=%22varicella%20encefalitis%22&f=false

>Van der Heide, R.M.
>Pokken, 10 jaar uitgeroeid!/ R.M. Van der Heide
In: Nederlands Tijdschrift voor Geneeskunde 1987;131:2278
[online] https://www.ntvg.nl/system/files/publications/1987122780001a.pdf

>Van Duijn
>Verwantschap tussen SIV en HIV en het gebruik van diermodellen in het onderzoek naar aids./ Van Duijn

Universiteit Gent dierengeneeskunde, 85 p.
[online] http://buck.ugent.be/fulltxt/RUG01/001/788/922/RUG01-001788922_2012_0001_AC.pdf

>Van Heuverswyn & Peeters
>The Origins of HIV and Implications for the Global Epidemic./ Van Heuverswyn & Peeters
In: Current Infectious Disease Reports July 2007, Volume 9, Issue 4, pp 338-346 [online]
http://download.springer.com/static/pdf/98/art%253A10.1007%252Fs11908-007-0052-x.pdf?auth66=1417441301_9f3e1e476abcf7ae33d3a286b5ab79fd&ext=.pdf

>Van Ranst, M.
>SARS (Severe Acute Respiratory Syndrome): een nieuwe virale longaandoening./ M. Van Ranst
[online] http://poj.peeters-leuven.be/content.php?url=article&id=1001662

>Van Vliet et al.
>Risico's van opkomende zoönosen voor de Nederlandse maatschappij./ Van Vliet et al.
Universiteit Utrecht [online] 36 p.
http://www.leefmilieu.nl/sites/www3.leefmilieu.nl/files/imported/pdf_s/2011-04-13_Adviesrapport_Risicos%20opkomende%20zoonosen.pdf

>Verdonschot
>Verkenning van de steekmuggen- en knuttenproblematiek bij klimaatverandering en vernatting./ Verdonschot
In: Alterra rapport 856, ISSN 1566-7197 [online]
http://content.alterra.wur.nl/Webdocs/PDFFiles/Alterrarapporten/AlterraRapport1856.pdf

>Vermont, C.L. et al.
>Virale infecties bij kinderen na een hematopoëtische stamceltransplantatie./ C.L. Vermont et al.
In: Ned Tijdschr Allergie & Astma 2011;1:13-23 [online]
http://www.google.be/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&cad=rja&uact=8&ved=0CCsQFjAC&url=http%3A%2F%2Fwww.ariez.nl%2FDownloadFile.lynkx%3Fguid%3D1f80d80f-05d0-4983-a074-5d6a7e2b1790&ei=22wAVYDwI829PbqNgaAM&usg=AFQjCNGjkdjbF62Q9pmXkTsicTo-b_VbTA&bvm=bv.87920726,d.ZWU

>Vetline.nl
>Vetline.nl
[online] http://www.vetline.nl/freetext.asp?ftmod=freetext_000000300

>VRT Taal
>VRT Taalnet
[online] http://www.vrt.be/taal

>Weerkamp et al.
>Meningo-encefalitis door varicella-zostervirus./ Weerkamp et al.
[online] https://www.ntvg.nl/system/files/publications/a1575.pdf

>Weijers & Kaspenberg
>Virologische diagnostiek in Nederland in de periode 1981-1985./ Weijers & Kaspenberg
In: Ned Tijdschr Geneeskd. 1987;131:632-5
[online] https://www.ntvg.nl/system/files/publications/1987106320001a.pdf

>Wells
>Longman pronunciation dictionary / J.C. Wells. – Harlow : Pearson education, 2007. Ninth impression. – 969 p.

>Westenend & Hoppenbrouwers
>Fatale varicella-zosterencefalitis; een zeldzame complicatie van herpes zoster./ Westenend & Hoppenbrouwers
In: Ned Tijdschr Geneeskd 1998 21 maart;142(12)
[online] https://www.ntvg.nl/system/files/publications/1998106540001a.pdf

>Wetzel et al.
>Good cognitive outcome of patients with herpes zoster encephalitis: a follow-up study./ Wetzel et al.
In: Journal of Neurology [0340-5354] 2002 vol:249 iss:11 pg:1612 [online]
http://download.springer.com/static/pdf/28/art%253A10.1007%252Fs00415-002-0874-2.pdf?auth66=1426004265_db19df5123bac464f0dc2b03a6f419c0&ext=.pdf

>Whitley R.J. & Gnann J.W.
>Viral encephalitis: familiar infections and emerging pathogens./ R.J. Whitley & J.W. Gnann
In: The Lancet Vol 359 February 9, 2002 507–514
[online] http://c5.ucalgary.ca/paed/files/paed/16-whitley-rj-viral-encehpalitis-familiar-infections-and-eme.pdf

>WHO
>World Health Organization
[online] http://www.who.int/en/

>Winkler-Prins
>Winkler Prins medische encyclopedie / eds. L.C.M. Röst, J. van Otterloo. – Amsterdam Elsevier, 2001. – 472 p.

>Woode, G.N. et al
>Studies with an unclassified virus isolated from diarrheic calves./ G.N. Woode et al
In: Veterinary Microbiology, 7 (1982) 221--240
[online] http://ac.els-cdn.com/0378113582900360/1-s2.0-0378113582900360-main.pdf?_tid=1359ff8e-7eff-11e4-84fa-00000aacb35f&acdnat=1418059653_234e252ff79b026fd9b23d30cbfb9760

>Woordenlijst
>Elektronisch Groene Boekje [online]
http://woordenlijst.org

>Zaaijer et al.
>De prevalentie van humaan T-lymfotroop virus type I onder Nederlandse bloeddonors./ Zaaijer et al.

In: Nederlands Tijdschrift voor Geneeskunde 1993, 137, nr 49
[online] https://www.ntvg.nl/system/files/publications/1993125410001a.pdf

>Zaaijer et al.
>Infectie met humaan T-lymfotroop virus bij Nederlandse bloeddonoren, 1993-1996./ Zaaijer et al.
In: Nederlands Tijdschrift voor Geneeskunde 1997 9 augustus 141(32)
[online] http://www.ntvg.nl/system/files/publications/1997115710001a.pdf

>Zhou et al.
>Effective inhibition of porcine transmissible gastroenteritis virus replication in ST cells by shRNAs targeting RNA-dependent RNA polymerase gene./ Zhou et al.
In: Antiviral Research 74 (2007) 36–42
[online] http://ac.els-cdn.com/S0166354207000022/1-s2.0-S0166354207000022-main.pdf?_tid=e7fe0938-c0fe-11e4-9b01-00000aab0f01&acdnat=1425316357_10fb3dab7589bb0f66eb19b81e6a2a25

VOLUME II

APPENDIX I: Terminological Records

**<Projectcode>MeSH E8 AaG 8
<Datum>23/05/2015
<Auteur>Aäron Gevaert
<Begeleider>Joost Buysschaert
<Talen>en, nl, op basis van MeSH 2015

**<MeSH Heading>Rubulavirus Infections
<Scope Note>Infections with viruses of the genus RUBULAVIRUS, family PARAMYXOVIRIDAE.
<Vakgebied>virus diseases
<UDC>616.9
<Project>^MeSH E8 AaG 8^
<Werkcode>
<Update Werkcode>C02.782.580.600.680
<Begrip>infectie met virus van het genus rubaluvirus, dat tot de familie paramyxoviridae behoort
<Internat>
<**Nl-term**>rubaluvirusinfectie
<Equival>
<**En-term**>rubaluvirus infection
<Equival>
<Beeld>

<**English**>rubulavirus infection
<Trefwoord>rubulavirus
<Betrouwb>nor 3pri
<Woordsrt>sub
<Genus>
<Flexie>plu rubulavirus infections (^Medical 2014^ 2014-10-23)
<Colloc>
<Uitspraak>ˌru:bjʊləˈvaɪərəs (^Merriam Webster^2014-10-23, transliteration AaG) inˈfekʃən (^Wells^ 411)
<Afko/Symb>
<Extrainfo>
<Extrasyn>
<Verwant>
<Boven>^paramyxoviridae infection^
<Neven>^respirovirus infection^,^pneumovirus infection^
<Onder>^mumps^

<Definitie>
<Commentaar>no definition was found. Definition of rubulavirus: a genus of viruses of the subfamily Paramyxovirinae (family Paramyxoviridae); species that cause human disease include human parainfluenza viruses 2 and 4 and mumps virus. (^Dorland's^ 1657)

<Contexten>An exciting possibility is that the WF-PIV genes that are responsible for activating cytokine synthesis could be incorporated into the WT rSV5 genome to allow an evaluation of the role of innate responses in adaptive immunity to rubulavirus infection. (^PubMed^ Young & Parks 12768033 2015-12-05)

There have been recent advances in elucidation of the pathogenesis of rubulavirus infection in young pigs (Allan et al., 1996), but the development of reproductive tract lesions in sexually mature pigs has not been examined. The aims of this study were to investigate the development of lesions and distribution of viral antigen in the reproductive tract of boars experimentally infected with this virus. (^PubMed^ Ramirez-Mendoza et al. 9447484 2014-14-10)

Moderate and severe respirovirus infections were associated with higher nasal wash concentrations of IL-1_, CXCL8, and CXCL10 when compared with mild respirovirus infections, and similarly, CXCL8 and CXCL10 concentrations were higher in samples from patients diagnosed with moderate to severe rubulavirus infections when compared with those with mild rubulavirus infections.

(^PubMed^ El Feghaly et al. 20182399 2014-10-14)

<Overige bronnen>

<**Nederlands**>rubulavirusinfectie
<Trefwoord>rubulavirus
<Betrouwb>sec
<Woordsrt>sub
<Genus>infectie: f (^Woordenlijst^ 2015-05-21)
<Flexie>
<Colloc>
<Uitspraak>
<Afko/Symb>
<Extrainfo>
<Extrasyn>
<Verwant>
<Boven>^^
<Neven>^^
<Onder>^^

<Definitie>
<Commentaar>Geen definitie gevonden. Voorstel: infectie veroorzaakt door een virus van de paramyxovirinaefamilie, dat de bof kan veroorzaken en ook een infectie kan veroorzaken bij varkens.

<Contexten>

<Overige bronnen>^UMLS^ 2015-05-19

**<MeSH Heading>Severe Acute Respiratory Syndrome
<Scope Note>A viral disorder characterized by high FEVER, dry COUGH, shortness of breath (DYSPNEA) or breathing difficulties, and atypical PNEUMONIA. A virus in the genus CORONAVIRUS is the suspected agent.

<Vakgebied>virus diseases
<UDC>616.9
<Project>^MeSH E8 AaG 8^
<Werkcode>
<Update Werkcode>C02.782.600.550.200.750
<Begrip>een besmettelijke longziekte die wordt veroorzaakt door een nieuw soort coronavirus
<Internat>
<**Nl-term**>SARS, ernstig acuut ademhalingssyndroom
<Equival>
<**En-term**>severe acute respiratory disease, SARS
<Equival>
<Beeld>

<**English**>severe acute respiratory syndrome
<Trefwoord>syndrome
<Betrouwb>nor 3pri 3sec
<Woordsrt>sub
<Genus>
<Flexie>no plu found; plu syndrome : syndromes
<Colloc>
<Uitspraak>sɪ'vɪə (^Wells^ 731) ə´kju:t (^Wells^ 9) ri'spɪrətəri (^Wells^ 684) 'sɪndrəʊm (^Wells^ 800)
<Afko/Symb>SARS
<Extrainfo>
<Extrasyn>
<Verwant>
<Boven>^coronavirus infection^
<Neven^transmissible * enteritis * of turkeys^, ^feline infectious peritonitis^
<Onder>^^

<Definitie>Severe acute respiratory syndrome (SARS) is a serious form of pneumonia. It is caused by a virus that was first identified in 2003. Infection with the SARS virus causes respiratory distress (severe breathing difficulty) and sometimes death.
SARS is a dramatic example of how quickly world travel can spread a disease. It is also an example of how quickly a connected health system can respond to a new health threat. (^Medline^ 2014-10-23)

<Commentaar>SARS is caused by a coronavirus and was first discovered in Guangdong province in 2002. The disease is highly contagious and has the potential of causing large epidemics in the absence of control measures. Transmission appears to occur primarily through dispersal of droplets from the respiratory tract, generated when the patient talks, coughs, or sneezes. Since sneezing and rhinorrhea are not common symptoms of SARS and cough is present only later part of the illness, oral droplets generated during talking may be an important mode of transmission. (^Textbook of Pulmonary Medicine^ 24-11-2014)
It is characterized by a fever of higher than 100.4 °F (38.0 °C), cough, difficulty breathing, or hypoxia. (^Taber's^ 1980)

<Contexten>A worldwide outbreak of severe acute respiratory syndrome (SARS) has been associated with exposures originating from a single ill health care worker from Guangdong Province,

China. (^PubMed^ Ksiazek et al. 12690092 2014-10-21)

The urban area of Toronto, Ont, and its surrounding suburbs, was the second-largest epicentre of the severe acute respiratory syndrome (SARS) epidemic of 2003. In the final tally, this area had 438 probable and suspected patient cases (100 of whom were health care workers) and 44 deaths due to SARS. (^Pubmed^ Jaakkimainen et al. 25316747 2014-10-21)

The best treatment strategy for severe acute respiratory syndrome (SARS) is still unknown. Ribavirin and corticosteroids were used extensively during the SARS outbreak. (^Pubmed^ Lai, S.T. 16172857 2014-10-21)

<Overige bronnen>^Dorland's^ 1848 - ^Stedman's II^ 1530 - ^Taber's^ 1980

<**English**>SARS
<Trefwoord>SARS
<Betrouwb>3pri 3sec
<Woordsrt>sub
<Genus>
<Flexie>sine plu
<Colloc>
<Uitspraak>sa:z (^Wells^ 712)
<Afko/Symb>
<Extrainfo>
<Extrasyn>
<Verwant>
<Boven>^coronavirus infection^
<Neven>^transmissible * enteritis * of turkeys^, ^feline infectious peritonitis^
<Onder>^^

<Definitie>severe acute respiratory syndrome ^Dorland's^ 1670
<Commentaar>This definition merely refers to severe acute respiratory syndrome, it does not give a definition of its own, most likely because the two terms are exact synonyms.

<Contexten>The epidemic was rapidly and globally disseminated when a medical professor from a teaching hospital in Guangzhou, who was considered as a ''super-spreader'' of SARS, came to Hong Kong on 21 February 2003. During his stay in hotel M, he transmitted the infection to other residents, and the secondary cases spread the disease to hospitals in Hong Kong, and to other countries including Vietnam, Singapore, and Canada. (^PubMed^ 2014-10-23 Cheng et al. 23994190)

No further information was provided until March 26, 2003 when China updated its numbers; there were a total of 792 cases and 31 deaths. China began daily reporting of SARS cases in early April. By April, the epidemic has spread and reached its peak in Beijing and several parts of China without the central government recognizing the seriousness of the situation. (^PubMed^ 2014-10-23 Chang-Yeoung 15018127)

After the outbreak of SARS in 2003, the Chinese Government established a new mechanism of monitoring, forecasting, and providing early warnings of emerging communicable diseases. With the new monitoring and early warning system, NHFPC and provincial health departments can publish information warning of an infectious disease based on results of their analysis in order to facilitate a rapid response. (^PubMed^ 2014-10-23 Yao et al. 24390368)

<Overige bronnen>^Dorland's^ 1670 - ^Textbook of Pulmonary Medicine^ 398 - ^Stedman's II^ 1495

<**Nederlands**>SARS
<Trefwoord>SARS
<Betrouwb>3pri 3sec
<Woordsrt>sub
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<Extrasyn>ernstig acuut luchtwegensyndroom (^Pinkhof I^) 2015-09-05
<Verwant>SARS CoV
<Boven>^^
<Neven>^^
<Onder>^^

<Definitie>ernstige atypische pneumonie veroorzaakt door SARS-coronavirus. (^Pinkhof I^ 2014-11-24)
<Commentaar>voor het eerst gesignaleerd in de provincie Guangdong in China in 2002

<Contexten>'Severe acute respiratory syndrome' (SARS) is een zoönose die betrekkelijk efficiënt van mens op mens wordt overgedragen, maar nadat de epidemie tot staan was gebracht, was de mens niet langer bron van verspreiding: ziekte bij de mens was derhalve een omvangrijk incident, maar de ziekte blijft een zoönose. (^Galama, J.M.D.^ 2014-11-24)

De eerste nieuwe infectieziekte van deze eeuw, aangeduid met 'SARS' ('severe acute respiratory syndrome'), heeft wereldwijd geleid tot een ongekende reactie van media, gezondheidszorg en wetenschap.1 Een netwerk van 11 laboratoria in 9 landen, in real time verbonden door het internet, stelde binnen een maand vast dat SARS veroorzaakt wordt door een voorheen onbekend Coronavirus, het SARS-CoV (figuur). Korte tijd later werd de basenparenvolgorde van het genetische materiaal (RNA) van SARS-CoV bekendgemaakt. (^Gelinck, L.B.S. et al.^ 2014-11-24)

Fylogenetische analyse van het genoom van het SARS coronavirus (SARS-CoV) genoom toonde aan dat dit nieuw type coronavirus niet nauw verwant is met de reeds gekende coronavirussen. Een mogelijke dierlijke oorsprong wordt aangenomen, aangezien een genetisch zeer verwant coronavirus kon worden geïdentificeerd bij civetkatten. Tot op heden (11 juli 2003) bedraagt het cumulatieve aantal SARS gevallen 8437, en stierven 813 patiënten. De epidemie lijkt op dit moment onder controle. (^Van Ranst, M.^ 2014-11-24)

<Overige bronnen>^Merck^ 1175 - ^Codex Medicus^ 400 - ^Coëlho^ 798

<**Nederlands**>ernstig acuut ademhalingssyndroom
<Trefwoord>ademhalingssyndroom
<Betrouwb>2pri
<Woordsrt>sub
<Genus>syndroom: n (^Woordenlijst^ 2015-05-21)
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<Uitspraak>
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<Extrainfo>
<Extrasyn>ernstig acuut luchtwegensyndroom (^Pinkhof I^) 2015-05-05
<Verwant>
<Boven>^^
<Neven>^^
<Onder>^^

<Definitie>

<Commentaar>er is een definitie gevonden. Voorstel gebaseerd op ^Pinkhof I^2014-24-11: ernstige atypische pneumonie veroorzaakt door het SARS-coronavirus.

<Contexten>Er doken nu ook gevallen op in Singapore en Vietnam. Het was duidelijk dat hier iets zeer ernstigs aan de hand was en op 12 maart 2003 stuurde de WHO een wereldwijde waarschuwing uit over deze nieuwe ziekte die SARS werd gedoopt: Severe Acute Respiratory Syndrome, ernstig acuut ademhalingssyndroom. (Het woord syndroom wordt in de geneeskunde gebruikt voor een ziekte met een geheel van verschijnselen waarvan de oozaak niet duidelijk is). (^Coutinho^ 2014-10-21)

Het Ernstig Acuut Ademhalingssyndroom (SARS) is een ziekte veroorzaakt door een coronavirus. Die virussen zijn allang bekend als pathogeen voor de mens, maar deze nieuwe vorm is virulenter dan de reeds bekende vormen. SARS werd onderkend in maart van dit jaar in China en leek de wereld te gaan teisteren als een soort Spaanse Griep. (^Bol, P.^ 2015-05-07)

<Overige bronnen>

**<MeSH Heading>Severe Dengue
<Scope Note>A virulent form of dengue characterized by THROMBOCYTOPENIA and an increase in vascular permeability (grades I and II) and distinguished by a positive pain test (e.g., TOURNIQUET PAIN TEST). When accompanied by SHOCK (grades III and IV), it is called dengue shock syndrome.

<Vakgebied>virus diseases
<UDC>616.9
<Project>^MeSH E8 AaG 8^
<Werkcode>
<Update Werkcode>C02.081.270.200
<Begrip>ernstige vorm van dengue gekenmerkt door in- en uitwendige bloedingen. Dengue shocksyndroom kan optreden in ergere fases van de ziekte
<Internat>
<**Nl-term**>dengue hemorragische koorts
<Equival>
<**En-term**>severe dengue, dengue hemorrhagic fever
<Equival>
<Beeld>

<**English**>severe dengue
<Trefwoord>dengue
<Betrouwb>nor 3pri
<Woordsrt>sub
<Genus>
<Flexie>sine plu
<Colloc>severe dengue fever
<Uitspraak>sɪˈvɪə (^Wells^ 731) ˈdeŋgi (^Wells^ 211)
<Afko/Symb>
<Extrainfo>
<Extrasyn>
<Verwant>
<Boven>^dengue^
<Neven>^^
<Onder>^^

<Definitie>severe dengue is classified as dengue with any of the following: severe plasma leakage leading to shock or fluid accumulation with respiratory distress; severe bleeding; or severe organ impairment such as elevated transaminases ≥1,000 IU/L, impaired consciousness, or heart impairment. (^Centers for Disease Control and Prevention^ 2014-10-30)
<Commentaar>

<Contexten>on day seven of life, the infant developed severe dengue with cyanosis and severe bleeding requiring blood transfusion. Both the baby and mother recovered and were ultimately discharged. (^PubMed^ Sharp et al. 25268134 2014-10-30)

People exposed to a secondary DENV infection with another serotype are at greater risk of developing more severe forms of dengue disease. The increased risk of severe dengue in people experiencing repeat DENV infections appear to be due, at least in part, to the ability of pre-existing serotype crossreactive antibodies to form virus-antibody complexes that can productively infect Fcc receptor-bearing target cells. (^PubMed^ Alwis et al. 25275316 2014-10-30)

Second, many respondents, regardless of their level of training, were unable to identify early signs of shock and warning signs for severe dengue, knowledge needed to effectively give anticipatory guidance and inform triage and referral decisions. (^PubMed^ Tomashek et al. 25299251 2014-10-30)

<Overige bronnen>

<**English**>dengue hemorrhagic fever
<Trefwoord>dengue
<Betrouwb>3pri 3sec
<Woordsrt>sub
<Genus>
<Flexie>sine plu
<Colloc>
<Uitspraak>ˈdeŋgi (^Wells^ 211) hɛməˈrædʒɪk (^Oxford English Dictionary^ 2014-11-24, transliteration Aa G) ˈfiːvə (^Wells^ 290)
<Afko/Symb>DHF
<Extrainfo>British English spelling: dengue haemorrhagic fever
<Extrasyn>hemorrhagic dengue (^International^ 1066)
<Verwant>
<Boven>^dengue^
<Neven>^^
<Onder>^^

<Definitie>a form of dengue characterized by hemorrhagic manifestations. It often occurs in epidemics in large urban centers in Asia, and is associated with a substantial mortality rate (50 percent or more), especially in children. Thrombocytopenia, concurrent hemoconcentration, and circulatory failure (dengue hemorrhagic shock syndrome), probably mediated by immunopathologic mechanisms, are important features of the disease. Intensive care with fluid replacement, blood transfusion, and administration of corticosteroids plays a part in management. (^International^ 1066)
<Commentaar>

<Contexten>Dengue infection can result in dengue fever (DF) and dengue hemorrhagic fever (DHF). The latter is further divided into four grades depending upon severity. Infection with one of the dengue viruses confers lifelong immunity to that serotype. If a person is infected by another serotype of dengue virus (secondary infection), problematic versions of dengue, such as dengue hemorrhagic fever, may develop due to immune enhancement. (^PubMed^ Khurram et al. 2014-10-30 24999118)

Serum samples were obtained from suspected dengue cases submitted for testing during 2007–2010 to the Passive Dengue Surveillance System (PDSS) of the CDC Dengue Branch, at San Juan, Puerto Rico. Samples were confirmed as DENV laboratory positive cases by reverse transcriptase polymerase chain reaction anti-DENV immunoglobulin M (IgM) assay and clinically identified as dengue hemorrhagic fever (DHF) or dengue fever (DF) based on a dengue case investigation form (DCIF) containing clinical data submitted with the specimen. (^PubMed^ Poole-Smith et al. 2014-10-30 25349378)

Few recent histopathologic studies on Asian cases of fatal dengue were available, one of the reasons being that fatality rates are low and fatal cases may occur in areas far from available pathology resources. Many individuals, adults or children, who die during the course of dengue hemorrhagic fever (DHF)/dengue shock syndrome (DSS) do so in facilities with advanced critical care resources. These deaths often occur after many days or weeks of resuscitation, complicating the interpretation of tissue changes seen on autopsy as being related to the original dengue-mediated pathogenesis. (^PubMed^ Aye et al. 2014-10-30 24767772)

<Overige bronnen>^Dorland's^ 482 - ^International^ 1066 – ^Stedman's^ 455 - ^Churchill's^ 695

<**Nederlands**>dengue hemorragische koorts
<Trefwoord>hemorragische koorts
<Betrouwb>3pri sec
<Woordsrt>sub
<Genus>koorts: v (^Woordenlijst^ 2015-05-21)
<Flexie>sine plu
<Colloc>
<Uitspraak>
<Afko/Symb>DHK
<Extrainfo>spelling Codex Medicus 493: dengue-hemorragische koorts
<Extrasyn>hemorragische dengue
<Verwant>
<Boven>^^
<Neven>^^
<Onder>^^

<Definitie>treedt op als complicatie van dengue en wordt gekenmerkt door in- en uitwendige bloedingen (hemorragieën). De ziekte komt veel voor in Zuidoost-Azië, al zijn er ook gevallen van dengue-hemorragische koorts gemeld in Cuba, het Caribisch gebied en de Fiji-eilanden. Slachtoffers zijn vooral jonge kinderen, terwijl volwassenen en ingezetenen van buitenlandse afkomst gewoonlijk alleen last hebben van ‘gewone’ dengue. Dengue-hemorragische koorts treedt op als iemand twee keer achter elkaar een infectie door het dengue virus heeft gehad maar dan door twee verschillende typen van het dengue virus.(^Medicinfo^ 2014-11-24)
<Commentaar>Medicinfo is not the most reliable source and it also contains the spelling with a hyphen.

<Contexten>De klinische presentatie van dengue kan sterk variëren, waardoor de diagnose vaak niet wordt overwogen. Als de diagnose is gesteld, dient er extra aandacht te zijn voor preventieve maatregelen. Een tweede infectie met dengue leidt vaker tot dengue hemorragische koorts. Als dengue in de voorgeschiedenis bekend is bij patiënten met dengue hemorragische koorts, zal dit leiden tot een snellere herkenning en behandeling. (^Den Ouden, H. et al^, 2014-10-30)

De hemorragische koorts virussen, dengue en het verwante gele koorts, behoren tot de familie van de *Flaviviridae*, in het genus *flavivirus*. Transmissie van deze RNA virussen naar de mens kan voortkomen uit een beet van een besmette vrouwelijke Aedes mug (*Ae. aegypti* als voornaamste vector). In het geval van het dengue virus (DENV) kunnen er zich milde symptomen ontwikkelen genaamd dengue koorts en kan de ziekte verder ontwikkelen tot het ernstige dengue hemorragische koorts/ dengue shock syndroom (DHK/DSS). Jaarlijks worden wereldwijd meer dan 100 miljoen individuen geïnfecteerd met het virus, waarbij het voor 20.000 fataal wordt (voornamelijk kinderen). (^Coen^, 2014-10-30)

Dengue-hemorragische-koorts (DHK) en dengue-shocksyndroom (DSS) zijn ernstige manifestaties van dengue. De oorzaak is niet geheel opgehelderd, maar de ‘virus enhancement’-theorie wordt algemeen aanvaard. Deze gaat uit van 2 opeenvolgende infecties met verschillende serotypen, waarbij tijdens de tweede infectie een immunologisch gemedieerde reactie ontstaat met activering van het complementsysteem, aantasting van endotheel en vaatdoorlaatbaarheid. (^Kager, P.A.^ 2014-10-30)

<Overige bronnen>^Codex Medicus^ 493

**<MeSH Heading>Simian Acquired Immunodeficiency Syndrome
<Scope Note>Acquired defect of cellular immunity that occurs naturally in macaques infected with SRV serotypes, experimentally in monkeys inoculated with SRV or MASON-PFIZER MONKEY VIRUS; (MPMV), or in monkeys infected with SIMIAN IMMUNODEFICIENCY VIRUS.

<Vakgebied>virus diseases
<UDC>616.9
<Project>^MeSH E8 AaG 8^
<Werkcode>
<Update Werkcode>C02.782.815.616.850
<Begrip>ziekte die een gebrek aan cellulaire immuniteit veroorzaakt die natuurlijk voorkomt in apen die geïnfecteerd zijn met bepaalde apenretrovirussen, het Mason-Pfizer apenvirus of SIV
<Internat>
<**Nl-term**>SAIDS, apenaids
<Equival>
<**En-term**>simian acquired immunodeficiency syndrome, SAIDS, simian AIDS
<Equival>
<Beeld>

<**English**>simian acquired immunodeficiency syndrome
<Trefwoord>simian acquired immunodeficiency syndrome
<Betrouwb>nor 3pri
<Woordsrt>sub
<Genus>
<Flexie>sine plu
<Colloc>
<Uitspraak>ˈsɪmiən (^Wells^ 734) ˌəˈkwʌɪəd (^Oxford English Dictionary^ 2015-03-09) ˌmjuːnəʊdɪˈfɪʃənsi (^Oxford English Dictionary^ 2015-03-09) ˈsɪndrəʊm (^Wells^ 800)
<Afko/Symb>SAIDS
<Extrainfo>
<Extrasyn>simian acquired immune deficiency syndrome (^PubMed^ 2014-11-23, Heidecker et al. 3041028)
<Verwant>
<Boven>^lentivirus infection^
<Neven>^equine infectious anemia^, ^HIV infection^
<Onder>^^

<Definitie>
<Commentaar>no definition found. Suggestion: a disease that may occur naturally in Old World monkeys and is similar to AIDS in humans. It is caused by the simian immunodeficiency virus (SIV)

<Contexten>A 1 ml suspension of viral stock was used for intravenous inoculation of 10 animals, (nine with SIV mac and one with SIV sm). A dose of 2.5 x 10-1 tissue culture infectious dose (TCID50) induced persistent viremia within 14 days, and simian acquired immunodeficiency syndrome (SAIDS) occurred in all of the animals 3 to 9 months postinoculation. (^Heise et al.^ 2015-03-31)

Four of four unimmunized animals developed severe clinical signs of simian acquired immunodeficiency syndrome by 38 to 227 days after challenge and were euthanatized 91 to 260 days postchallenge. (^Marthas et al.^ 2015-03-30)

The simian immunodeficiency virus (SIV)-infected rhesus macaques provide a suitable animal model to determine the role of IEL in the immunopathogenesis of HIV infection. SIV is a lentivirus that

causes simian acquired immunodeficiency syndrome (SAIDS) in rhesus macaques. (^Mattapallil et al.^ 2015-03-31)

<Overige bronnen>

<**English**>SAIDS
<Trefwoord>SAIDS
<Betrouwb>3pri
<Woordsrt>sub
<Genus>
<Flexie>sine plu
<Colloc>
<Uitspraak>No pronunciation found. Suggestion (partially based on ^Wells^ 17): seɪdz
<Afko/Symb>
<Extrainfo>
<Extrasyn>
<Verwant>
<Boven>^lentivirus infection^
<Neven>^equine infectious anemia^, ^HIV infection^
<Onder>^^

<Definitie>
<Commentaar>no definition found. Suggestion: a disease that may occur naturally in Old World monkeys and is similar to AIDS in humans. It is caused by the simian immunodeficiency virus (SIV)

<Contexten>A disease that is similar to human AIDS may occur in monkeys. Simian AIDS (SAIDS) was experimentally transmitted from 2 rhesus monkeys dying of the disease to 4 cytomegalovirus (CMV) antibody negative rhesus monkeys. The inocula consisted of the supernatant fluid from 10% homogenates of various tissues with or without buffy-coat cells from blood. (^London et al.^ 2014-11-02)

Simian acquired immunodeficiency syndrome (SAIDS) in macaque monkeys is caused by type D retroviruses; three independent virus isolates are identified as SRV-1 (SAIDS retrovirus-serotype l), SRV-2, and MPMV (Mason-Pfizer monkey virus). Virions from these three isolates have serologically related core antigens, but distinct surface proteins. Also, SRV-2 is unique since it apparently induces retroperitoneal fibromatosis in addition to SAIDS. (^Thayer et al.^ 2014-11-02)

Type D simian retroviruses (SRV) are *Betaretroviruses* which have been etiologically linked to a simian acquired immune deficiency syndrome (SAIDS) of varying severity in several Asian macaque species. SRV infections are found in wild-caught macaques and have been endemic in captive macaque populations in the National Primate Research Centers (NPRC) in the United States. (^PubMed^ Philippe-Staheli 2015-03-09 16515713)

<Overige bronnen>

<**English**>simian AIDS
<Trefwoord>simian AIDS
<Betrouwb>3pri
<Woordsrt>sub
<Genus>
<Flexie>sine plu
<Colloc>
<Uitspraak>ˈsɪmiən (^Wells^ 743) eɪdz (^Wells^ 17)
<Afko/Symb>

<Extrainfo>
<Extrasyn>
<Verwant>
<Boven>^lentivirus infection^
<Neven>^equine infectious anemia^, ^HIV infection^
<Onder>^^

<Definitie>
<Commentaar>no definition found. Separate terms:
Simian: Of or relating to monkeys or apes (^International^ 2613)

AIDS: The most severe manifestation of disease due to infection with human immunodeficiency virus (HIV). The criteria established by the Centers for Disease Control and Prevention for the diagnosis of AIDS include (1) presence of certain opportunistic infections indicating an underlying defect in cell-mediated immunity in the absence of known causes of underlying immunodeficiency or other host defense defects; or (2) CD4+ cell count of less than 200/mL; or (3) CD4+ cell percentage of less than 14 per cent. (^Dorland's^ 1820)

<Contexten>The animals described in this report were maintained in accordance with the guidelines of the Committee on Animals of the Harvard Medical School and those prepared by the Committee on Care and Use of Laboratory Animals of the Institute of Laboratory Animal Resources, National Research Council. All animals were individually housed in isolation facilities, but were periodically handled in small groups for blood or tissue collection. Polyomaviral disease was diagnosed after postmortem examination of four SIV-infected rhesus monkeys (Macaca mulatta [Mm]) that died with simian AIDS. (^PubMed^ Horvath et al. 1376560 2015-03-09)

The majority of these animals were euthanized due to symptoms of simian AIDS with low CD4 count, and the lymphomas were diagnosed at necropsy. An additional lymphoma case was obtained from the Lovelace Respiratory Research Institute. This macaque (A07762) was euthanized during quarantine due to clinical disease and diagnosed with malignant lymphoma at necropsy. (^PubMed^ Bruce et al. 23055934 2015-03-09)

Interestingly, we observed a clustering of deaths in animals with TCP soon after weeks 42 and 71, which were shortly after boosting immunization without antiretroviral therapy in this study. We recently reported that immunizations in these SIV-infected macaques without antiretroviral therapy result in a transient rise in VL, presumably due to the activation of a population of CD4 T cells. 21 This rise in VL may have accelerated the development of complications of simian AIDS. (^Alcantara et al.^ 2015-03-09)

<Overige bronnen>

<**Nederlands**>SAIDS
<Trefwoord>SAIDS
<Betrouwb>2pri
<Woordsrt>sub
<Genus>
<Flexie>
<Colloc>
<Uitspraak>
<Afko/Symb>
<Extrainfo>
<Extrasyn>
<Verwant>
<Boven>^^

<Neven>^^
<Onder>^^

<Definitie>
<Commentaar>Er zijn geen definities gevonden. Suggestie: een ziekte die kan voorkomen in apen van de Oude Wereld en die sterk lijkt op AIDS in mensen. De ziekte wordt veroorzaakt door het apenvirus SIV

<Contexten>Er zijn verschillende soorten SIV-isolaten gevonden, waaronder bij de chimpansee, roetmangabey, mandril, groene meerkat en de diadeemmeerkat. Deze komen voor in Afrika, zijn endemisch en veroorzaken geen ziekte in hun natuurlijke gastheer. Apensoorten in Azië hebben in het wild geen natuurlijke SIV, maar wanneer ze experimenteel geïnfecteerd worden ontwikkelen ze wel ziekte, vergelijkbaar aan AIDS. Deze ziekte bij apen wordt SAIDS (simian AIDS) genoemd (Geretti, 1999). Tabel 1 geeft de belangrijkste SIV-isolaten en hun natuurlijke gastheer weer. (^Van Duijn^ 2015-02-11)

In 1981-82 bij de vierde besmettingsgolf heeft men een verband met het hiv gelegd. Het kreeg de benaming SAIDS (Simian aids). (^Vangroenweghe^ 2015-05-19)

<Overige bronnen>

<**Nederlands**>apenaids
<Trefwoord>apenaids
<Betrouwb>1pri sec
<Woordsrt>sub
<Genus>aids : m (^Woordenlijst^ 2015-05-21)
<Flexie>
<Colloc>
<Uitspraak>
<Afko/Symb>
<Extrainfo>
<Extrasyn>
<Verwant>
<Boven>^^
<Neven>^^
<Onder>^^

<Definitie>
<Commentaar>Er zijn geen definities gevonden. Suggestie: een ziekte die kan voorkomen in apen van de Oude Wereld en die sterk lijkt op AIDS in mensen. De ziekte wordt veroorzaakt door het apenvirus SIV

<Contexten>Apen die besmet zijn met SIV worden zelf niet ziek en krijgen geen apen-AIDS, maar zij kunnen het virus wel overdragen op andere apen en ook op mensen. (^Kennislink^ 2015-05-19)

<Overige bronnen>^VRTtaal^ 2015-03-29

**<MeSH Heading>Smallpox
<Scope Note>an acute, highly contagious, often fatal infectious disease caused by an orthopoxvirus characterized by a biphasic febrile course and distinctive progressive skin eruptions. Vaccination has succeeded in eradicating smallpox worldwide. (Dorland, 28th ed)

<Vakgebied>virus diseases
<UDC>616.9
<Project>^MeSH E8 AaG 8^
<Werkcode>
<Update Werkcode>C02.256.743.826
<Begrip>Nu uitgeroeide infectieziekte veroorzaakt door het pokkenvirus (variolavirus)
<Internat>variola
<**Nl-term**>pokken, variola
<Equival>
<**En-term**>smallpox, variola
<Equival>
<Beeld>

<**English**>smallpox
<Trefwoord>smallpox
<Betrouwb>nor 3pri 3sec
<Woordsrt>sub
<Genus>
<Flexie>sine plu
<Colloc>
<Uitspraak: ˈsmɔ:lpɒks (^Wells^ 751)
<Afko/Symb>
<Extrainfo>
<Extrasyn>pestis variolosa (^International^ 2625)
<Verwant>
<Boven>^poxviridae infection^
<Neven>^monkeypox^, ^fowlpox^
<Onder>^^

<Definitie>An acute, highly contagious, and frequently fatal viral illness caused by the variola virus. (^Dorland's^ 1726)
<Commentaar>the disease was eradicated in 1980 but is still kept in storage in facilities in the US and Russia.

<Contexten>Until its global eradication in 1980, due to an aggressive global surveillance, vaccination, and containment campaign conducted by the World Health Organization (WHO) from1966 to 1977, smallpox was endemic in 31 countries in the 20th century. As recently as 1967, the WHO estimated that 10 to 15 million people contracted smallpox yearly, and more than 2 million died of smallpox each year. (^PubMed^ Mucker et al. 2014-11-15 24100494)

The Native-American populations were located at Jesuit missions in what is now the southwestern United States and Mexico, and, in every case, the host population had not previously experienced a smallpox outbreak. In every population of European/African descent, there was at least some history of exposure to smallpox. (^PubMed^ Elderd et al. 2014-11-15 24021521)

Vaccines are the most successful strategy developed in Medicine to prevent and even eradicate the most dreadful epidemic infectious diseases. The history of smallpox vaccination in Naples is quite unique. Although Galbiati established the retro-vaccination (1803) and developed the "calf" lymph vaccine, recognized and implemented since 1864 as the optimal smallpox vaccine in the following

hundred years, Naples general population was mainly vaccinated with “human” lymph from abandoned children until 1893. (^PubMed^ Buonaguro et al. 2015-02-20 25622683)

<Overigebronnen>^Dorland’s^ 1726 - ^Oxford Medical Companion^ 906 - ^Mosby’s^ 1448 - ^Taber^ 2016 - ^Stedman’s^ 1649 - ^International^ 2625 - ^Churchill’s^ 1734

<**English**>variola
<Trefwoord>variola
<Betrouwb>3pri 3sec
<Woordsrt>sub
<Genus>
<Flexie>
<Colloc>variola virus (VARV), variola minor, variola major, variola infection
<Uitspraak>vəˈraɪələ ^Wells^ 870
<Afko/Symb>
<Extrainfo>
<Extrasyn>
<Verwant>
<Boven>^poxviridae infection^
<Neven>^monkeypox^, ^fowlpox^
<Onder>^^

<Definitie>smallpox (^Dorland’s^ 2025)
<Commentaar>variola is a synonym of smallpox, for that reason medical dictionaries such as Dorland’s and Churchill’s tend to refer to smallpox.

<Contexten>On 1 August 1881, Roger McNeill was awarded the degree of M.D. with first class honours and a gold medal. Thomas Grainger Stewart, Physician to the Queen in Scotland, considered the research ‘the best account with which he was acquainted of certain points in the clinical history of variola. (^Sheets, J.W.^ 2015-02-20)

Thus, although no actual post-mortem material that could be diagnosed as of variolar origin has yet been discovered in Asia Minor, the Egyptian lesions make the occurrence of variola in Mesopotamia a very strong probability. Some of the Akkadian texts relating to the bubu'tu lesions date from the Old Babylonian period (c. seventeenth century B.C.), having been copied from older texts. It is probable therefore, that the Egyptian disease was known to physicians in the early part of the second millenium in Mesopotamia, a period of time that would agree quite well with the reported case of suspected variola from the XVIIIth dynasty in Egypt. (^Adamson, P.B.^ 2015-02-20)

It has been a long history since people declared war on disease. The manuscript Shen Nong Ben Cao Jing in ancient China represents the permanent aspiration of humans: to understand and cure diseases. Due to the prosperity of life science in the last two centuries, an increasing number of diseases have been conquered, such as variola and tuberculosis, and drug and disease models played an indispensable role in the process. It is worth mentioning that some recently emerged techniques have breathed new life into this old field. (^Li & Zhou^ 2015-02-20)

<Overigebronnen>^Dorland’s^ 2025 - ^Oxford Medical Companion^ 988 - ^Mosby’s^ 1633 - ^Taber’s^ 2297 - ^Stedman’s^ 1931 - ^International^ 3098 - ^Churchill’s^ 2052

<**Nederlands**>pokken
<Trefwoord>pokken

<Betrouwb>3pri 3sec
<Woordsrt>sub
<Genus>
<Flexie>
<Colloc>
<Uitspraak>
<Afko/Symb>
<Extrainfo>
<Extrasyn>
<Verwant>
<Boven>^^
<Neven>^^
<Onder>^^

<Definitie>infectieziekte die wordt veroorzaakt door het pokkenvirus (variolavirus); dit virus is uitgeroeid en wordt nog officieel bewaard op twee plaatsen (Centers for Disease Control and Prevention (CDC) in Atlanta (V.S.) en Russisch Staatscentrum voor Onderzoek op Virologie en Biotechnologie, Novosibirsk); vroeger maakte men onderscheid in twee hoofdvormen van pokken: variola major en variola minor (alastrim); bij variola minor is het beloop milder (kleinere huidlaesies) dan bij variola major; letaliteit in partieel gevaccineerde populatie van variola minor was vroeger <1%, terwijl mortaliteit van variola major rond 10% lag, bij zeldzame vormen (zoals hemorragisch type) oplopend tot 100%; bij variola major ontstond na griepachtige verschijnselen binnen enkele dgn. een papuleus exantheem en enantheem, waaruit zich spoedig vesikels en later pustels vormden; na het afvallen v.d. korstjes bleven vooral in het gezicht littekens (putjes) over (vgl. het woord ‘pokdalig’); behandeling uitsl. symptomatisch en ondersteunend. (^Pinkhof I^ 2014-11-21)
<Commentaar>

<Contexten>Heel begrijpelijk worstelt Lieuwe Jans hier met de concepten van virus en vaccinatie, maar tegelijkertijd beschrijft hij heel praktisch hoe hij zijn gezin van vaccins tegen de pokken voorzag. Dit was ruim 40 jaar nadat Edward Jenner liet zien dat inoculatie van materiaal uitkoepokken beschermt tegen het oplopen van menselijke pokken. Hiermee legde Jenner de basis voor vaccinatie en de latere eradicatie van pokken.(^De Jong^ 2014-11-24)

Vooral in de eerste 75 jaar van het bestaan van de raad (1902-1977) speelde de vaccinatie van kinderen tegen pokken in de advisering een grote rol, mede omdat er een, sterk omstreden, wettelijke indirecte vaccinatiedwang bestond, die na lange tijd door de regering – ondanks een negatief advies van de raad ter zake – werd ingetrokken. Dat was in 1929. (^Huisman, J.^ 2014-11-24)

Volgens een Amerikaanse studie is meer dan 90%van de mensen die 25 tot 75 jaar geleden als kind voor pokken werden ingeënt ook nu nog in hoge mate immuun voor de dodelijke ziekte. Herhaalde vaccinaties resulteerden niet in een verhoogde bescherming.(^Kievits & Adriaanse^ 2014-11-24)

<Overige bronnen>^Merck^ 1102 - ^Coëlho^ 707 - ^Modern Medisch Woordenboek^ 379 - ^Kerkhof^ 304

<**Nederlands**>variola
<Trefwoord>variola
<Betrouwb>3pri 3sec
<Woordsrt>sub
<Genus>
<Flexie>sine plu
<Colloc>
<Uitspraak>
<Afko/Symb>

<Extrainfo>
<Extrasyn>
<Verwant>
<Boven>^^
<Neven>^^
<Onder>^^

<Definitie>
<Commentaar>geen definitie gevonden. Voorstel AaG op basis van ^Merck^ 1174: een uiterst besmettelijke en dodelijke ziekte die zich verspreidt door inademing van lucht die besmet is met druppeltjes vocht die door een geïnfecteerde persoon zijn uitgeademd of uitgehoest. Deze ziekte wordt veroorzaakt door het pokkenvirus en is intussen uitgeroeid. Het virus kan alleen in mensen overleven, niet in dieren. (^Merck^ 1174)

<Contexten>De Gezondheidsraad suggereert dat tijdige behandeling van de indexpersoon en diens contactpersonen met oselta-mivir de verspreiding van griep kan tegengaan (ringprofy-laxe).
1Dat getuigt van veel optimisme. Bij variola (pokken) slaagde ringvaccinatie omdat de initiële ziektetekenen zeerspecifiek, algemeen bekend en zeer gevreesd waren. Bij een dreigende grieppandemie betekent ringprofylaxe echter datieder griepachtig syndroom onmiddellijk moet worden‘omringd’ met profylactische behandeling van alle contact-personen. Overigens is behandeling geen garantie voorstopzetting van de transmissie: kinderen kunnen na behandeling virus blijven uitscheiden. (^Bonneux, L.^ 2014-11-25)

Aanhangers van deze mening wezen o.a. terecht op de eradicatie van variola als een van de grootste prestaties van de preventieve geneeskunde, het verdwijnen van autochtone buiktyfus uit de westerse wereld en op door vaccinatie beteugelde ziekten zoals poliomyelitis en difterie. Deze kijk op infectieziekten heeft ook in een land als Nederland – waar toch al geen sterke ‘public health’-traditie heerst – tot een suboptimale ontwikkeling geleid van het vakgebied infectieziekten en hun bestrijding. (^Huisman, J.^ 2014-11-25)

Tevens wordt daarin het verschijnen van het boek ‘Smallpox and its eradication’ in januari 1988 aangekondigd. Hierin zullen kenners van de ziekte een volledig en afsluitend overzicht vinden over kliniek, virologie, pathologie en immunologie van variola en andere orthopox-ziekten (^Van der Heide, R.M.^ 2015-02-20)

<Overige bronnen>^Modern Medisch Woordenboek^ 484 - ^Coëlho^ 946 - ^Elseviers Medische Encyclopedie^ 425

**<MeSH Heading>Superinfection
<Scope Note>A frequent complication of drug therapy for microbial infection. It may result from opportunistic colonization following immunosuppression by the primary pathogen and can be influenced by the time interval between infections, microbial physiology, or host resistance. Experimental challenge and in vitro models are sometimes used in virulence and infectivity studies.
<Vakgebied>virus diseases
<UDC>616.9
<Project>^MeSH E8 AaG 8^
<Werkcode>
<Update Werkcode>C02.597.880
<Begrip>meervoudige infectie met dezelfde ziekteverwekker waarbij de tweede infectie plaatsvindt na de eerste terwijl er nog geen immuniteit is ontstaan tegen de behandeling van de eerste infectie
<Internat>
<**Nl-term**>superinfectie, surinfectie
<Equival>
<**En-term**>superinfection
<Equival>
<Beeld>

<**English**>superinfection
<Trefwoord>superinfection
<Betrouwb>nor 3pri 3sec
<Woordsrt>sub
<Genus>
<Flexie>plu: superinfections (^Damjanovic^ 869)
<Colloc>HIV superinfection, HIV-1 superinfection, bacterial superinfection
<Uitspraak>su:pərˈɪnfɛkʃn (^Oxford English Dictionary^ 2014-11-29, transliteration, AaG) su:pə (^Wells^ 792) ɪnˈfɛkʃən (^Wells^ 411)
<Afko/Symb>SI (^Redd et al.^ 844)
<Extrainfo>
<Extrasyn>
<Verwant>
<Boven>^opportunistic infections^
<Neven>^aids-related opportunistic infections^
<Onder>^^

<Definitie>a new infection occurring in a patient having a preexisting one, such as bacterial superinfection in viral respiratory disease or infection of a chronic hepatitis B carrier with hepatitis D virus. Superinfection can complicate the course of antimicrobial therapy when the new infection is by organisms resistant to the drugs in use. (^Dorland's^ 1804)
<Commentaar>

<Contexten>HIV superinfection (HIV-SI) occurs when an HIV-infected individual becomes re-infected with a new phylogenetically distinct viral HIV strain. The possibility of HIV-SI was first demonstrated by the observation of co-infection of both HIV-1 and HIV-2, which are evolutionarily distinct viral species, but share approximately 42% of nucleotide homology in their envelope genes. (^PubMed^ Redd et al. 2014-11-29 24371237)

HIV superinfection was defined when an individual's follow-up sample demonstrated two or more distinct consensus sequences forming a phylogenetically distinct cluster that was unlinked from the individual's consensus sequences in the initial sample and was of adequate genetic distance from the baseline sequences to rule out natural evolutionary drift (_0.55% per year for the p24 region or

_0.98% per year for the gp41 region) (1). Samples from subjects who initially were identified by their initial and follow-up samples as being superinfected were further analyzed at multiple midpoints (selected from samples between months 3 to 6, 9 to 12, 12 to 24, and 24 to 36) to verify SI and to identify the approximate time of SI. (^PubMed^ Redd et al. 2014-11-29 23726798)

Influenza remains one of the leading causes of deaths from respiratory tract infections. Influenza predisposes to secondary bacterial superinfection that often occurs during the recovery phase from influenza and accounts for significant hospitalizations and mortality. For instance, during the Spanish flu pandemic of 1918, an estimated 100 million people died and the secondary bacterial pneumonia was a common cause of death. (^PubMed^ Damjanovic et al. 2014-11-29 23831294)

<Overige bronnen>^Mosby's^ 1506 - ^Taber's^ 2107 - ^Stedman's^ 1730 - ^International^ 2756 - ^Churchill's^ 1822

<**Nederlands**>superinfectie
<Trefwoord>superinfectie
<Betrouwb>3pri 3sec
<Woordsrt>sub
<Genus>infectie: f (^Woordenlijst^ 2015-05-21)
<Flexie>superinfecties (^Goslinga, J.^ 2014-11-29)
<Colloc>bacteriële superinfectie
<Uitspraak>
<Afko/Symb>
<Extrainfo>
<Extrasyn>
<Verwant>
<Boven>^^
<Neven>^^
<Onder>^^

<Definitie>meervoudige infectie met dezelfde ziekteverwekker, waarbij de tweede infectie plaatsvindt, terwijl er nog geen immuniteit door de eerste is ontstaan; niet te verwarren met secundaire infectie (infectie door een andere ziekteverwekker). (^Pinkhof I^ 2014-11-29)
<Commentaar>

<Contexten>Het feit dat er steeds meer recombinanten van HIV-1-subtypen vóórkomen, suggereert dat er infecties met twee subtypen kunnen optreden. Voor het eerst wordt er melding gemaakt van een HIV-1-superinfectie: een 38-jarige man die oorspronkelijk geïnfecteerd was met subtype AE en die succesvol met HAART werd behandeld, raakte vervolgens besmet met subtype B; daarna steeg de HIV-1-RNA-concentratie in het bloed sterk. Dit toont aan dat controle over een bepaald subtype geen controle over een ander subtype garandeert (abstract ThOrA1381). (^Opstelten et al.^ 2014-11-29)

Het feit dat de koorts bij onze patiënt verdween binnen 48 h na het starten van intraveneuze antibiotica, deed vermoeden dat er sprake was van een bacteriële superinfectie. Wij denken dat het niet ging om een toevallig ontdekte latente tuberculose, omdat er in dat geval geen M. tuberculosis in het maagaspiraat aangetroffen zou zijn. (^Prins et al.^ 2014-11-29)

De meest voorkomende complicaties van mazelen zijn otitis media, laryngotracheobronchitis en bronchiolitis (5-10%). Bij 1-5% van de mazelenpatiënten treedt een pneumonie op en bij 0,1% een acute encefalitis, vaak met blijvende gevolgen, zoals bij patiënt B. Complicaties kunnen worden veroorzaakt door het mazelenvirus zelf of door een bacteriële superinfectie. De sterfte ten gevolge van mazelen is sterk afhankelijk van de leeftijd en het hoogst bij jonge kinderen (0,1% bij kinderen jonger dan 1 jaar) en meestal het gevolg van een fulminant verlopende pneumonie. Tijdens de laatste mazelenepidemie overleden 3 kinderen. (^Schuurman et al.^ 2014-11-29)

<Overige bronnen>^Reuter^ 628 - ^Pinkhof I^ 2014-29-11 - ^Merck^ 925 - ^Coëlho^ 872 - ^Kerkhof^ 321

<**Nederlands**>surinfectie
<Trefwoord>surinfectie
<Betrouwb>3pri sec
<Woordsrt>sub
<Genus>infectie : f (^Woordenlijst^ 2015-05-21)
<Flexie>surinfecties (^Gryson, L.^ 2014-11-29)
<Colloc>
<Uitspraak>
<Afko/Symb>
<Extrainfo>
<Extrasyn>
<Verwant>
<Boven>^^
<Neven>^^
<Onder>^^

<Definitie>herbesmetting van een lijder van een of andere infectieziekte met hetzelfde ziektemakende agens, dat ongeveer soortgelijke verschijnselen teweegbrengt (^IATE^ 2015-03-16)
<Commentaar>

<Contexten>Indien kinderen gedurende de eerste 6 uur geen symptomen hebben, blijft dit in de meeste gevallen zo. Slaperigheid is het belangrijkste neurologische symptoom; convulsies en coma zijn zeldzaam. Spontaan braken komt vaak voor en kan aspiratie bevorderen. Buikpijn en melaena worden zelden gezien. Koorts wordt dikwijls aangetroffen, zoals bij pneumonie gewoon is, zelfs als er geen bacteriële surinfectie aanwezig is. Hepatosplenomegalie, hartaritmie en hemolytische anemie zijn zeldzaam. (^Melis et al.^ 2014-11-29)

Insectenbeten kan men best vermijden door zoveel mogelijk huid te bedekken met kledij en door insectenwerende middelen te gebruiken zoals bvb DEET, en in sommige gevallen met een (geïmpregneerde) klamboe of beschermkledij. Huidwondjes en insectenbeten moeten steeds zo snel mogelijk ontsmet worden en wondjes en krabletsels worden best afgedekt, in de eerste plaats om bacteriële surinfectie te vermijden maar ook om geen ingangspoort te bieden voor bvb maden. (^Claes et al.^ 2014-11-29)

Corticosteroiden onderdrukken bovendien de immuunrespons en kunnen de beschadigde long vatbaarder maken voor bacteriële kolonisatie. Het gebruik van antibiotica is omstreden. Ze hebben geen bewezen effect, doch worden meestal wel toegediend omdat een bacteriële surinfectie moeilijk te diagnosticeren is. Koorts en leukocytose zijn immers bijna steeds aanwezig bij chemische pneumonitis doch wijzen niet noodzakelijk op een infectie. (^Bauters et al.^ 2014-11-29)

<Overige bronnen>^IATE^ 2015-16-03

**<MeSH Heading>Tick-Borne Diseases
<Scope Note>Bacterial, viral, or parasitic diseases transmitted to humans and animals by the bite of infected ticks. The families Ixodidae and Argasidae contain many bloodsucking species that are important pests of man and domestic birds and mammals and probably exceed all other arthropods in the number and variety of disease agents they transmit. Many of the tick-borne diseases are zoonotic.
<Vakgebied>virus diseases
<UDC>616.9
<Project>^MeSH E8 AaG 8^
<Werkcode>
<Update Werkcode>C02.081.885
<Begrip>bacteriële, virale of parasitaire ziekten die worden overgedragen naar de mens en dieren door de beet van geïnfecteerde teken
<Internat>
<**Nl-term**>tekenbeetziekte, tekenziekte, door teken overgedragen ziekte, door teken overgebrachte ziekte
<Equival>
<**En-term**>tick-borne disease
<Equival>
<Beeld>

<**English**>tick-borne disease
<Trefwoord>tick-borne disease
<Betrouwb>nor3pri sec
<Woordsrt>sub
<Genus>
<Flexie>plu tick-borne diseases
<Colloc>
<Uitspraak>tɪk (^Wells^ 824) bɔ:n (^Wells^ 96) dɪˈzi:zɪz (^Wells^ 236)
<Afko/Symb>
<Extrainfo>also written without the hyphen; tick borne disease and tickborne disease
<Extrasyn>
<Verwant>
<Boven>^arbovirus infection^
<Neven>^bluetongue^, ^african horse sickness^
<Onder>^colorado tick fever^, ^kyasanur forest disease^

<Definitie>A disease that is spread to animals by the bite of an infected tick (^Encyclopedia^ 2014-05-12)
<Commentaar>The definition on this website refers to Gale Encyclopedia of Medicine, 3rd Ed. 2006

<Contexten>Ticks can carry and transmit viruses, bacteria, rickettsia, spirochetes, protozoans, Chlamydia, Mycoplasma, Bartonia bodies, and nematodes. Approximately 10 genera of ticks, 119 species including 100 species of Ixodidae and 19 species of Argasidae, have been identified in China. Tick-borne diseases are a major contributor to vectorborne diseases, and are distributed worldwide. They are mainly natural focal diseases, and most often occur in forests, bushes, and semi-desert grasslands. Globally, the number of distinct and epidemiologically important tickborne diseases, including tick-borne encephalitis, Kyasanur forest disease, Crimean–Congo hemorrhagic fever, and Rocky Mountain spotted fever, has increased considerably over the last 30 years. (^PubMed^ Wu et al. 2014-12-05 23617899)

Tick-borne diseases occur throughout the United States, although the geographic distribution of individual diseases varies. Early detection and appropriate treatment is crucial for reducing morbidity

and mortality due to tick-borne pathogens. Unfortunately, timely diagnosis and management may be hindered due to unrecognized tick bites, non-specific symptoms, or a lack of familiarity on the part of the health care provider. In addition, providers may be called upon by concerned patients to provide prophylaxis following a recognized tick bite. Prophylaxis can be effective in preventing LD; however the circumstances where this is considered beneficial are complex and require substantial knowledge on the part of the provider (Fix et al., 1998; O'Reilly et al., 2003;Warshafsky et al., 2010). There is currently no evidence that post-tick bite prophylaxis is effective for preventing other tick-borne diseases. (^PubMed^ Brett et al. 2014-12-05 24713280)

The research by Bartosik et al. on prevention of tick bites and protection of tick-borne diseases, which covered 300 inhabitants of south-eastern Poland, indicated that according to the questionnaire survey the most frequently applied method of prevention was the application of a repellent (38% of respondents). Apart from this, these researchers confirmed that individuals occupationally exposed to tick bites did not possess knowledge concerning the consequences resulting from contact with these arthropods. (^PubMed^ Cisak et al. 23020041 2014-12-05)

<Overige bronnen>^Taber's^ 1276

<**Nederlands**>tekenbeetziekte
<Trefwoord>tekenbeetziekte
<Betrouwb>3pri sec
<Woordsrt>sub
<Genus>ziekte: f (^Woordenlijst^ 2015-05-21)
<Flexie>
<Colloc>
<Uitspraak>
<Afko/Symb>
<Extrainfo>
<Extrasyn>
<Verwant>
<Boven>^^
<Neven>^^
<Onder>^^

<Definitie>teken(beet)ziekten: ziekten die het gevolg zijn van een beet door een, met ziekteverwekkers besmette, teek; afhankelijk van land of werelddeel verschillen de ziekteverwekkers en de ziektebeelden; met name lymeziekte is bekend in Nederland; een teek kan echter met meerdere ziekteverwekkers besmet zijn en daardoor tot meerdere infecties leiden (zgn. co-infecties, zie infectie); het betreft onder andere die met *Bartonell henselae* en *Babesia* ize: babesiosis); andere, door teken overgebrachte, ziekteverwekkers of infecties zijn o.a. ehrlichiose, teken-encefalitis, *Rickettsia, Coxiella* (zie Q-koorts), *Rocky Mountain spotted fever en * fièvre boutonneuse (^Coëlho^ 888-889)
<Commentaar>

<Contexten>Ook het lekenpubliek is geconfronteerd met een ruime hoeveelheid informatie omtrent lymeborreliose. In kranten, tijdschriften en televisieprogramma's (Teleac/NOT: *Bij ons thuis: over opvoeding en onderwijs*, uitzending van 18 april 2005, Nederland 2) is veel aandacht besteed aan de 'tekenbeetziekte', en ook andere informatiekanalen zijn niet onbenut gelaten. (^Neuters et al.^ 2015-05-09)

Dat de tekenbeetziekte (Lyme-ziekte) ook in ons land voorkomt, is inmiddels wel beschreven. Wij hebben geprobeerd te illustreren dat bij kinderen met een acute perifere aangezichtsverlamming de diagnose 'Bell-parese' pas mag worden gesteld nadat neuroborreliose is uitgesloten. (^Dorresteijn & Kouwenberg^ 2015-05-09)

De incidentie van Lyme-ziekte is de laatste jaren wereldwijd sterk gestegen. Deze aandoening – ook wel bekend onder de namen ‘tekenbeetziekte’ en ‘Lyme-borreliose’ – wordt vrijwel in alle gevallen overgebracht door de beet van een teek die besmet is met de bacterie Borrelia burgdorferi. (^Kievits & Adriaanse^ 2015-05-09)

<Overige bronnen>^Coëlho^ 888-889

<**Nederlands**>tekenziekte
<Trefwoord>tekenziekte
<Betrouwb>3pri sec
<Woordsrt>sub
<Genus>ziekte: f (^Woordenlijst^ 2015-05-21)
<Flexie>
<Colloc>
<Uitspraak>
<Afko/Symb>
<Extrainfo>
<Extrasyn>
<Verwant>
<Boven>^^
<Neven>^^
<Onder>^^

<Definitie>teken(beet)ziekten: ziekten die het gevolg zijn van een beet door een, met ziekteverwekkers besmette, teek; afhankelijk van land of werelddeel verschillen de ziekteverwekkers en de ziektebeelden; met name lymeziekte is bekend in Nederland; een teek kan echter met meerdere ziekteverwekkers besmet zijn en daardoor tot meerdere infecties leiden (zgn. co-infecties, zie infectie); het betreft onder andere die met *Bartonell henselae* en *Babesia* ize: babesiosis); andere, door teken overgebrachte, ziekteverwekkers of infecties zijn o.a. ehrlichiose, teken-encefalitis, *Rickettsia, Coxiella* (zie Q-koorts), *Rocky Mountain spotted fever en * fièvre boutonneuse (^Coëlho^ 888-889)
<Commentaar>

<Contexten>De CDC zal de verdere ontwikkelingen scherp blijven volgen. Artsen worden opgeroepen alle mogelijk aan een tekenziekte te wijten bijwerkingen van bloeddonaties ogenblikkelijk te melden bij de FDA. Alles bij elkaar lijkt het hier te gaan om een storm in een glas water, maar de gebeurtenissen tonen wel aan hoe bevreesd men intussen in de VS is geworden voor door Rickettsia of Ehrlichia veroorzaakte tekenziekten. (^Meijer & van Putten^ 2015-03-16)

Zo werkt de Universiteit van Luik bijvoorbeeld samen met het Marokkaanse Landbouw- en Diergeneeskundig Instituut Hassan II in Rabat. Het onderzoeksproject moet leiden tot de bestrijding van tekenziekten bij runderen in het centrale noorden van Marokko en een verhoging van de melk- en vleesproductie. (^Boutsen & Vannoppen^ 2015-03-16)

Zoals overal In Nederland in bos- / struweelrijke gebieden zullen recreanten bedacht moeten zijn op teken en tekenbeten en preventieve maatregelen moeten nemen in de perioden dat teken actief zijn. Wat dat betreft zal het risico op het oplopen van infecties ten gevolge van tekenbeten en tekenziekten niet veel anders zijn dan in andere natuurgebieden. (^Groot Bruinderink et al.^ 2015-03-16)

<Overige bronnen>^Codex Medicus^ 385 - ^Coëlho^ 888-889

<**Nederlands**>door teken overgedragen ziekte
<Trefwoord>door teken overgedragen ziekte
<Betrouwb>3pri

<Woordsrt>sub
<Genus>ziekte: f (^Woordenlijst^ 2015-21-05)
<Flexie>plu door teken overgedragen ziekten
<Colloc>
<Uitspraak>
<Afko/Symb>
<Extrainfo>morphological variant: ziekte overgedragen door teken,
<Extrasyn>door teken overdraagbare ziekte
<Verwant>
<Boven>^^
<Neven>^^
<Onder>^^

<Definitie>
<Commentaar>no definition found.Suggested definition: ziekte die wordt verspreid door de beet van een geïnfecteerde teek.

<Contexten>De ziekte van Lyme is de meest voorkomende door teken overgedragen ziekte in zowel Europa als in het noordoosten van de Verenigde Staten. In 1975 werden er ongeveer 50 gevallen van een ziekte gelijkend op reumatische arthritis bij kinderen gevonden in het dorpje ‘Old Lyme’ in Connecticut. Veel van deze kinderen speelden of leefden in de bossen en hadden een typische rode uitslag na een tekenbeet. (^Schuit^, 2014-12-05)

Andere door teken overgedragen ziekten zijn arbovirusinfecties (hemorragische koorts, encefalitis), Borrelia-infecties (febris recurrens), spirochetosen (Lyme-artritis en meningoradiculoneuritis), babesiose en tularemie. (^Bühre et al.^ 2014-12-05)

De door teken overgedragen ziekte van Lyme is zelden dodelijk, maar komt veel vaker voor dan de ziekte van Weil en kan ernstige gevolgen hebben, zoals chronische vermoeidheid en gewrichtspijnen. Iemand die tijdens een boswandeling gebeten wordt door een teek, heeft ongeveer 10% kans op de ziekte van Lyme. Het aantal gevallen van Lyme in Nederland is de laatste jaren spectaculair gestegen. (^Van den Berg^ 2014-12-05)

<Overige bronnen>

<**Nederlands**>door teken overgebrachte ziekte
<Trefwoord>door teken overgebrachte ziekte
<Betrouwb>3pri
<Woordsrt>sub
<Genus>ziekte: f (^Woordenlijst^ 2015-21-05)
<Flexie>plu door teken overgebrachte ziekten
<Colloc>
<Uitspraak>
<Afko/Symb>
<Extrainfo>morphological variant: ziekte overgebracht door teken
<Extrasyn>
<Verwant>
<Boven>^^
<Neven>^^
<Onder>^^

<Definitie>

<Commentaar>no definition found; suggested definition: ziekte die wordt verspreid door de beet van een geïnfecteerde teek.

<Contexten>Lyme-borreliose is in Europa en Noord-Amerika de meest voorkomende door teken overgebrachte ziekte. Sommige manifestaties ervan waren in Europa al tientallen jaren bekend en ook het verband met tekenbeten was al opgemerkt voordat duidelijk werd dat het hier uitingen betrof van een infectieziekte met vele verschijningsvormen. Tabel 1 geeft een overzicht van deze manifestaties. In 1975 kreeg de ziekte de naam ‘Lyme disease’, naar de plaats Lyme in de Amerikaanse staat Connecticut, waar twee moeders melding maakten van een ongewoon ziektebeeld, mogelijk een infectieziekte, bij een groep kinderen. (^Postma et al.^ 2014-12-05)

Een andere door teken overgebrachte ziekte is Frühsommer Meningo encefalitis (FSME). Ongeveer twee derde van de besmette mensen wordt in het geheel niet ziek. De ziekte verloopt vaak in twee fasen. Eén tot twee weken na de tekenbeet ontstaat gedurende enkele dagen koorts. Bij een deel van de patiënten ontstaat een tweede ziekteperiode met hoge koorts, hoofdpijn en verlammingsverschijnselen. Zelden leidt dit tot ernstige en blijvende aandoeningen van het zenuwstelsel. Tegen deze ziekte bestaat geen behandeling. (^Roelofs & Looije^ 2014-12-05)

Klimaatverandering beïnvloedt het vóórkomen in Nederland van ziekten overgebracht door teken, muggen en zandvliegen. (^Rahamat-Langendoen^ 2014-12-05)

<Overige bronnen>

**<MeSH Heading>Torovirus Infections
<Scope Note>Infections with viruses of the genus TOROVIRUS, family CORONAVIRIDAE.
<Vakgebied>virus diseases
<UDC>616.9
<Project>^MeSH E8 AaG 8^
<Werkcode>
<Update Werkcode>C02.782.600.550.800
<Begrip>infectie met een virus dat tot het genus Torovirus behoort die tot maag-darmklachten leidt
<Internat>
<**Nl-term**>torovirusinfectie
<Equival>
<**En-term**>torovirus infection
<Equival>
<Beeld>

<**English**>torovirus infection
<Trefwoord>torovirus
<Betrouwb>nor 3pri sec
<Woordsrt>sub
<Genus>
<Flexie>plu torovirus infections (^PubMed^ 2014-01-12 24903213)
<Colloc>
<Uitspraak>ˈtɒrəʊvaɪərəs (^Medlexicon^ 2014-11-29, transliteration AaG) 792 ɪnˈfekʃən (^Wells^ 411)
<Afko/Symb>
<Extrainfo>
<Extrasyn>
<Verwant>
<Boven>^coronaviridae infection^
<Neven>^coronavirus infection^
<Onder>^^

<Definitie>

<Commentaar>No definition found, these are the definitions of the separate terms:
Torovirus: a genus of viruses of the family Coronaviridae having a tubular nucleocapsid that may bend into an open torus; organisms cause gastrointestinal disease. It includes Berne and Breda viruses, as well as human and porcine viruses (^Dorland's^ 1940)

Infection: 1. invasion and multiplication of microorganisms or parasites in body tissues; it may be clinically inapparent (subclinical infection) or remain localized with cellular injury due to competitive metabolism, toxins, intracellular replication, or antigen-antibody reaction. Infections remain localized, subclinical, and temporary if the body's defense mechanisms are effective. However, they may persist, become symptomatic, and spread by extension to become acute, subacute, or chronic disease states. A local infection may also become systemic when the microorganisms gain access to the lymphatic system or the bloodstream. 2. Infectious disease. (^Dorland's^ 935)

<Contexten>Although no deaths in the immunocompromised patients studied could be directly attributable to torovirus infection, enteric viral infections cause severe morbidity and mortality among such patients. Among asymptomatic controls, torovirus was detected at a lower rate in immunocompromised patients than in immunocompetent patients (9.0% vs. 15.6%; table 2), whereas

among children with gastroenteritis, it was more common among immunocompromised than in immunocompetent patients. (^Jamieson et al.^ 2014-12-01)

HE proteins mediate reversible binding to sialic acid receptor determinants, very abundant glycan residues in the enteric and respiratory tracts. The role of the HE protein during the torovirus infection cycle remains unknown, although it is believed to be important in the natural infection process. The phylogenetic analysis of HE coding sequences from porcine torovirus (PToV) field strains revealed the existence of two distinct HE lineages. (^PubMed^ Pignatelli et al. 2014-12-01 24364900)

Porcine torovirus (PToV) is a member of the genus Torovirus which is responsible for gastrointestinal disease in both human beings and animals with particular prevalence in youth. Torovirus infections are generally asymptomatic, however, their presence may worsen disease consequences in concurrent infections with other enteric pathogens. (^PubMed^ Zhou et al. 2014-12-01 24903213)

<Overige bronnen>^Saunders^ 1148

<**Nederlands**>torovirusinfectie
<Trefwoord>torovirusinfectie
<Betrouwb>pri 2sec
<Woordsrt>sub
<Genus>infectie: f (^Woordenlijst^ 2015-05-21)
<Flexie>
<Colloc>
<Uitspraak>
<Afko/Symb>
<Extrainfo>
<Extrasyn>
<Verwant>
<Boven>^^
<Neven>^^
<Onder>^^

<Definitie>
<Commentaar>Er zijn geen definities gevonden. Suggestie: infectie die voorkomt bij paarden, runderen, varkens en mensen die veroorzaakt wordt door het torovirus.

<Contexten>BVD-MD en torovirusinfecties kennen naast diarree ook een algemeen ziektebeeld, wat niet overeenkomt met de symptomen bij de 2 kalveren. (^Lieveld^ 2015-05-09)

<Overige bronnen>^UMLS^ 2015-05-09 - Index Dierenarts^ 2015-05-09

**<MeSH Heading>Enteritis, Transmissible, of Turkeys
<Scope Note>an acute, highly contagious virus disease of turkeys characterized by chilling, anorexia, decreased water intake, diarrhea, dehydration and weight loss. The infectious agent is a CORONAVIRUS

<Vakgebied>virus diseases
<UDC>616.9
<Project>^MeSH E8 AaG 8^
<Werkcode>
<Update Werkcode>C02.782.600.550.200.325
<Begrip>heel besmettelijke virusziekte van kalkoenen die veroorzaakt wordt door een coronavirus. De ziekte veroorzaakt ernstige diarree en uitdroging
<Internat>
<**Nl-term**>overdraagbare kalkoenenteritis
<Equival>
<**En-term**>transmissible * enteritis * of turkeys, bluecomb of turkeys, turkey coronaviral enteritis
<Equival>
<Beeld>

<**English**>transmissible * enteritis * of turkeys
<Trefwoord>enteritis
<Betrouwb>nor 3pri
<Woordsrt>sub
<Genus>
<Flexie>sine plu
<Colloc>
<Uitspraak>trænsˈmɪsəbl (^Wells^ 836) ˌentəˈraɪtɪs (^Wells^ 276)əv (^Wells^ 559) ˈtɜːkiz(^Wells^ 845)
<Afko/Symb>
<Extrainfo>
<Extrasyn>
<Verwant>
<Boven>^coronavirus infection^
<Neven>^feline infectious peritonitis^, ^severe acute respiratory syndrome^
<Onder>^^

<Definitie>
<Commentaar>no definition found other than the MeSH Scope Note. Suggestion: highly infectious disease of turkeys caused by a coronavirus and characterized by a sudden onset, dehydration,and diarrhea.

<Contexten>Transmissible enteritis of turkeys and pheasants has been seen in Alberta since 1961. The condition closely resembles that described by other authors. In this disease of broiler chicks, the brooder house mortality, the age of the affected birds, necropsy, lesions, and the embryo mortality pattern is strongly reminiscent of transmissible enteritis of poults. (^Carlson & Whenham^ 2015-19-03)

Although transmissible enteritis of turkeys has been recognized for 20 years, there is still no general agreement as to its etiology. To a large extent, this reflects the lack of a reliable means for isolating the causative agent.(^Adams &Hofstadt^ 2015-19-03)

The virus of a transmissible enteritis of turkeys, a condition which is possibly synonymous with that of Bluecomb, is generally regarded as a coronavirus, and has therefore been discussed here. (^Darbyshire^ 2015-19-03)

<Overige bronnen>

<**English**>bluecomb of turkeys
<Trefwoord>bluecomb
<Betrouwb>3pri sec
<Woordsrt>sub
<Genus>
<Flexie>sine plu
<Colloc>
<Uitspraak>blu: (^Wells^ 91) kəʊm (^Wells^ 164) əv (^Wells^ 559) ˈtɜːkiz(^Wells^ 845)
<Afko/Symb>
<Extrainfo>sometimes spelled “blue comb” ^Velayudhan 592^
also called blue comb disease (^Saunders^ 143)
<Extrasyn>bluecomb disease of turkeys
<Verwant>
<Boven>^coronavirus infection^
<Neven>^feline infectious peritonitis^, ^severe acute respiratory syndrome^
<Onder>^^

<Definitie>a highly infectious disease of turkeys which causes severe production losses in certain parts of the United States and Canada. The disease is characterized by a sudden onset, dehydration, and diarrhea. Although turkeys of all ages can be infected, extensive outbreaks are more common in young brooding poults. (^PubMed^ Carson et al. 2014-12-14 4113256)
<Commentaar>

<Contexten>Transmissible enteritis is a specific disease entity caused by a filterable agent not yet characterized. The term "bluecomb" of turkeys refers to a clinical syndrome characterized by depression and weight loss. (^Adams et al.^ 2015-19-03)

Infectious enteritis (bluecomb) of turkeys is of unknown etiology. Although bacterial and viral isolates from cases of bluecomb have been suspected as the casual agents of the disease, attempts to reproduce the disease with such isolates have not been uniformly successful. The intestinal signs and lesions in affected turkeys indicate that the intestinal microflora may play an important role in manifestation of the bluecomb syndrome.(^Naqi et al.^ 2015-19-03)

Transmissible enteritis (bluecomb) of turkeys continues to be a serious problem for turkey growers. In Ontario the greatest loss from this condition has been due to the high mortality experienced when the disease attacks poults less than six weeks old. (^Truscott^ 2015-19-03)

<Overige bronnen>^International^ 813

<**English**>turkey coronaviral enteritis
<Trefwoord>enteritis
<Betrouwb>3pri 2sec
<Woordsrt>sub
<Genus>
<Flexie>sine plu
<Colloc>
<Uitspraak>ˈtɜːki (^Wells^ 845) coronavirus: kəˈrəʊnəˌvʌɪrəs (^Oxford English Dictionary^ 2015-04-04)ɐntəˈraɪtɪs (^Wells^ 276)
<Afko/Symb>TCE (^Boynton^ 2015-04-24-)
<Extrainfo>
<Extrasyn>coronaviral enteritis of turkeys, turkey coronavirus enteritis
<Verwant>
<Boven>^coronavirus infection^

<Neven>^feline infectious peritonitis^, ^severe acute respiratory syndrome^
<Onder>^^

<Definitie>an acute, highly infectious disease of turkeys of all ages. It is caused by a coronavirus that invades intestinal epithelial cells. The disease is characterized by severe diarrhea, high morbidity, and often high mortality. Also called bluecomb disease of turkeys. (^International^ 953)
<Commentaar>

<Contexten>Turkey coronaviral enteritis is an acute and highly contagious disease (Nagaraja and Pomeroy, 1997). Turkey poult enteritis associated with turkey coronaviral infection has contributed to significant economic losses for turkey producers in Indiana, North Carolina, and other states for the last several years and remained as a major threat to the turkey industry. (^Loa et al.-1^ 2015-03-02)

Turkey coronaviral enteritis is characterized byanorexia, watery droppings, marked dehydration, and decreased body weight gain (Gonderet al., 1976). Infection with TCV causes rapid histopathologicchanges in the mucosa of theintestinal tract of turkeys. (^Lin et al.^2015-03-02)

Turkey coronaviral enteritis is characterizedby anorexia, watery droppings, marked dehydration, anddecreased body weight gain (Gonder et al., 1976). Repeatedoutbreaks of TCoV-associated acute enteritis in young turkeypoults occurred in Indiana, North Carolina, and other statesfor the last decade. This disease contributed to significanteconomic losses and remains as a serious threat to the turkeyproducers.(Loa et al. -2^ 2015-03-02)

<Overige bronnen>^Saunders^ 396 - ^International^ 953

<**Nederlands**>overdraagbare kalkoenenteritis
<Trefwoord>kalkoenenteritis
<Betrouwb>sec
<Woordsrt>sub
<Genus>enteritis: f (^Van Dale^ 2015-05-21)
<Flexie>
<Colloc>
<Uitspraak>
<Afko/Symb>
<Extrainfo>
<Extrasyn>
<Verwant>
<Boven>^^
<Neven>^^
<Onder>^^

<Definitie>
<Commentaar>Er zijn geen definities gevonden. Suggestie: een heel besmettelijke ziekte van kalkoenen van alle leeftijden die veroorzaakt wordt door een coronavirus. De ziekte veroorzaakt ernstige diarree en leidt tot een hoge mortaliteit.

<Contexten>
<Overige bronnen>^UMLS^ 2015-04-24

**<MeSH Heading>Gastroenteritis, Transmissible, of Swine
<Scope Note>A condition of chronic gastroenteritis in adult pigs and fatal gastroenteritis in piglets caused by a CORONAVIRUS.

<Vakgebied>virus diseases
<UDC>616.9
<Project>^MeSH E8 AaG 8^
<Werkcode>
<Update Werkcode>C02.782.600.550.200.400
<Begrip>chronische gastro-enteritis in volwassen varkens en fatale gastro-enteritis in biggen die wordt veroorzaakt door een coronavirus
<Internat>
<**Nl-term**>overdraagbare varkensgastro-enteritis, overdraagbare gastro-enteritis bij varkens
<Equival>
<**En-term**>transmissible * gastroenteritis * of swine, porcine transmissible gastroenteritis
<Equival>
<Beeld>

<**English**>transmissible * gastroenteritis * of swine
<Trefwoord>gastroenteritis
<Betrouwb>nor 3pri 2sec
<Woordsrt>sub
<Genus>
<Flexie>sine plu
<Colloc>
<Uitspraak>trænsˈmɪsəbl (^Wells^ 836) ɡæstrəʊˌentəˈraɪtɪs (^Wells^ 334) əv (^Wells^ 559) swaɪn (^Wells^ 798)
<Afko/Symb>TGE (^International^ 1184)
<Extrainfo>
<Extrasyn>transmissible gastroenteritis of pigs (^IATE^ 2015-02-04)
<Verwant>
<Boven>^coronavirus infection^
<Neven>^transmissible * enteritis * of turkeys^, ^severe acute respiratory syndrome^
<Onder>^^

<Definitie>A non-inflammatory disease of the small intestine of swine, caused by a coronavirus, and characterized by atrophy of the intestinal villi. (^International^ 1184)
<Commentaar>

<Contexten>Transmissible gastroenteritis of swine (TGE) is characterized by destruction of absorptive cells of villous epithelium in the small intestine, by virus. As a result, villi shorten and broaden, and low cuboidal epithelium replaces the columnar absorptive cells on villi. This lesion is referred to as villous atrophy, and the resultant functional deficit is referred to as malabsorption (5, 6). (^PubMed^ Moon et al. 2015-03-02 4266695)

Transmissible gastroenteritis (TGE) of swine is an acute viral disease characterized by vomiting, diarrhea, dehydration, and high mortality rate in pigs under 3 weeks of age. Previous studies of TGE have not shown significant necrotic or inflammatory changes in intestinal tissues. (^PubMed^ Thake 2015-03-02 4231727)

Transmissible gastroenteritis of swine is an acute diarrheal disease caused by destruction of absorptive epithelial cells of the intestinal villi by a specific coronavirus. The resultant lesion is called villous atrophy. (^PubMed^ Moon et al. 2015-03-02 1229058)

<Overige bronnen>^Dorland's^ 764 - ^International^ 1184

<**English**>porcine transmissible gastroenteritis
<Trefwoord>gastroenteritis
<Betrouwb>3pri
<Woordsrt>sub
<Genus>
<Flexie>sine plu
<Colloc>
<Uitspraak>ˈpɔːsaɪn (^Wells^ 628) trænsˈmɪsəbl (^Wells^ 836), gæstrəʊˌentəˈraɪtɪs (^Wells^ 334)
<Afko/Symb>TGE (^Zhou et al^ 2015-03-02)
<Extrainfo>
<Extrasyn>
<Verwant>
<Boven>^coronavirus infection^
<Neven>^transmissible * enteritis * of turkeys^, ^severe acute respiratory syndrome^
<Onder>^^

<Definitie>
<Commentaar>no definition found. Suggestion: A non-inflammatory disease of the small intestine of swine, caused by a coronavirus, and characterized by atrophy of the intestinal villi. (^International^ 1184)

<Contexten>Porcine transmissible gastroenteritis is a highly contagious enteric disease of swine caused by transmissible gastroenteritis virus (TGEV), which belongs to the Coronaviridae family and has a positive-stranded polyadenylated RNA genome of 28.5 kb (Eleouet et al., 1995; Mendez et al., 1996). The disease usually causes only a transient diarrhea in adults but is a major cause of death in piglets under 2 weeks of age (Saif and Bohl, 1986). (^Anton et al.^ 2015-03-02)

Porcine transmissible gastroenteritis is a typical intestinal disease with severe consequences generally leading to the death of young piglets. The rapid development of the disease can be prevented only by a sufficient amount of virus neutralizing antibodies in the small intestine. (^Tuboly et al.^ 2015-03-02)

Transmissible gastroenteritis virus (TGEV), the causative agent of porcine transmissible gastroenteritis (TGE), at all ages of pigs results in gastroenteritis, characterized by vomiting, yellowish diarrhea and dehydration. The consequences of TGE vary among different ages of pigs. (^Zhou et al.^ 2015-03-02)

<Overige bronnen>

<**Nederlands**>overdraagbare varkensgastro-entertitis
<Trefwoord>varkensgastro-entertitis
<Betrouwb>2sec
<Woordsrt>sub
<Genus>gastro-enteritis: f (^Woordenlijst^ 2015-29-04)
<Flexie>sine plu
<Colloc>
<Uitspraak>
<Afko/Symb>
<Extrainfo>
<Extrasyn>
<Verwant>overdraagbare varkensgastroenteritis (incorrect spelling)
<Boven>^^
<Neven>^^

<Onder>^^

<Definitie>
<Commentaar>Er is geen definitie gevonden. Suggestie: een niet-inflammatoire varkensziekte die veroorzaakt wordt door een coronavirus. De ziekte kan tot sterfte leiden bij biggen.

<Contexten>

<Overige bronnen>^UMLS^ 2015-04-24 - ^IATE^ 2015-04-24

<**Nederlands**>overdraagbare gastro-enteritis bij varkens
<Trefwoord>gastro-enteritis
<Betrouwb>pritra
<Woordsrt>sub
<Genus>
<Flexie>gastro-enteritis: f (^Woordenlijst^2015-04-24)
<Colloc>
<Uitspraak>
<Afko/Symb>
<Extrainfo>
<Extrasyn>
<Verwant>
<Boven>^^
<Neven>^^
<Onder>^^

<Definitie>
<Commentaar>Er is geen definitie gevonden. Suggestie: een niet-inflammatoire varkensziekte die veroorzaakt wordt door een coronavirus. De ziekte kan tot sterfte leiden bij biggen.

<Contexten>In de veterinaire geneeskunde stonden coronavirussen al langer bekend als verwekkers van een scala van soms ernstige aandoeningen van groot economisch belang, zoals infectieuze bronchitis bij kippen en overdraagbare gastro-enteritis bij varkens. Van de kant van de menselijke pathologie was de belangstelling voor coronavirussen veel minder. (^Postma et al.^ 2015-03-03)

<Overige bronnen>

**<MeSH Heading>Paraparesis, Tropical Spastic
<Scope Note>A subacute paralytic myeloneuropathy occurring endemically in tropical areas such as the Caribbean, Colombia, India, and Africa, as well as in the southwestern region of Japan; associated with infection by HUMAN T-CELL LEUKEMIA VIRUS I. Clinical manifestations include a slowly progressive spastic weakness of the legs, increased reflexes, Babinski signs, incontinence, and loss of vibratory and position sensation. On pathologic examination inflammatory, demyelination, and necrotic lesions may be found in the spinal cord. (Adams et al., Principles of Neurology, 6th ed, p1239)

<Vakgebied>virus diseases
<UDC>616.9
<Project>^MeSH E8 AaG 8^
<Werkcode>
<Update Werkcode>C02.182.600.600
<Begrip>een subacute paralytische myeloneuropathie die veroorzaakt wordt door het HTLV-I-virus voorkomt in een aantal tropische gebieden en Japan en die leidt tot verzwakking van de benen
<Internat>
<**Nl-term**>tropische spastische paraparese, HTLV-1-geassocieerde myelopathie, met HTLV-I samenhangende myelopathie
<Equival>
<**En-term**>tropical spastic * paraparesis, HTLV-1-associated myelopathy
<Equival>
<Beeld>

<**English**>tropical spastic * paraparesis
<Trefwoord>paraparesis
<Betrouwb>nor 3pri 3sec
<Woordsrt>sub
<Genus>
<Flexie>
<Colloc>
<Uitspraak>ˈtrɒpɪkl (^Wells^ 842) ˈspæstɪk (^Wells^ 761) ˌparəpəˈriːsɪs (^Oxford English Dictionary^ 2014-12-22)
<Afko/Symb>TSP
<Extrainfo>tropic spastic paresis is a less specific term; tropical spastic paraplegia is an obsolete term and is an inaccurate description (^Casseb^ 2014-12-12)
<Extrasyn>tropical spastic paresis, tropical spastic paraplegia
<Verwant>chronic progressive myelopathy
<Boven>^myelitis^
<Neven>^poliomyelitis^
<Onder>^^

<Definitie>
<Commentaar>^Dorland's^ 1379 refers to chronic progressive myelopathy, which it defines as: gradually progressive spastic paraparesis associated with infection by human T-lymphotropic virus 1, characterized by progressive difficulty in walking and weakness of the lower limb, sensory disturbances, and urinary incontinence, with no evidence of spinal compression or involvement of motoneurons. ^Dorland's^ 1220

<Contexten>In 1969, the term tropical spastic paraparesis (TSP) was introduced. These authors discussed the strong possibility that a slow virus was involved in this perplexing disorder found in India and Jamaica. Most cases used to come from predominantly rural areas, which raised the possibility of a viral reservoir in mammals or fowl. (^PubMed^ Zaninovic 2015-04-30 10460931)

Human T cell lymphoma/leukemia virus (HTLV-1) is endemic in parts of the Caribbean, Africa, and Japan and is found globally where people from these areas settle (Levine et al., 1988). There are three particularly interesting features of infection with this retrovirus. First, it only causes disease in about 2% of infected persons (Murphy et al., 1989) the majority being healthy carriers of the virus. Second, the latency between seroconversion and disease is often long, typically several years (Blattner et al., 1986). Third, infection is causally related to two main diseases: adult T cell leukemia (ATL) and tropical spastic paraparesis (TSP). (^Parker et al.^ 2015-04-30)

HTLV-1 is associated with a wide spectrum of manifestations including tropical spastic paraparesis, a disease characterized by the slow and progressive development of myelopathy, as well as leukemia/lymphoma in adult T-cells. (^PubMed^ Viana et al. 2014-12-15 25229227)

<Overige bronnen>^Dorland's^ 1379 - ^Taber's^ 1593 - ^Merck Manual EN^ 2015-04-30

<**English**>HTLV-1-associated myelopathy
<Trefwoord>myelopathy
<Betrouwb>3pri 2sec
<Woordsrt>sub
<Genus>
<Flexie>plu HTLV-I-associated myelopathies (^Kaplan et al.^ 2014-12-12)
<Colloc>
<Uitspraak>eɪtʃ (^Wells^ 360) tiː (^Wells^ 804) eɪ (^Wells^ 448) viː (^Wells^ 868) wʌn (^Wells^ 563) əˈsəʊsɪeɪtɪd (^Wells^ 50) mʌɪəˈlɒpəθi ^Oxford English Dictionary^ 2014-12-22
<Afko/Symb>HAM ^Oxford English Dictionary^ 2014-12-22, HAM/TSP . (^Jeffery et al.^ 2015-27-04)
<Extrainfo>alternative spelling: HTLV-I-associated myelopathy. HTLV-I or HTLTV-1 stand for human T-lymphotropic virus type I (or 1)
<Extrasyn>
<Verwant>chronic progressive myelopathy
<Boven>^myelitis^
<Neven>^poliomyelitis^
<Onder>^^

<Definitie>A degenerative encephalomyelopathy with pyramidal tract dysfunction affecting the lower extremities. It is associated with HTLV-I infection and found primarily in the Caribbean region and in southwestern Japan. (^PubMed^ 2014-12-21, Dixon et al 2139754)
<Commentaar>

<Contexten>Tropical spastic paraparesis (TSP) or human T-lymphotropic virus type I (HTLV-I-associated myelopathy (HAM) is a slowly progressive encephalomyelopathy that generally presents in the middle adult years. The initial symptoms are increasing difficulty in walking, low back pain, and cramping sensations of the legs. Urinary sphincter dysfunction is also common. Impotence or diminished libido is almost universal. Most cases reach a clinical plateau within two years of the start of symptoms and remain at that level of function, without remission, for years. (^PubMed^ Dixon et al. 2014-12-21 2139754)

HTLV-I was first described as a pathogenic human retrovirus that causes adult T-cell leukemia (ATL). Soon after the discovery of HTLV-I, an association of this virus with a slowly progressive neurological disorder was found independently in Japan and Caribbean islands, and this new clinical entity (HTLV-I-associated myelopathy with tropical spastic paraparesis) was named HAM/TSP. (^Izumo et al.^ 2015-04-30)

HTLV-I is a persistent virus, infecting 10 –20 million people worldwide. Most infected people remain healthy, but 1–2% develop a progressive paralytic myelopathy (HTLV-I-associated myelopathy; HAM/TSP) and a further 2–3% develop an aggressive T cell leukemia/lymphoma. (^Jeffery et al.^ 2015-04-27)

<Overige bronnen>^Dorland's^ 1220 - ^Taber's^ 1415 -

<**Nederlands**>tropische spastische paraparese
<Trefwoord>paraparese
<Betrouwb>3pri 3sec
<Woordsrt>sub
<Genus>paraparese: f (^Van Dale^ 2015-05-21)
<Flexie>
<Colloc>
<Uitspraak>
<Afko/Symb>TSP, HAMTSP
<Extrainfo>
<Extrasyn>
<Verwant>
<Boven>^^
<Neven>^^
<Onder>^^

<Definitie>verlamming van beide benen ten gevolge van besmetting met het HLTV-I-virus (^Pinkhof I^ 2014-21-12)
<Commentaar>deze definitie geeft slechts één symptoom; uit de Engelse definities blijkt dat de symptomen uitgebreider (kunnen) zijn

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<Contexten>Bij neurologisch onderzoek werd een dubbelzijdig piramidaal syndroom vastgesteld, aan de benen duidelijker dan aan de armen. MRI van hoofd en wervelkolom toonde geen afwijkingen. Omdat patiënte afkomstig was uit de Dominicaanse Republiek, werd tevens aanvullend onderzoek ingezet op tropische spastische paraparese. Zowel in bloed als in liquor werden antistoffen tegen HTLV-I aangetoond. (^Makdoembaks^ 2014-12-22)

Een positieve uitslag van serologische tests op Treponema is bij 60 van de patiënten met tropische spastische paraparese/HTLV-I-geassocieerde myelopathie op Jamaica gevonden ('venereal disease research laboratory'(VDRL)-test), bij 42 patiënten uit de Seychellen (Treponema pallidum-hemagglutinatie-assay (TPHA) en FTA-abs-test) en bij 14 van de patiënten met tropische spastische paraparese uit Martinique (met 'routinetechnieken'). (^Kamphuis et al.^ 2014-12-22)

Bij enkele procenten van de geïnfecteerden veroorzaakt HTLV-1 ofwel adulte T-celleukemie, ofwel een neurologisch ziektebeeld ('HTLV associated myelopathy' (HAM), identiek aan tropische spastische paraparese (TSP)). De incubatietijd voor HAMTSP bedraagt enkele maanden tot jaren, die voor adulte T-celleukemie tientallen jaren. Bij enkele personen met HTLV-2-infectie is een HAMTSP-achtig ziektebeeld beschreven. (^Zaaijer et al^ 2014-12-22)

<Overige bronnen>^Merck^ 914 - ^Codex Medicus^ 532 - ^Pinkhof II^ 975

<**Nederlands**>HTLV-1-geassocieerde myelopathie
<Trefwoord>myelopathie
<Betrouwb>3pri 2sec

<Woordsrt>sub
<Genus>
<Flexie>
<Colloc>
<Uitspraak>
<Afko/Symb>HAM/TSP
<Extrainfo>
<Extrasyn>HTLV-I-geassocieerde myelopathie
<Verwant>
<Boven>^^
<Neven>^^
<Onder>^^

<Definitie>
<Commentaar>Er zijn geen definities gevonden. Suggestie: verlamming van beide benen ten gevolge van besmetting met het HLTV-I-virus (^Pinkhof I^ 2014-12-21)

<Contexten>De twee best gekarakteriseerde ziektes, geassocieerd met het HTLV-1 virus, zijn HTLV-1-geassocieerde myelopathie of tropische spastische paraparese (HAM/TSP) en adulte T-cel leukemie/lymfoma (ATLL). HAM/TSP is een progressieve neurodegeneratieve aandoening, waarvoor de behandeling voornamelijk bestaat uit symptomatische en empirische strategieën, zoals het gebruik van immunosuppressiva (corticosteroïden), interferon-alfa (IFN-a), vitamine C (ascorbinezuur, AA) of ondersteunende therapie met antispasmodica. (^Moens^ 2015-04-28)

Deze myelopathie is bekend onder de naam tropische spastische paraparese (TSP)/HTLV-1-geassocieerde myelopathie (HAM) en komt vooral gelokaliseerd, beperkt zich meestal niet tot het niveau van één wervel en gaat in veel gevallen gepaard met osteomyelitis van een of enkele wervels. (^Asbeck^ 2015-04-28)

Sinds 1985 is ook bekend dat er een sterk verband bestaat tussen HTLV-I en tropische spastische paraparese: zogenaamde HTLV-I-geassocieerde myelopathie. (^Kamphuis et al.^ 2015-04-28)

<Overige bronnen>^UMC Utrecht^ 2015-04-28 - ^UMLS^ 2015-04-28

<**Nederlands**>met HTLV-I samenhangende myelopathie
<Trefwoord>myelopathie
<Betrouwb>2pri
<Woordsrt>sub
<Genus>
<Flexie>
<Colloc>
<Uitspraak>
<Afko/Symb>
<Extrainfo>
<Extrasyn>
<Verwant>
<Boven>^^
<Neven>^^
<Onder>^^

<Definitie>
<Commentaar>Er zijn geen definities gevonden. Suggestie: verlamming van beide benen ten gevolge van besmetting met het HLTV-I-virus (^Pinkhof I^ 2014-12-21)

<Contexten>De neuroloog concludeerde dat patiënte leed aan met HTLV-I samenhangende myelopathie met loop- en mictiestoornissen. De klachten namen in ernst toe, met ook duidelijk krachtverlies in de benen. In 1996 werd patiënte rolstoelafhankelijk en zij verhuisde. (^Makdoembaks^ 2015-04-28)

Daarnaast veroorzaakt HTLV-I bij een niet nauwkeurig bekend, maar waarschijnlijk klein deel van de geïnfecteerden enige maanden tot jaren na infectie een progressieve neurodegeneratieve ziekte (met HTLV-I samenhangende myelopathie, ook wel ‘tropische spastische paraparese’ genoemd). (^Zaaijer et al.^ 2015-04-28)

<Overige bronnen>

**<MeSH Heading>Vaccinia
<Scope Note>The cutaneous and occasional systemic reactions associated with vaccination using smallpox (variola) vaccine.

<Vakgebied>virus diseases
<UDC>616.9
<Project>^MeSH E8 AaG 8^
<Werkcode>
<Update Werkcode>C02.256.743.929
<Begrip>de huidreacties en incidentele systemische reacties veroorzaakt door de vaccinatie met het pokkenvaccin
<Internat>
<**Nl-term**>vaccinia
<Equival>
<**En-term**>vaccinia
<Equival>
<Beeld>

<**English**>vaccinia
<Trefwoord>vaccinia
<Betrouwb>nor 3pri 3sec
<Woordsrt>sub
<Genus>
<Flexie>sine plu
<Colloc>
<Uitspraak>vækˈsɪnɪə (^Wells^ 868)
<Afko/Symb>
<Extrainfo>adj: vaccinial ^Oxford English Dictionary^ 2014-12-23
<Extrasyn>vaccine ^International^ 3085
<Verwant>
<Boven>^poxviridae infections^
<Neven>^lumpy skin disease^, ^fowlpox^
<Onder>^^

<Definitie>an acute infection caused by the vaccinia virus and characterized by a localized pustular eruption. The infection stimulates antibody production which confers immunity to smallpox. A live vaccinia virus preparation is used as an active immunizing agent against smallpox. When a viral infection of this nature occurs in cattle it is called cowpox. (^International^ 3085)
<Commentaar>also called vaccine, there are several subdivisions of vaccinia (^International^ 3085)

<Contexten>Humans may be infected by contact with the wildlife source or by infected animals of several species as rodents or cats (Fenner 1996). Only smallpox and monkeypox have been known as generalized human diseases. Cowpox and vaccinia cause, generally, localized, and pustular lesions with lymphodenopaty. Rarely secondary lesions can occur and immunologic deficiencies should be considered (Fenner 1996, Czerny et al. 1997). (^Schatzmayer et al.^ 2015-04-30)

In addition, one instance of contact vaccinia occurred in an individual from a dog bite while she removed a vaccinia-laden sachet (designed to immunize wild animals against rabies) from his mouth (Rupprecht et al, 2001). These are isolated, rare events in the era between cessation of vaccination and today's revival of activity with vaccinia. (^PubMed^ Fulginiti 2014-12-23 12603870)

On questioning, the patient had noticed that his opponent had two scabs on his arm consistent with recent vaccination marks. A diagnosis of vaccinia was made, and the patient was admitted to Rush

Green Hospital, Romford, under the care of Dr. G. D. W. McKendrick, consultant in infectious diseases. (^PubMed^ Cowen 2014-12-23 5658919)

<Overige bronnen>^Dorland's^ 2017 - ^Stedman's^ 1761 - ^Mosby's^ 1626 - ^Taber's^ 2287 - ^Churchill's^ 2049

<**Nederlands**>vaccinia
<Trefwoord>vaccinia
<Betrouwb>3pri 3sec
<Woordsrt>sub
<Genus>vaccinia: f (^Van Dale^ 2015-05-21)
<Flexie>
<Colloc>
<Uitspraak>
<Afko/Symb>
<Extrainfo>
<Extrasyn>vaccina (^Pinkhof II^ 1423 & ^Reuter^ 705)
<Verwant>
<Boven>^^
<Neven>^^
<Onder>^^

<Definitie>min of meer uitgebreide infectie met vacciniavirus bij de mens (^Pinkhof I^ 2014-12-23)
<Commentaar>^Pinkhof I^ 2014-12-23 also mentions: aanvankelijke betekenis koepokken, de pokken die bij koeien voorkomen.

<Contexten>De multifocale, symmetrische uitbreiding van karakteristieke ovale, gele ulcera met verheven rand maakt verwarring met andere ulceratieve aandoeningen van de vulva onwaarschijnlijk. Bij de differentiële diagnose kunnen herpes zoster, vaccinia, multipele luetische ulcera meestal gemakkelijk worden verworpen. (^Lammens^ 2015-05-16)

Therapie met immunoglobulinepreparaten van humane oorsprong ontwikkelde zich in de jaren vijftig. Deze preparaten worden onderverdeeld in drie groepen. Ten eerste, specifieke immunoglobulinepreparaten (SIG) gericht tegen hepatitis B, varicella zoster, rabies, tetanus, vaccinia, bof, rubella en cytomegalovirus. (^Strengers^ 2015-04-28)

De laatste gevallen van accidentele vaccinia werden gemeld in 1979. Aangezien de WHO in 1980 heeft aanbevolen geen reizigers meer tegen pokken te vaccineren en er sinds 1981 ook geen pokkenvaccin meer beschikbaar wordt gesteld, was het te verwachten dat er geen vaccinia meer zou worden geïsoleerd. Dat bleek ook het geval te zijn. (^Weijers & Kaspenberg^ 2015-04-28)

<Overige bronnen>^Reuter^ 705 - ^Coëlho^ 943 - ^Kerkhof^ 330 - ^Pinkhof II^ 1423

**<MeSH Heading>Encephalitis, Varicella Zoster
<Scope Note>Inflammation of brain tissue caused by infection with the varicella-zoster virus (HERPESVIRUS 3, HUMAN). This condition is associated with immunocompromised states, including the ACQUIRED IMMUNODEFICIENCY SYNDROME. Pathologically, the virus tends to induce a vasculopathy and infect oligodendrocytes and ependymal cells, leading to CEREBRAL INFARCTION, multifocal regions of demyelination, and periventricular necrosis. Manifestations of varicella encephalitis usually occur 5-7 days after onset of HERPES ZOSTER and include HEADACHE; VOMITING; lethargy; focal neurologic deficits; FEVER; and COMA.
<Vakgebied>virus diseases
<UDC>616.9
<Project>^MeSH E8 AaG 8^
<Werkcode>
<Update Werkcode>C02.182.500.300.400
<Begrip>ontsteking van hersenweefsel veroorzaakt door een infectie met het varicellazostervirus (humaan herpesvirus 3) en vaak gepaard gaand met immuungecompromitteerde toestanden zoals aids
<Internat>
<**Nl-term**>varicella-zosterencefalitis, VZV-encefalitis
<Equival>
<**En-term**>varicella zoster encephalitis, herpes zoster encephalitis, varicella zoster virus encephalitis
<Equival>varicella zoster encephalitis and herpes zoster encephalitis refer to the same condition but the former would be used when the condition arises after the patient has been affected with varicella, the latter after the patient was affected by herpes zoster. The causal agent is the same.
<Beeld>
<**English**>varicella-zoster * encephalitis
<Trefwoord>encephalitis
<Betrouwb>nor 3pri sec
<Woordsrt>sub
<Genus>
<Flexie>plu encephalitis: encephalitides (^Oxford English Dictionary^ 2014-12-23)
<Colloc>
<Uitspraak>ˌværiˈselə (^Wells^ 870) ˈzɒstə (^Wells^ 920) enˌkefəˈlaɪtɪs (^Wells^ 273)
<Afko/Symb>
<Extrainfo>alternative spelling: varicella zoster encephalitis (^Mosby's^ 312)
<Extrasyn>varicella encephalitis
<Verwant>
<Boven>^viral * encephalitis^
<Neven>^arbovirus * encephalitis^, ^herpes simplex * encephalitis^
<Onder>^^

<Definitie>
<Commentaar>No definition found. Suggestion: encephalitis that is caused by the varicella-zoster virus, which is mostly associated with immunocompromised patients.

<Contexten>A patient with AIDS who developed the clinical picture of bilateral progressive outer retinal necrosis (PORN) in combination with varicella zoster encephalitis is described. The picture developed more than 2 years after an episode of ophthalmic zoster infection, and following intermittent exposure to oral acyclovir because of recurrent episodes of cutaneous herpes simplex infection. (^PubMed^ Van den Horn et al. 8976726, 2015-03-06)

A case report has been published in which a patient with varicella zoster encephalitis complicating microscopic polyangiitis was successfully treated with acyclovir and steroid therapy (13). In our patient, who suffered persisting neurological symptoms, we added steroids to inhibit the possible adverse effects of the inflammatory response. The clinical course clearly improved following administration of intravenous dexamethasone. (^Sigaloff and De Flijter^, 2015-03-06)

All patients had been initially treated with intravenous acyclovir. The etiology could be disclosed in 37 patients (42%), which included 15 patients with herpes simplex encephalitis, **7** with varicella-zoster encephalitis, and 29 with other encephalitides *(Mycoplasma*, adenovirus, influenza, rotavirus, rubella, Epstein-Barr, arbovirus, syphilis, and tuberculosis). (^Launes et al.^ 2015-03-06)
<Overige bronnen>

<**English**>herpes zoster encephalitis
<Trefwoord>encephalitis
<Betrouwb>3pri
<Woordsrt>sub
<Genus>
<Flexie>plu encephalitis: encephalitides (^Oxford English Dictionary^ 2014-12-23)
<Colloc>
<Uitspraak>ˈhɜːpiːz (^Wells^ 376)) ˈzɒstə (^Wells^ 920) enˌkefəˈlaɪtɪs (^Wells^ 273)
<Afko/Symb>HZE (^Wetzel et al^ 1612)
<Extrainfo>
<Extrasyn>varicella encephalitis
<Verwant>
<Boven>^viral * encephalitis ^
<Neven>^arbovirus * encephalitis^, ^herpes simplex * encephalitis ^
<Onder>^^

<Definitie>
<Commentaar>No definition found. Suggestion based on ^Wetzel et al^ 1612: encephalitis that develops in approximately 5% of patients hospitalised because of herpes zoster. The diagnosis of HZE includes an encephalopathic state, clinical evidence of herpes zoster with or without virological confirmation and an inflammatory cerebrospinal fluid (CSF).

<Contexten>Encephalitis is a rare but serious complication of herpes zoster (Appelbaum, Kreps, & Sunshine, 1962). Its annual incidence is not well understood (e.g., Appelbaum et al., 1962), although it is thought to be rare but may occur in up to 5% of patients who require hospitalization (Mazur & Dolin, 1978). Few studies have examined the brain changes and cognitive outcomes associated with herpes zoster encephalitis (HZE). (^PubMed^ Bangen et al. 20503134, 2015-03-10)

Encephalitis is an infrequent complication of varicella zoster virus (VZV) infection. VZV belongs to the herpes virus group and is the cause of both varicella (chickenpox) and zoster (shingles). Encephalitis occurs in up to 5% of patients hospitalized because of herpes zoster and in less than 0.05% of adult patients hospitalized because of varicella. In this paper the term herpes zoster encephalitis (HZE) is used for both conditions. (^Hokkanen et al.^ 2015-03-10)

Herpes zoster encephalitis (HZE) develops in approximately 5% of patients hospitalised because of herpes zoster. The diagnosis of HZE includes an encephalopathic state, clinical evidence of herpes zoster with or without virological confirmation and an inflammatory cerebrospinal fluid (CSF). Mental changes are a main neurological symptom in HZE but specific neuropsychological sequelae after the acute stage of HZE have not been adequately studied. (^Wetzel et al.^ 2015-03-10)

<Overige bronnen>

<**English**>varicella zoster virus encephalitis
<Trefwoord>varicella zoster virus encephalitis
<Betrouwb>3pri
<Woordsrt>sub
<Genus>
<Flexie>plu encephalitis: encephalitides (^Oxford English Dictionary^ 2014-12-23)
<Colloc>

<Uitspraak>ˌværiˈselə (^Wells^ 870) ˈzɒstə (^Wells^ 920) ˈvaɪrəs (^Wells^ 878) enˌkefəˈlaɪtɪs (^Wells^ 273)
<Afko/Symb>VZV encephalitis
<Extrainfo>
<Extrasyn>varicella encephalitis
<Verwant>
<Boven>^viral * encephalitis ^
<Neven>^arbovirus * encephalitis^, ^herpes simplex * encephalitis ^
<Onder>^^

<Definitie>
<Commentaar>No definition found. Suggestion based on ^Mpaka et al^ 2015-03-10: an uncommon, but not rare illness that is mostly found in immunocompetent adults. Typically, patients develop stroke with hemiplegia caused by large vessel vasculopathy days to weeks after herpes zoster ophthalmicus.

<Contexten>Varicella zoster virus (VZV) encephalitis has become increasingly prevalent in the era of acquired immunodeficiency syndrome (AIDS), and a widening spectrum of pathological lesions has defined the disease in these and other severely immunosuppressed patients. VZV produces three distinct morphological patterns of brain damage. VZV can cause bland or hemorrhagic infarctions secondary to a large or medium vessel vasculopathy. (^B.K. Kleinschmidt-DeMasters^ 2015-03-10)

The diagnosis of varicella-zoster virus encephalitis was confirmed by polymerase chain reaction analysis of the cerebrospinal fluid. No zosteriform rash preceded or followed encephalitis. Two years later, the patient is in good health, and no relapse or sign of immunosuppression has been reported. (^Mpaka et al.^ 2015-03-10)

Specific, evidence-based, anti-viral therapy, acyclovir, is available for herpes encephalitis (recommendation level A). Acyclovir might also be effective for varicella-zoster virus encephalitis, gancyclovir and foscarnet for cytomegalovirus encephalitis and pleconaril for enterovirus encephalitis (IV class of evidence). (^Steiner et al.^ 2015-03-10)

<Overige bronnen>

<**Nederlands**>varicella-zosterencefalitis
<Trefwoord>varicella-zosterencefalitis
<Betrouwb>pri sec
<Woordsrt>sub
<Genus>encefalitis : f (^Woordenlijst^ 2015-05-21)
<Flexie>
<Colloc>
<Uitspraak>
<Afko/Symb>
<Extrainfo>
<Extrasyn>herpes-zosterencefalitis
<Verwant>
<Boven>^^
<Neven>^^
<Onder>^^

<Definitie>
<Commentaar>Er is geen definitie gevonden. Suggestie: immuungemedieerde encefalitis die optreedt als een zeldzame complicatie van besmetting met het varicellazostervirus en die gepaard gaat met convulsies, uitvalsverschijnselen en verminderd bewustzijn tot zelfs coma.

<Contexten>Bij een 82-jarige vrouw werd varicella-zosterencefalitis vastgesteld, een zeldzame complicatie van gordelroos. Opmerkelijk was het fulminante en fatale beloop bij een patiënte zonder onderliggende ziekte. (^Westenend & Hoppenbrouwers^ 2015-05-05)

<Overige bronnen>^UMLS^ 2015-05-05

<**Nederlands**>VZV-encefalitis
<Trefwoord>VZV-encefalitis
<Betrouwb>3pri
<Woordsrt>sub
<Genus>encefalitis: f (^Woordenlijst^ 2015-05-21)
<Flexie>
<Colloc>
<Uitspraak>
<Afko/Symb>
<Extrainfo>
<Extrasyn>herpes-zosterencefalitis
<Verwant>
<Boven>^^
<Neven>^^
<Onder>^^

<Definitie>
<Commentaar>Er is geen definitie gevonden. Suggestie: immuungemedieerde encefalitis die optreedt als een zeldzame complicatie van besmetting met het varicellazostervirus en die gepaard gaat met convulsies, uitvalsverschijnselen en verminderd bewustzijn tot zelfs coma.

<Contexten>Aanvankelijk was de neurologische conditie zorgwekkend. Het EEG vertoonde vrijwel geen activiteit. De PCR's voor VZV-DNA in het bloed waren zwak positief, maar in de liquor negatief, zodat er wel een VZV-viremie was, maar geen VZV-encefalitis. De slechte perinatale toestand leek dus het best verklaard te worden door de sederende medicatie die de moeder kreeg rondom de partus en niet door een VZV-encefalitis of perinatale asfyxie, waarbij de serumlactaatconcentratie van de pasgeborene vaak veel hoger is (_ 11 mmol/l). (^Manten et al.^ 2015-03-11)

Bij reactivatie bij immuungecompromitteerde patiënten kan het zich uiten als een klassieke herpes zoster beperkt tot 1 dermatoom maar ook een meer gegeneraliseerde herpes zoster waarbij meerdere dermatomen zijn aangedaan. Ook kan er viscerale verspreiding plaatsvinden waarbij een levensbedreigende aandoening kan ontstaan met vzv-encefalitis, pneumonitis en/of hepatitis. Verraderlijk genoeg kan dit beeld ook ontstaan zonder dat op de huid de klassieke vesikels zichtbaar zijn, waardoor soms ernstige diagnostische vertraging optreedt. (^Vermont^ 2015-03-11)

De verschijnselen van VZV-encefalitis bij kinderen en volwassenen komen grotendeels overeen. De encefalitis ontstaat 3-8 dagen na de huiduitslag met een uitloop van 21 dagen, echter een interval van drie maanden is ook beschreven. De verschijnselen bestaan uit een combinatie van hoofdpijn, braken, koorts, epileptische aanvallen en een organisch psychosyndroom. De liquor toont meestal een mononucleaire pleiocytose. De diagnostische waarde hiervan is omstreden omdat liquorafwijkingen met uitscheiding van VZV ook bij zoster zonder encefalitis voorkomen. (^Boermans^ 2015-03-11)

<Overige bronnen>

**<MeSH Heading>Vesicular Stomatitis
<Scope Note>A viral disease caused by at least two distinct species (serotypes) in the VESICULOVIRUS genus: VESICULAR STOMATITIS INDIANA VIRUS and VESICULAR STOMATITIS NEW JERSEY VIRUS. It is characterized by vesicular eruptions on the ORAL MUCOSA in cattle, horses, pigs, and other animals. In humans, vesicular stomatitis causes an acute influenza-like illness.

<Vakgebied>virus diseases
<UDC>616.9
<Project>^MeSH E8 AaG 8^
<Werkcode>
<Update Werkcode>C02.782.580.830.825
<Begrip>een virusziekte die veroorzaakt wordt door twee verschillende soorten vesiculovirus: vesicular stomatitis Indiana virus en vesicular stomatitis New Jersey virus
<Internat>
<**Nl-term**>vesiculaire stomatitis
<Equival>
<**En-term**>vesicular stomatitis
<Equival>
<Beeld>

<**English**>vesicular stomatitis
<Trefwoord>stomatitis
<Betrouwb>nor 3pri 3sec
<Woordsrt>sub
<Genus>
<Flexie>sine plu
<Colloc>
<Uitspraak>vəˈsɪkjʊlə (^Wells^ 874) ˌstəʊməˈtaɪtɪs (^Wells^ 778)
<Afko/Symb>
<Extrainfo>
<Extrasyn>
<Verwant>
<Boven>^rhabdoviridae infections^
<Neven>^ephemeral fever^, ^rabies^
<Onder>^^

<Definitie>a vesicular disease of horses, cattle, swine, and occasionally humans caused by a Vesiculovirus (vesicular stomatitis virus) in the family Rhabdoviridae; in horses and cattle the disease usually causes mouth vesicles which, in cattle cannot be differentiated clinically from those of foot-and-mouth disease. (^Stedman's^ 1702)
<Commentaar>

<Contexten>Vesicular stomatitis is a viral disease primarily affecting horses and cattle when it occurs in the United States. Outbreaks in the southwestern United States occur sporadically, with initial cases typically occurring in Texas, New Mexico, or Arizona and subsequent cases occurring in a northward progression. The viruses causing vesicular stomatitis can be transmitted by direct contact of lesioned animals with other susceptible animals, but transmission is primarily through arthropod vectors.
In 2012, an outbreak of vesicular stomatitis in the United States occurred that was caused by *Vesicular stomatitis New Jersey virus* serotype. Overall, 51 horses on 36 premises in 2 states were confirmed positive. Phylogenetic analysis of the virus indicated that it was most closely related to viruses detected in the state of Veracruz, Mexico, in 2000. (^PubMed^ McCluskey, B.J. et al 2014-12-27 23883666)

A 4-year-old boy with acute lymphocytic leukaemia in relapse was admitted with vesicular stomatitis, rash, and fever which had been treated with nystatin oral suspension for 2 days. He was listless but arousable and his rectal temperature was 38 6'C. There was a vesicular, pustular eruption affecting both lips, and the gums and tongue were coated with a yellowish-white friable plaque. (^Redfield et al.^ 2014-12-31)

Epidemics of vesicular stomatitis occurred in Colorado during 1949, 1964, 1966 and 1982, with virtually no cases reported in the intervening years. The financial effect of this disease on dairy herds may be tragic. Vesicular stomatitis in a 109 cow herd in Alabama caused teat lesions in 105 of the cows (Ellis and Kendall, 1964). (^Alderink, F.J.^ 2014-12-31)

<Overige bronnen>^Stedman's^ 1702 - ^International^ 2708 - ^Dorland's^ 1776

<**Nederlands**>vesiculaire stomatitis
<Trefwoord>stomatitis
<Betrouwb>2pri sec
<Woordsrt>sub
<Genus>stomatitis: f (^Van Dale^ 2015-05-21)
<Flexie>
<Colloc>
<Uitspraak>
<Afko/Symb>
<Extrainfo>
<Extrasyn>
<Verwant>
<Boven>^^
<Neven>^^
<Onder>^^

<Definitie>een virusziekte die voorkomt bij paarden, runderen en varkens en mogelijk ook bij schapen en geiten. Ook de mens is gevoelig voor deze ziekte. In het wild komt de ziekte voor bij herten en veel kleine zoogdieren. (^Rijksoverheid.nl^ 2015-05-07)
<Commentaar>

<Contexten>De melk die werd gebruikt voor het vervaardigen van de in dit certificaat omschreven producten afkomstig zijn van een reigo of een land dat geudrende de laatste 12 maanden vrij was van besmettelijke nodulaire dermatose, besmettelijke pleuropneumonie, mond-en-klauwzeer, pest bij kleine herkauwers, riftvalleykoorts, runderpest, schapen- en geitenpokken en vesiculaire stomatitis. (^Federaal agentschap voor de veiligheid van de voedselketen^ 2015-05-07)

Vesiculaire stomatitis is een virale aandoening die in Amerika wel eens wordt gezien bij paarden. De ziekte komt tevens voor bij koeien, varkens en waarschijnlijk ook bij kleine herkauwers. Dieren kunnen er ernstig door gaan kwijlen en krijgen blaasjes in en rondom de mond. Symptomen lijken erg op mond-en-klauwzeer. (^Van Delft^ 2015-05-04)

<Overige bronnen>^Rijksoverheid.nl^ 2015-05-07

**<MeSH Heading>Encephalitis, Viral
<Scope Note>Inflammation of brain parenchymal tissue as a result of viral infection. Encephalitis may occur as primary or secondary manifestation of TOGAVIRIDAE INFECTIONS; HERPESVIRIDAE INFECTIONS; ADENOVIRIDAE INFECTIONS; FLAVIVIRIDAE INFECTIONS; BUNYAVIRIDAE INFECTIONS; PICORNAVIRIDAE INFECTIONS; PARAMYXOVIRIDAE INFECTIONS; ORTHOMYXOVIRIDAE INFECTIONS; RETROVIRIDAE INFECTIONS; and ARENAVIRIDAE INFECTIONS.

<Vakgebied>virus diseases
<UDC>616.9
<Project>^MeSH E8 AaG 8^
<Werkcode>
<Update Werkcode>C02.182.500.300
<Begrip>encefalitis die optreedt als het resultaat van een virale infectie. De encefalitis kan optreden na besmetting met verschillende soorten virussen
<Internat>
<**Nl-term**>virale encefalitis, virale hersenontsteking
<Equival>
<**En-term**>viral encephalitis
<Equival>
<Beeld>

<**English**>viral encephalitis
<Trefwoord>viral encephalitis
<Betrouwb>nor 3pri 2sec
<Woordsrt>sub
<Genus>
<Flexie>plu viral encephalitides (^Misra et al^ 13)
<Colloc>
<Uitspraak>ˈvaɪrəl (^Wells^ 876) enˌkefəˈlaɪtɪs (^Wells^ 273)
<Afko/Symb>
<Extrainfo>
<Extrasyn>
<Verwant>
<Boven>^encephalitis^
<Neven>^encephalitis * arbovirus^, ^encephalitis * herpes simplex^
<Onder>^^

<Definitie>any type of encephalitis caused by a virus. There are two main types: encephalitis associated with the multiplication of various viruses, such as arbovirus, poliovirurs, herpes virus, or mumps virus, in the nervous system; and encephalitis which occurs during the course of exanthemata of viral origin, such as vaccinia, measles, German measles, and chickenpox. In these infections it is still uncertain whether the virus multiplies in the nervous tissue, or whether, as is generally believed, the encephalitis is an allergic or hypersensitivity reaction of the same type as that which occurs in “experimental allergic encephalitis,” which can be induced in animals by the injection of brain tissue with Freund’s adjuvant. In encephalitis lethargica, another important variety of encephalitis, the causative agent has not been identified. (^International^ 934)
<Commentaar>

<Contexten>Differential diagnosis of viral encephalitis is wide and includes other infections of the central nervous system (CNS), autoimmune diseases such as ADEM, limbic encephalitis, Rasmussen’s syndrome, and metabolic diseases. This paper will focus on some specific viral encephalitis. (^PubMed^ Silva 2015-04-14 24141509)

Testing the effects of synthetic cannabinoids as adjunctive therapy in chronic viral encephalitis, we found the specific CB2 receptoragonist HU-308superior to the general cannabinoid agonistWIN55, 212-2 in providing longer term anti-inflammatory effects and preservation of newborn cells. (^PubMed^ Solbrig et al. 2015-04-14 24021420)

While precise figures for the incidence of encephalitis following these various viruses are not available, estimates have been given for some of them. For example, it has been estimated that HSE, the most important treatable viral encephalitis, has an incidence of about one case per million per year. (^Kennedy^ 2015-04-14)

<Overige bronnen>^International^ 934 - ^Churchill's^ 610

<**Nederlands**>virale encefalitis
<Trefwoord>virale encefalitis
<Betrouwb>3pri sec
<Woordsrt>sub
<Genus>encefalitis: f (^Woordenlijst^ 2015-05-21)
<Flexie>
<Colloc>
<Uitspraak>
<Afko/Symb>
<Extrainfo>
<Extrasyn>
<Verwant>
<Boven>^^
<Neven>^^
<Onder>^^

<Definitie>
<Commentaar>er werd geen definitie gevonden. Voorstel: encefalitis die veroorzaakt wordt door een virus.

<Contexten>Kort na terugkeer in Nederland van een reis naar Ontario, een deel van Canada waar infectie met het West-Nijl-virus is beschreven, werd een 69-jarige man toenemend verward en algeheel ziek inclusief hoge koorts. Op grond van het klinische beeld werd aan de mogelijkheid van virale encefalitis gedacht, hetgeen werd ondersteund door bijpassende afwijkingen op het EEG en bij onderzoek van de liquor cerebrospinalis. MRI van de hersenen droeg niet bij tot de diagnose. (^Prick et al.^ 2015-04-20)

In de richtlijn van de European Federation of Neurological Societies (EFNS) wordt VZV als één van de belangrijkste verwekkers van virale encefalitis genoemd. (^Weerkamp et al.^ 2015-04-20)

Het *Japanse-encefalitisvirus* is wereldwijd in kwantitatief opzicht een van de belangrijkste verwekkers van virale encefalitis. Het aantal ziektegevallen wordt geschat op 50.000 per jaar en hiervan overlijden circa 15.000 patiënten. (^Delsing et al.^ 2015-04-20)

<Overige bronnen>^Reuter^ 228

<**Nederlands**>virale hersenontsteking
<Trefwoord>virale hersenontsteking
<Betrouwb>2pri sec
<Woordsrt>sub
<Genus>hersenontsteking: f (^Woordenlijst^ 2015-05-21)
<Flexie>

<Colloc>
<Uitspraak>
<Afko/Symb>
<Extrainfo>
<Extrasyn>
<Verwant>
<Boven>^^
<Neven>^^
<Onder>^^

<Definitie>
<Commentaar>er werd geen definitie gevonden. Voorstel: hersenontsteking die veroorzaakt wordt door een virus.

<Contexten>Japanse encefalitis is een in Azië niet zo zeldzame en potentieel ernstige virale hersenontsteking (verlammingen, epilepsie, coma, overlijden). Japanse encefalitis is met 30-50.000 gesignaleerde gevallen per jaar de voornaamste vorm van virale encefalitis in Azië, en heeft de bijnaam de ‘pest van het Oosten’. (^Verdonschot^ 2015-04-20)

Japanse hersenontsteking wordt veroorzaakt door het Japanese Encephalitis virus en is de hoofdoorzaak van virale hersenontsteking in Azië, met jaarlijks 50.000 nieuwe gevallen en 10.000 doden. Het wordt verspreid door de mug *Culex tritaeniorhynchus* die in Azië veel voorkomt en zich voedt op grote warmbloedigen zoals koeien en varkens. (^Van Vliet et al.^ 2015-04-20)

<Overige bronnen>^Merck Manual NL^ 2015-04-20

APPENDIX II: English-Dutch Lexicon

bluecomb of turkeys	cf. C02.782.600.550.200.325	overdraagbare kalkoenenteritis
dengue hemorrhagic fever	cf. C02.081.270.200	dengue hemorragische koorts
encephalitis, herpes zoster	cf. C02.182.500.300.400	varicella-zosterencefalitis VZV-encefalitis herpes-zosterencefalitis
encephalitis, varicella zoster	C02.182.500.300.400	varicella-zosterencefalitis VZV-encefalitis herpes-zosterencefalitis
encephalitis, varicella zoster virus	cf. C02.182.500.300.400	varicella-zosterencefalitis VZV-encefalitis herpes-zosterencefalitis
encephalitis, viral	C02.182.500.300	virale encefalitis virale hersenontsteking
enteritis, transmissible, of turkeys	C02.782.600.550.200.325	overdraagbare kalkoenenteritis
enteritis, turkey coronaviral	cf. C02.782.600.550.200.325	overdraagbare kalkoenenteritis,
gastroenteritis, porcine transmissible	cf. C02.782.600.550.200.400	overdraagbare varkensgastro-enteritis overdraagbare gastro-enteritis bij varkens
gastroenteritis, transmissible, of swine	C02.782.600.550.200.400	overdraagbare varkensgastro-enteritis overdraagbare gastro-enteritis bij varkens
myelopathy, HTLV-1-associated	cf. C02.182.600.600	tropische spastische paraparese HTLV-1-geassocieerde myelopathie met HTLV-I samenhangende myelopathie
paraparesis, tropical spastic	C02.182.600.600	tropische spastische paraparese HTLV-1-geassocieerde myelopathie met HTLV-I samenhangende myelopathie
rubulavirus infections	C02.782.580.600.680	rubulavirusinfecties
SAIDS	cf. C02.782.815.616.850	apenaids SAIDS
SARS	cf. C02.782.600.550.200.750	SARS ernstig acuut ademhalingssyndroom
severe acute respiratory syndrome	C02.782.600.550.200.750	SARS

		ernstig acuut ademhalingssyndroom
severe dengue	C02.081.270.200	dengue hemorragische koorts
simian acquired immunodeficiency syndrome	C02.782.815.616.850	apenaids SAIDS
simian AIDS	cf. C02.782.815.616.850	apenaids SAIDS
smallpox	C02.256.743.826	pokkenvariola
superinfection	C02.597.880	superinfectie surinfectie
tick-borne diseases	C02.081.885	door teken overgedragen ziekte door teken overgebrachte ziekte tekenziekte tekenbeetziekte
torovirus infections	C02.782.600.550.800	torovirusinfecties
vaccinia	C02.256.743.929	vaccinia
variola	cf. C02.256.743.826	pokken variola
vesicular stomatitis	C02.782.580.830.825	vesiculaire stomatitis

APPENDIX III: Dutch-English Lexicon

ademhalingssyndroom, ernstig acuut	cf. C02.782.600.550.200.750	severe acute respiratory syndrome SARS
apenaids	C02.782.815.616.850	simian acquired immunodeficiency syndrome simian AIDS SAIDS
dengue hemorragische koorts	C02.081.270.200	severe dengue dengue hemorrhagic fever
door teken overgebrachte ziekte	cf. C02.081.885	tick-borne diseases
door teken overgedragen ziekte	cf. C02.081.885	tick-borne diseases
encefalitis, virale	C02.182.500.300	encephalitis, viral
gastro-enteritis, overdraagbare, bij varkens	cf. C02.782.600.550.200.400	gastroenteritis, transmissible, of swine gastroenteritis, porcine transmissible
herpes-zosterencefalitis	cf. C02.182.500.300.400	encephalitis, varicella zoster encephalitis, herpes zoster encephalitis, varicella zoster virus
hersenontsteking, virale	cf. C02.182.500.300	encephalitis, viral
kalkoenenteritis, overdraagbare	C02.782.600.550.200.325	enteritis, transmissible, of turkeys bluecomb of turkeys enteritis, turkey coronaviral
myelopathie, HTLV-1-geassocieerde	cf. C02.182.600.600	paraparesis, tropical spastic myelopathy, HTLV-1-associated
myelopathie, met HTLV-I samenhangende	cf. C02.182.600.600	paraparesis, tropical spastic myelopathy, HTLV-1-associated
paraparese, tropische spastische	C02.182.600.600	paraparesis, tropical spastic myelopathy, HTLV-1-associated
pokken	C02.256.743.826	smallpox variola
rubulavirusinfecties	C02.782.580.600.680	rubulavirus infections
SAIDS	cf. C02.782.815.616.850	simian acquired immunodeficiency syndrome simian AIDS SAIDS
SARS	C02.782.600.550.200.750	severe acute respiratory syndrome

		SARS
superinfectie	C02.597.880	superinfection
surinfectie	cf. C02.597.880	superinfection
tekenbeetziekte	C02.081.885	tick-borne diseases
tekenziekte	cf. C02.081.885	tick-borne diseases
torovirusinfecties	C02.782.600.550.800	torovirus infections
vaccinia	C02.256.743.929	vaccinia
varicella-zosterencefalitis	C02.182.500.300.400	encephalitis, varicella zoster encephalitis, herpes zoster encephalitis, varicella zoster virus
variola	cf. C02.256.743.826	smallpox variola
varkensgastro-enteritis, overdraagbare	C02.782.600.550.200.400	gastroenteritis, transmissible, of swine gastroenteritis, porcine transmissible
vesiculaire stomatitis	C02.782.580.830.825	vesicular stomatitis
VZV-encefalitis	cf. C02.182.500.300.400	encephalitis, varicella zoster encephalitis, herpes zoster encephalitis, varicella zoster virus

APPENDIX IV: MeSH Tree 2015

Rubulavirus Infections

Paramyxoviridae Infections [C02.782.580.600]

- Avulavirus Infections [C02.782.580.600.080] +
- Henipavirus Infections [C02.782.580.600.400]
- Morbillivirus Infections [C02.782.580.600.500] +
- Respirovirus Infections [C02.782.580.600.600] +
- Pneumovirus Infections [C02.782.580.600.620] +
- Rubulavirus Infections [C02.782.580.600.680]
  - Mumps [C02.782.580.600.680.500]

Severe Acute Respiratory Syndrome

Virus Diseases [C02]

RNA Virus Infections [C02.782]

Nidovirales Infections [C02.782.600]

Coronaviridae Infections [C02.782.600.550]

Coronavirus Infections [C02.782.600.550.200]

- Enteritis, Transmissible, of Turkeys [C02.782.600.550.200.325]
- Feline Infectious Peritonitis [C02.782.600.550.200.360]
- Gastroenteritis, Transmissible, of Swine [C02.782.600.550.200.400]
- Severe Acute Respiratory Syndrome [C02.782.600.550.200.750]

Severe Dengue

Virus Diseases [C02]

Arbovirus Infections [C02.081]

Dengue [C02.081.270]

- Severe Dengue [C02.081.270.200]

Simian Acquired Immunodeficiency Syndrome

Virus Diseases [C02]

RNA Virus Infections [C02.782]

Retroviridae Infections [C02.782.815]

Lentivirus Infections [C02.782.815.616]

Equine Infectious Anemia [C02.782.815.616.300]

Feline Acquired Immunodeficiency Syndrome [C02.782.815.616.350]

HIV Infections [C02.782.815.616.400] +

Pneumonia, Progressive Interstitial, of Sheep [C02.782.815.616.660]

Simian Acquired Immunodeficiency Syndrome [C02.782.815.616.850]

Visna [C02.782.815.616.900]

Smallpox

Virus Diseases [C02]

DNA Virus Infections [C02.256]

Poxviridae Infections [C02.256.743]

Cowpox [C02.256.743.175]

Ecthyma, Contagious [C02.256.743.193]

Ectromelia, Infectious [C02.256.743.239]

Fowlpox [C02.256.743.366]

Lumpy Skin Disease [C02.256.743.494]

Molluscum Contagiosum [C02.256.743.611]

Monkeypox [C02.256.743.615]

Myxomatosis, Infectious [C02.256.743.665]

Smallpox [C02.256.743.826]

Vaccinia [C02.256.743.929]

Superinfection

Virus Diseases [C02]

Opportunistic Infections [C02.597]

AIDS-Related Opportunistic Infections [C02.597.050]

Superinfection [C02.597.880]

Tick-Borne Diseases

Virus Diseases [C02]

Arbovirus Infections [C02.081]

African Horse Sickness [C02.081.030]

Bluetongue [C02.081.125]

Dengue [C02.081.270] +

Encephalitis, Arbovirus [C02.081.343] +

Encephalomyelitis, Equine [C02.081.355] +

Phlebotomus Fever [C02.081.700]

Rift Valley Fever [C02.081.810]

Tick-Borne Diseases [C02.081.885]

African Swine Fever [C02.081.885.125]

Colorado Tick Fever [C02.081.885.200]

Encephalitis, Tick-Borne [C02.081.885.400]

Hemorrhagic Fever, Crimean [C02.081.885.430]

Hemorrhagic Fever, Omsk [C02.081.885.440]

Kyasanur Forest Disease [C02.081.885.475]

Nairobi Sheep Disease [C02.081.885.550]

Yellow Fever [C02.081.980]

Torovirus Infections

Virus Diseases [C02]

RNA Virus Infections [C02.782]

Nidovirales Infections [C02.782.600]

Coronaviridae Infections [C02.782.600.550]

Coronavirus Infections [C02.782.600.550.200] +

Torovirus Infections [C02.782.600.550.800]

Enteritis, Transmissible, of Turkeys

Virus Diseases [C02]

RNA Virus Infections [C02.782]

Nidovirales Infections [C02.782.600]

Coronaviridae Infections [C02.782.600.550]

Coronavirus Infections [C02.782.600.550.200]

Enteritis, Transmissible, of Turkeys [C02.782.600.550.200.325]

Feline Infectious Peritonitis [C02.782.600.550.200.360]

Gastroenteritis, Transmissible, of Swine [C02.782.600.550.200.400]

Severe Acute Respiratory Syndrome [C02.782.600.550.200.750]

Gastroenteritis, Transmissible, of Swine

Virus Diseases [C02]

RNA Virus Infections [C02.782]

Nidovirales Infections [C02.782.600]

Coronaviridae Infections [C02.782.600.550]

Coronavirus Infections [C02.782.600.550.200]

Enteritis, Transmissible, of Turkeys [C02.782.600.550.200.325]

Feline Infectious Peritonitis [C02.782.600.550.200.360]

Gastroenteritis, Transmissible, of Swine [C02.782.600.550.200.400]

Severe Acute Respiratory Syndrome [C02.782.600.550.200.750]

Paraparesis, Tropical Spastic

Virus Diseases [C02]

Central Nervous System Viral Diseases [C02.182]

Myelitis [C02.182.600]

Paraparesis, Tropical Spastic [C02.182.600.600]

Poliomyelitis [C02.182.600.700] +

Vaccinia

Virus Diseases [C02]

DNA Virus Infections [C02.256]

Poxviridae Infections [C02.256.743]

Cowpox [C02.256.743.175]

Ecthyma, Contagious [C02.256.743.193]

Ectromelia, Infectious [C02.256.743.239]

Fowlpox [C02.256.743.366]

Lumpy Skin Disease [C02.256.743.494]

Molluscum Contagiosum [C02.256.743.611]

Monkeypox [C02.256.743.615]

Myxomatosis, Infectious [C02.256.743.665]

Smallpox [C02.256.743.826]

Vaccinia [C02.256.743.929]

Encephalitis, Varicella Zoster

Virus Diseases [C02]

Central Nervous System Viral Diseases [C02.182]

Encephalitis [C02.182.500]

Encephalitis, Viral [C02.182.500.300]

Encephalitis, Arbovirus [C02.182.500.300.300] +

Encephalitis, Herpes Simplex [C02.182.500.300.350]

Encephalitis, Varicella Zoster [C02.182.500.300.400]

Encephalomyelitis, Equine [C02.182.500.300.450] +

Leukoencephalopathy, Progressive Multifocal [C02.182.500.300.500]

Subacute Sclerosing Panencephalitis [C02.182.500.300.600]

Vesicular Stomatitis

Virus Diseases [C02]

RNA Virus Infections [C02.782]

Mononegavirales Infections [C02.782.580]

Rhabdoviridae Infections [C02.782.580.830]

Ephemeral Fever [C02.782.580.830.375]

Hemorrhagic Septicemia, Viral [C02.782.580.830.450]

Rabies [C02.782.580.830.750]

Vesicular Stomatitis [C02.782.580.830.825]

Encephalitis, Viral

Virus Diseases [C02]

Central Nervous System Viral Diseases [C02.182]

Encephalitis [C02.182.500]

Encephalitis, Viral [C02.182.500.300]

Encephalitis, Arbovirus [C02.182.500.300.300] +

Encephalitis, Herpes Simplex [C02.182.500.300.350]

Encephalitis, Varicella Zoster [C02.182.500.300.400]

Encephalomyelitis, Equine [C02.182.500.300.450] +

Leukoencephalopathy, Progressive Multifocal [C02.182.500.300.500]

Subacute Sclerosing Panencephalitis [C02.182.500.300.600]