

# Bacteria, viruses, parasites behind common disorders.

*Important note: This information has been compiled by staff of MR AB - not medical professionals. The info has been compiled from reliable medical sources on the internet.*

## 1. Arthritis

### Reactive arthritis:

Streptococci, intestinal bacteria such as salmonella, yersinia, campylobacter, bacteria in the urinary tract and genitalia such as chlamydia, gonococci.

### Acute arthritis, arthritis/arthralgia by virosis and other forms of arthritis:

- \* Yersinia (very common)
- Salmonella
- Shigella
- Campylobacter
- Chlamydia trachomatis
- Chlamydia pneumoniae
- Clostridium difficile
- Beta-hemolyserande streptococci group A
- Giardia lamblia
- Occasional cases of UVI with E. coli
- Influenza
- Rubella (incl. vaccination)
- Parotitis
- Hepatit B and C
- Adeno virus
- EB-virus (mononucleosis)
- Herpes varicellae/zoster
- Entero viroses (ECHO, Coxsackie)
- Human parvo virus B19 (parvovirus B19, erythema infectiosum)
- Sindbis-virus
- HIV
- Borrelia

## 2. Asthma - no viruses/bacteria found as direct cause - see Bronchitis

### Causes

- Inflammation in the bronchi and the peripheral respiratory tract
- Bronchial hyper reactivity
- Bronchial spasms

### Allergic asthma

### Non-allergic asthma, cold asthma:

\*RS virus,

\*common cold viruses

## 3. Bronchitis

\*RS-virus,

\*Pneumococcus bacteria,

\*Mycoplasma pneumoniae,

\*Chlamydia pneumoniae,

\*Bordetella pertussis,

\*Streptococcus pneumoniae,

\*Moraxella catarrhalis

\*Haemophilus influenza.

## 4. Diarrhoea

### Viruses

- *Rota virus*

Most common aetiology in children aged 6 months to 2 years

- ***Calici virus***

- Norovirus and Sapovirus can occur in all ages (Sapovirus primarily in children), common as nosocomial infection (Norwalk virus) and infections from foods

- *Enteric adenovirus*

Mainly in children

- *Astrovirus*

Mainly in children nosocomial infections can occur

## **Bacteria**

- **Salmonella**
- **Campylobacter**
- **Shigella**
- **Yersinia enterocolitica**
- **Clostridium difficile**

Approx. 25 % of cases have antibiotic-associated diarrheah

- **Enterotoxinbildande E. coli (ETEC)**

The most common cause of "tourist diarrheah

- **Enterohemorrhagiska E. coli (EHEC)**

## **Bacterial "classic food poisoning" (pre-formed toxins)**

- *Stafylococcus aureus*
- *Clostridium perfringens*
- *Bacillus cereus*

## **Protozoes**

- *Entamoeba histolytica/dispar*
- *Giardia intestinalis*
- *Cryptosporidium*-species
- *Cyclospora cayetanensis*
- *Dientamöba fragilis*

Clinical relevance uncertain - consult an infection specialist

- *Blastocystis hominis*

Clinical relevance uncertain - consult an infection specialist

## 5. Constipation

Campylobacter  
Helicobacter pylori

## 6. Skin problems

- \*Streptococci,
- \*Staphylococci.
- \*Parvo virus B19
- \*Herpes virus
- \*VZ-virus
- \* Yeast fungus *Malassezia furfur*
- \* Scabies

## 7. Fibromyalgia

Often a connection to inflammations in the brain and central nervous system.

- No direct viruses/bacteria found for fibromyalgia, but look for viruses/ bacteria causing inflammations in the brain and in the central nervous system.
- However, assumptions exist that mutated retro virus can cause fibromyalgia, such as XMRV or reactivated herpes viruses which create new viruses such as mutated **entero virus**.

Encephalitis:

\* Pneumococci and meningococci (80 % of all cases of serious meningitis) such as *Neisseria meningitidis* (contagious).

There are several sub groups of meningococci, of which seven groups are known to cause severe disease: groups A, B, C, W135, X, Y, Z.

- \* Hemophilus bacteria
- \* Borrelia
- \* Herpes simplex virus

## 8. Colds

- \* Rhino virus is the most common cause for colds, 30–80 % of all cases. A rhino virus contains RNA and belongs to the family
- \* \*Picornaviridae. There are 99 known types of viruses in this virus family.
  
- \* Corona virus 10–15 % of cases.
- \* Influenza virus 5–15 % of cases.
- \* parainfluenza virus,
- \* human respiratory syncytial virus,
- \* adeno virus,
- \* entero virus
- \* metapneumo virus.

Usually, more than one virus is the cause of infection. There are totally over 200 different viruses connected to colds. Among them, Respiratory infections: Epstein-barr virus

## 9. Gout

Bacteria:

- \* Staph.aureus,
- \* Staph.epidermidis,
- \* Pneumococci,
- \* Streptococci and gram negative intestinal bacteria.

Virus that may cause gout:

- \* Rubella
- \* Parotitis
- \* Hepatitis B (jaundice)

## 10. Gynecological diseases

- \* All viruses causing genital diseases and:
- \* Papilloma virus
- \* HIV
- \* Streptococci
- \* MRSA
- \* Chlamydia
- \* Gonococci

## 11. Urinary infection

- \* Escherichia coli
- \* Staphylococcus saprophyticus
- \* Enterobacter,
- \* Klebsiella,
- \* Proteus
- \* Enterokocker.
- \* Proteus (stone forming bacteria)

## 12. Cancer

- \* Papillomavirus
- \* Hepatitisvirus B and C
- \* Helicobacter bacteria
- \* Herpes simplex
- \* H-pylori

....and surely many more...

## 14. Twar

- \*Chlamydia pneumoniae
- \*Mycoplasma

## 15. Canine viruses (Zoonoses, i.e. can spread from animal to human)

- \*Leptospira
- \*Parvo virus
- \*Angiostrongylus vasorum (French heart worm - uncertain if zoonotic)

## 16. Cat viruses, cat bacteria (zoonoses)

- \*Corona virus
- \*Toxoplasma gondii - causes parasites in the human brain
- \*Feline parvo virus
- \*Feline immunodeficiency virus (Fiv) or feline AIDS
- \*Feline leukemia virus (FeLv), shares many aspects of other lenti-viruses such as HIV - the last two, uncertain if zoonotic.
- \* Pasteurella (very dangerous)

## 17 . Other dangerous viruses:

- \*Zika virus
- \*HIV
- \*Sars
- \*Legionella

#### \* MRSA

Meticilline resistant *Staphylococcus aureus* (MRSA) has developed resistance to basically all [betalactam antibiotics](#) by forming a new [penicillin](#)-binding protein which overtakes the functions of the others. These bacteria can be more or less sensitive to other staphylococci antibiotics such as [m klindamycin](#), [fusidinsyra](#) etc. The share of MRSA of invasive staphylococci infections (positive blood cultures) varies greatly between countries, from approx. 20% in England to approx. 1% in Sweden.

#### \* ESBL

Extended-spectrum betalactamas producing bacteria (ESBL), usually *Escherichia coli* or *Klebsiella* spp., are bacteria which form an enzyme which breaks down all [penicillins](#) and cephalosporines. In approx. 50% of cases, they are also resistant to amino glycosides, quinolones and [trimetoprim/sulfa](#), which makes them only sensitive to [carbapenemes](#) intravenously. Also here, the existence of these varies greatly between countries.

#### \* VRE

Also [vancomycin](#) resistant enterococci (VRE) exist in the intestines. They have an altered cellular wall, which leads to that [vankomycin](#) cannot bind the bacteria. Treatment options for VRE are very limited.

#### \* PRP

[Penicillin](#) resistant pneumococci (PRP) are respiratory bacteria which cause the same infection panorama as the sensitive pneumococci, i.e. otitis, sinusitis and pneumonia. The resistance is the result of alterations in the [penicillin](#) binding proteins, which causes the [penicillin](#) not to bind as well to the bacteria cell walls.