Human herpes viruses

There are eight (or nine since HHV6 and HHV6a are sometimes listed separately):

1. Herpes simplex virus type 1 (cold sores and whitlows on fingers and hands, also half new cases of genital herpes)
2. Herpes simplex virus type 2 (genital sores, also sometimes cold sores and whitlows)

The other viruses cause quite different illnesses. These are:

3. Varicella-zoster virus (also called herpes varicella/chickenpox and herpes zoster/shingles)
4. Epstein Barr virus (often abbreviated to EBV)
5. Cytomegalovirus (often shown as CMV)
6. Human herpes virus 6 (HHV6)
7. Human herpes virus 7 (HHV7)
8. Human herpes virus 8 (HHV8 or it can be called KSHV - see below)

1 - Herpes simplex virus type 1 (short version - see also cold sores):
How common? By age 15 around 25% of UK population, by age 25 around 60%.
How is it caught? By direct skin contact with the affected part, but only if the virus is present in the skin at the time of contact.
How long before it appears (incubation period)? 4 or 5 days is usual, but it could be as soon as 2 days or as long as two weeks. Some people may get their first skin symptoms months or years after catching the virus.
What does it cause? Often nothing; at its most obvious it causes a flu-like illness followed by blisters or ulcers on the affected skin. If it recurs, there are likely to be fewer blisters.

2. Herpes simplex virus type 2 (short version - see also our frequently asked questions): How common? Around 25% of the sexually active UK population. Over the whole country between 3% and 10%. The rates are much higher in other countries.
How is it caught? By direct skin contact with the affected part, when the virus is active.
How long before it appears (incubation period)? 4 or 5 days is usual, but it could be as soon as 2 days or as long as two weeks - or even longer.
What does it cause? Often nothing, at its most obvious it causes a flu-like illness followed by blisters or ulcers on the affected skin. If it recurs, there are likely to be fewer blisters.
3. Varicella-zoster virus (short version - see also our shingles and post-herpetic neuralgia page):
How common? Over 90% of UK population by adulthood. In tropical countries the rates are much lower.
How is it caught? Chickenpox is caught like flu: virus floats in the air, from the breath of an infected person.
When it returns it is called shingles. No one can catch shingles, but if you have not had chickenpox and you have skin contact with shingles, you can catch chickenpox.
How long before it appears (incubation period)? About 4–6 days is usual, skin lesions show up 10–14 days after infection, but it could be as soon as 4 days or as long as 21 days.
What does it cause? A flu-like illness followed by blisters over the body. If it recurs, as shingles, the blisters will be a restricted area, often around the ribs. Older people may develop post-herpetic neuralgia, a pain the nerves that may be severe and may last for months or year. See our pages on how this is treated.

4. Epstein Barr virus (EBV, also called glandular fever, kissing disease, mononucleosis, mono):
How common? Very common indeed: for example, a study of new students at a UK university found that 75% carried the virus.
How is it caught? Saliva - hence 'kissing disease'.
How long before it appears (incubation period)? It is estimated that it takes 33-49 days to show up after infection - but this is not confirmed.
What does it cause? In babies and children, the symptoms are often so mild that they are not noticed. In teenagers and adults, it causes a sore throat, fever, swollen glands, aching joints and it may cause fatigue which can last weeks or sometimes months. If it recurs, it will cause the same symptoms but they will not be as strong and will not last as long. People on drugs following organ transplants may suffer from ill-health caused by this virus. If a news report features 'herpes' and 'cancer', it is usually about EBV as this very occasionally causes Hodgkin's lymphoma or nasopharyngeal cancer. These cancers are most likely to occur in children with malaria in tropical countries and in adults in China.

5. Cytomegalovirus (CMV)
How common? Half the population has CMV by a young age, with higher rates of infection in poorer areas.
How is it caught? The virus is present in saliva, breast milk and other secretions.
What does it cause? In adults, it is usually caught with no symptoms at all. Sometimes it causes the same symptoms as a mild glandular fever (see above). This virus can be a problem if a woman catches it (first time infection) during her pregnancy, her baby could have congenital CMV. In the UK, it is estimated that one to two babies in every 200 will be born with congenital CMV. Of these, about 13% will have problems when they are born and around another 14% will develop problems later on. Problems that congenital CMV can cause include hearing loss and learning difficulties.

6. Humanherpes virus 6 (roseola infantum/exanthem subitum) which was first identified in 1986.
How common? By the age of 2, almost all babies have caught it.
How is it caught? Saliva, and, in older people, possibly semen and other secretions (unlike herpes simplex which is not found in bodily fluids).
How long before it appears (incubation period)? 5 to 15 days.
What does it cause? There are two types 6A and 6B. Type 6A has not been shown
to cause any disease. Type 6B causes roseola in babies between 6 months and 1-
year old. It is usually a mild infection, which clears without treatment. Symptoms
include a fever lasting for a few days, swollen glands and normally a mild rash
which appears after the fever goes. Occasionally children will have a swollen liver.
It is a major cause of fever induced seizures in babies. Since it is usually caught
in childhood, adults are rarely affected by it. If they do it is a more serious illness
than in babies. HHV-6B has rarely been associated with a variety of viral illnesses,
including a glandular fever-like illness and infection of the brain or lungs.

7. Human herpes virus 7
First identified in 1990.
How common? By the age of 3, almost all children have HHV-7.
How is it caught? Saliva, and, in older people, possibly semen and other
secretions.
What does it cause? Sometimes it may cause a mild childhood rash similar to the one caused by Human herpes virus 6.

8. Human herpes virus 8
Also called Kaposi's sarcoma herpes virus or KSHV, it which was first identified in
1995.
How common? This virus is quite common in some parts of the world. In Europe
and the USA, it is not very common - fewer than 10% have it. However, a survey
in Lusaka, Zambia, found that 39% carried antibodies to this virus.
How is it caught? In Western countries it may be transmitted during sex. However
in countries where it is most common, it would seem to be caught through saliva
during childhood.
How long before it appears (incubation period)? It can take as long as 40 years
for the symptoms to appear.
What does it cause? This virus features in stories about 'herpes' and 'cancer' as it
has been found to be a cause of Kaposi's sarcoma - a skin cancer sometimes
found in people with AIDS.