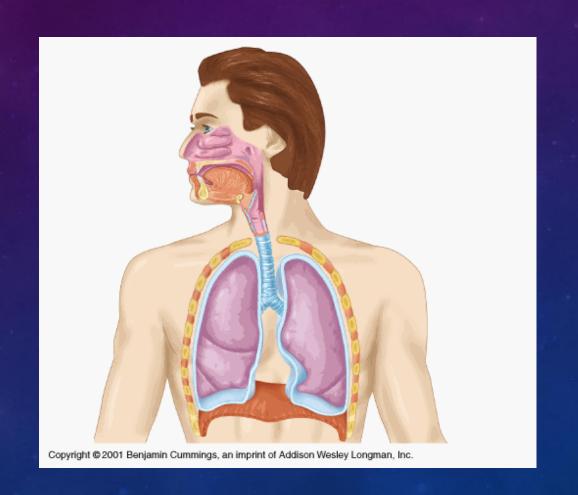


VIRAL UPPER RESPIRATORY TRACT INFECTIONS

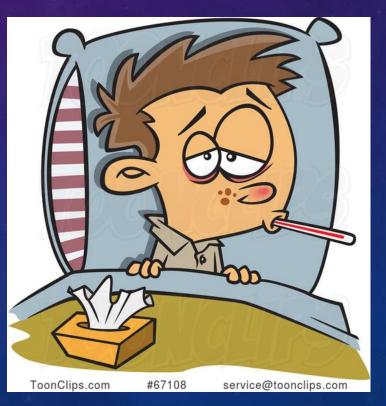
 The common cold is an acute, self limited viral infection of the upper respiratory tract involving symptoms such as sneezing, nasal congestion, runny nose, cough, sore throat, headache, fevers, and fatigue.

WHAT IS THE UPPER RESPIRATORY SYSTEM?



THE COMMON COLD

- Over 200 different types of viruses have been associated with the common cold
 - Rhinovirus (causes about 50% of all colds)
 - Caronavirus
 - Influenza virus
 - Parainfluenza
 - Adenovirus
 - Enterovirus
 - Respiratory Syncytial Virus (RSV)



IS THE COMMON COLD REALLY THAT COMMON?

- Telephone survey conducted between 2000-2001 indicated that there are about 500 million non influenza (flu) viral URI's every year resulting in a direct cost of \$17 Billion annually.
- The average incidence is 5-7 colds a year in preschool age children. This decreases to about 2-3 colds a year by adulthood.
- Annual absences from school and work in the United States due to colds caused 26 and 23 million lost days respectively.

HOW DO THESE VIRUSES GET PASSED AROUND?



Classic study from 1980 evaluating hand to hand transmission: 0 of 8 subjects contracted rhinovirus after exposure onto hands after they were treated with iodine, vs 6 of 10 became ill with rhinovirus when their hands were exposed to rhinovirus after placebo iodine wash. Gwaltney JM Jr, Moskalski PB, Hendley JO. Interruption of experimental rhinovirus transmission. J Infect Dis 1980; 142:811.

OTHER PASSAGE ROUTES

- Small droplet: small virus particles become airborne by coughing or sneezing
- Large droplet: larger virus particles that require more direct contact with a sick person
- Surface contact: rhinovirus can stay alive on various environmental surfaces for several hours

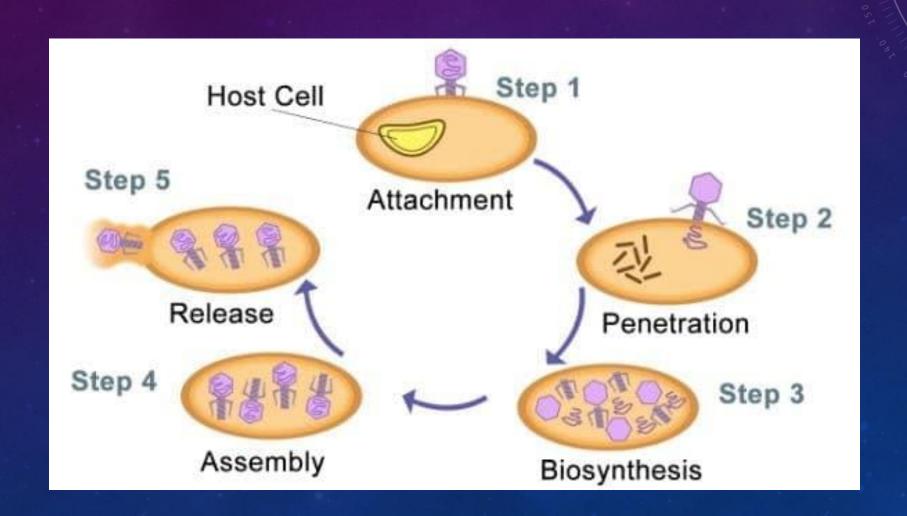
PERIOD OF INFECTIVITY

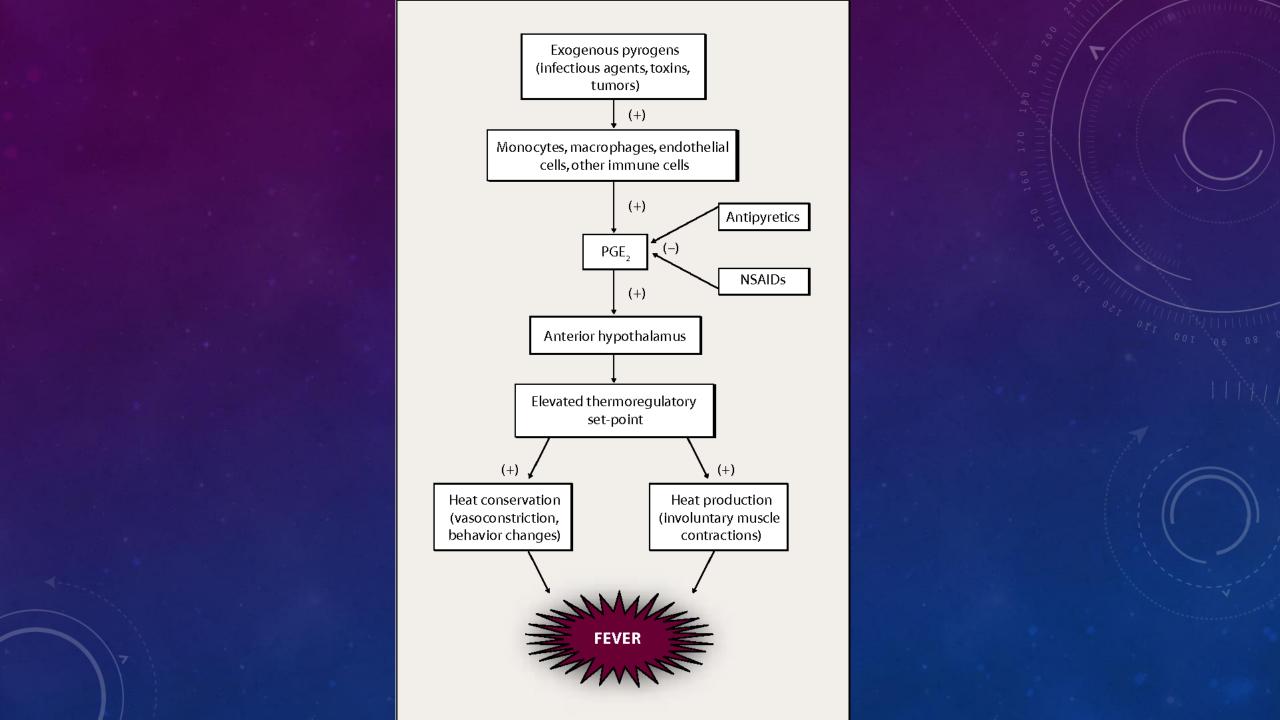
 Rhinovirus has a peak of viral shedding on day three after inoculation; this coincides with the peak of symptoms.

Viral titers in nasal washings returns to near baseline by day 5

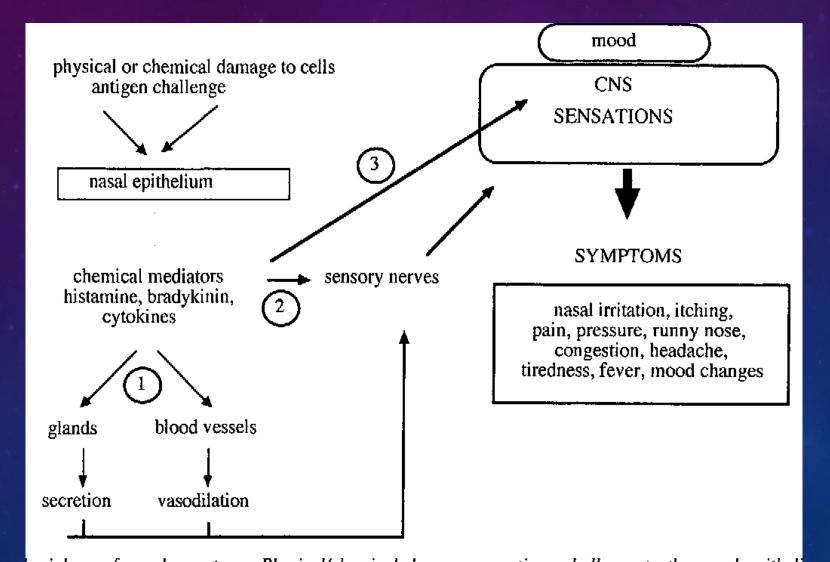
Low levels of viral shedding may persist for up to two weeks

VIRAL REPLICATION





SYMPTOMS OF URI OTHER THAN FEVER



WHEN CAN I GET BACK IN THE GAME COACH?!

- With viral URI the athlete should not participate in sport until their symptoms have peaked and are beginning to improve at a minimum
- Must be afebrile
- Eichner (early 90s): "Neck Check" Rule
 - Above the neck: Warm up for 10 minutes, if symptoms do not worsen may continue to gradually return to play
 - Below the neck: Athlete should wait 10-14 days prior to resumption of intensive athletic activity

SPECIAL INFECTION CIRCUMSTANCES

- Infectious mononucleosis: minimum period of 21 days away from sport (contact specifically)
- Myocarditis: 6 months away from sport after resolution of symptoms
- Cutaneous infections:
 - Shingles: Primary outbreak 10-14 days of antivirals, Secondary outbreak 5 days of antivirals
 - Herpes simplex: 5 days of antivirals
 - Headlice: can return after treatment (7 days)

SARS-COV-2 (OR COVID-19)



- Quarantine is 10 days from the onset of symptoms. Must be afebrile without fever reducing medications for 3 days.
- If mild symptoms athlete can return after this time
- If moderate to severe: EKG, troponins, echocardiogram before returning to sport

COMMON NON-INFECTIOUS SIT OUT REASONS

- Concussion: No return until medically cleared, then return-to-play protocol
- Fractures: minimum 6-8 weeks, sometimes 12 weeks or longer
- Sprains: return as pain allows
- Overuse injuries: rest for minimum 7-10 days, return as pain allows



• Thank you!



ATHLETIC MEDICINE & PERFORMANCE