**Influenza**

The incidence of Seasonal Influenza is now low and it’s time to vaccinate. The approved trivalent vaccine for 2018–19 includes A/Michigan (H1N1), A/Singapore (H3N2) and B/Colorado. The Quadrivalent vaccine also contains an additional B virus, B/Phuket. ACIP has approved any licensed, age-appropriate vaccine including LAIV4 this year.

https://www.cdc.gov/mmwr/volumes/67/rr/rr6703a1.htm?s_cid=rr6703a1_w

The CDC Influenza Risk Assessment Tool (IRAT), which measures potential for emergence and impact of pandemic influenza strains, continues to rank H7N9 (A/Hong Kong/125/2017) as having the overall greatest risk for emergence and impact. Unlike seasonal influenza, pandemic influenza can occur at any time and is a novel influenza strain for which the population has no natural immunity.

https://www.cdc.gov/flu/pandemic-resources/monitoring/irat-virus-summaries.htm

**Norovirus**

Outbreaks of Norovirus (ie, “stomach flu”) continue to be a problem on college campuses around the country, particularly in the winter months. Numerous shared exposures and close living areas make college settings especially vulnerable to large Norovirus outbreaks.

The best strategies to control a campus outbreak of Norovirus are still unknown, but a few measures are certainly worthwhile. Temporary closure of public areas such as dining halls and student union buildings for the purpose of disinfection and cancellation of large gatherings may break or slow the cycle of virus transmission. There is currently no evidence that cancellation of class or complete closure of the campus is necessary to control a Norovirus outbreak.

To prevent Norovirus on your campus, you should promote good hand hygiene, encourage adequate environmental disinfection (a simple bleach solution is inexpensive and effective), and push for policies that make it easy for food workers to self-exclude in the event they have an acute GI illness.

https://www.cdc.gov/norovirus/index.html
https://www.cdc.gov/mmwr/preview/mmwrhtml/mm5839a2.htm

**Rocky Mountain Spotted Fever (RMSF)**

Although RMSF tends to occur in North Carolina, Oklahoma, Arkansas, Tennessee, and Missouri, it has been identified throughout most of the mainland United States. RMSF is transmitted by several tick species. These include the American dog tick, Rocky Mountain wood tick, and the Brown dog tick. The incubation period is 3–12 days.
Early symptoms include high fever, severe headache, malaise, myalgia, swelling around eyes/back of hands, and GI distress. Late symptoms (occurring 5 days or later) may include altered mental status, respiratory compromise, necrosis, and multi-organ failure.

A rash typically starts a few days after symptoms. The early rash is maculopapular with non-pruritic small pink macules that start peripherally on the extremities and spread to the trunk. A late, petechial rash may occur. Such a rash can be a sign of potentially severe disease.

Lab testing may demonstrate thrombocytopenia, elevated liver function tests, and hyponatremia. Diagnosis may be achieved with skin biopsy for PCR testing or immunohistochemically staining. Additionally, diagnosis may be established with a four-fold increase in IgG antibody titer comparing the first week with week 2–4. A decision to treat should be based upon clinical presentation. Delay in treatment for lab results could result in severe illness or even death. The CDC recommends Doxycycline for both adults and children. At the recommended dose to treat RMSF, there is no evidence of staining of permanent teeth in children.

https://www.cdc.gov/rmsf/index.html
https://www.cdc.gov/ticks/tickborne_diseases/TickborneDiseases-P.pdf

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