Welcome, Matt!

Matt grew up in Guernsey, Wyoming and went to college at the University of Wyoming where he completed his undergraduate and master’s work in Kinesiology and Health Promotion and (more importantly) met his wife Megan, who is a nurse at the VA. After his first stint in graduate school he worked at Gold’s Gym before being accepted into the Biomedical Sciences Doctoral Program at UW, where he has spent the last 3 years studying cardiovascular disease. He has two ornery dogs, an exercise addiction, and is very happy to be starting his new job as a communicable disease epidemiologist for the state.

CDC Announces highest rates of STDs ever reported

The Centers of Disease Control and Prevention (CDC) announced at the 2018 STD Prevention Conference that STDs were again at an all time high in 2017. Approximately 2.3 million cases of chlamydia, gonorrhea, and syphilis were reported in 2017, exceeding the number of cases reported in 2016 by over 200,000. This is the fourth consecutive year of increases for the three STDs.

The number of gonorrhea cases nationally increased 67% from 2013-2017 while cases in Wyoming increased approximately 520% during this time. The CDC is concerned with the rise of gonorrhea given the potential drug resistance. “We expect gonorrhea will eventually wear down our last highly effective antibiotic, and additional treatment options are urgently needed,” said Gail Bolan, M.D, Director of the CDC division of STD Prevention.

The CDC indicates the increases may be due to multiple factors including lack of education and awareness of STDs, reduced screening by health care professionals, and a lack of inquiry about screening and treatment by patients. CDC warns that diagnosed cases represent just a small fraction of the true disease burden.

The Communicable Disease Unit has funding available to assist communities with prevention and testing efforts. These funding opportunities can be used to prevent and detect STDs and HIV through marketing, condom distribution, education, harm reduction, and testing events. For more information on funding opportunities, please visit: https://health.wyo.gov/publichealth/communicable-disease-unit/hiv-prevention-program/
Expanding Hepatitis C Testing in Emergency Departments Shows Success

A study recently published in *Academic Emergency Medicine* showed that expanding hepatitis C (HCV) testing in emergency departments is an effective way to screen undiagnosed patients that would have otherwise gone without treatment. This study took place in the emergency department at Boston Medical Center (BMC), where the HCV screening rate increased over 6,000%. BMC decided to implement testing among the patient population, regardless of perceived risk of disease.

Lead author Elissa Perkins, MD, MPH, indicated, “Our findings indicate that if we had only tested the high risk birth cohort, there would have been 268 missed cases and 155 missed active infections. Physicians and patients should consider screening for HCV outside of the typical high-risk groups to ensure appropriate HCV diagnosis.”

The study authors looked at testing between November 2016 and January 2017 during which time 3,808 patients were tested in the emergency department, averaging 1,269 screenings per month. This screening rate was 6,950% higher from the prior year’s monthly average of 18 HCV screenings. The expanded screening included those aged 13 years and older, were already receiving blood testing for clinical purposes, and who authorized HCV antibody and reflex confirmatory testing.

Among those who were screening, 504 tested antibody positive, of whom 97% received confirmatory testing. The positivity rate was 8% during the study period. Among those who tested positive, 155 (30.7%), did not meet the criteria for increased risk of HCV.

New TB Vaccine Shown to Protect Half of People with LTBI

A new vaccine by GlaxoSmithKline may prevent active TB disease in half of people with LTBI who receive it, a new study shows. The current vaccine, commonly called BCG (Bacille Calmette-Guerin), is given to babies in countries where TB is endemic. The protection BCG offers only lasts a few years and does not protect most adults from developing active disease.

The new vaccine, currently called M72/AS01, offers protection among adults with LTBI. The study took place in Kenya, Zambia, and South Africa. In the study, 1,786 adults with LTBI were given the vaccine and 1,787 were given a placebo injection. Of those with the vaccine, 10 developed active disease whereas 20 among the placebo group developed active TB after 2.3 years of follow-up.

This study was a phase IIb trial, which are generally used to evaluate safety and efficacy of the vaccine. The vaccine will be put through a phase IIIa trial next to further evaluate safety and efficacy in the intended population before regulatory submission for a New Drug Application.

To read more about the trial, please visit: https://www.nejm.org/doi/full/10.1056/NEJMoa1803484
A study recently published in the International Journal of Drug Policy found that those with hepatitis C (HCV) who inject drugs (PWID) are more likely to be aware of their HCV status and receive HCV confirmatory testing.

The study takes place in Ukraine, where more than 70% of PWID are estimated to be infected with HCV. PWID and were dependent on opioids were interviewed and tested for HIV and HCV in five Ukrainian cities from January 2014 to March 2015. Logistic regression was used to examine the independent correlates of anti-HCV positive awareness, chronic HCV infection, and annual HCV testing for PWID.

Of 1,613 PWID in the study, 1,002 (62.1%) had an anti-HCV positive test result, of which, 56.7% were are of prior to the study. Of those with anti-HCV positive test results, 34.5% reported previous confirmatory testing. Independent correlates of anti-HCV awareness included:

- Current opioid agnostic treatment (OAT): Adjusted odds ratio (AOR) 3.08 (95% CI: 2.16—4.40)
- Prior OAT: AOR 1.85 (95% CI: 1.27—2.68)
- Aware of having HIV: AOR 4.10 (95% CI: 2.99—5.62)

Independent correlates of confirmed HCV infection awareness of those with positive anti-HCV results included:

- Current OAT: AOR 2.00 (95% CI: 1.24—3.23)
- Prior OAT: AOR 1.74 (95% CI: 1.15—2.63)

Among the 1,613 PWID, 56.9% were either HCV negative or unaware of their HCV status, of which 21.6% reported recent anti-HCV testing (during last 12 months). Recent anti-HCV testing in this group was associated with the following:

- Current OAT: AOR 7.17 (95% CI: 4.63—11.13)
- Prior OAT: AOR 2.24 (95% CI: 1.32—3.81)

People in OAT were significantly more like to know their anti-HCV status and receive confirmatory testing than those who were not in OAT. Opioid therapy providers and clinics may be a critical venue for HCV testing among PWID.

To read the full study, please visit: https://www.researchgate.net/publication/324531384_Hepatitis_C_virus_status_awareness_and_test_results_confirmation_among_people_who_inject_drugs_in_Ukraine
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