in recent years. However, limited data exist addressing the mortality associated with HCV infection since the advent of DAAs. This study examines multiple cause-of-death (MCOD) data from 2014 to 2017 to describe changes in HCV-associated mortality in the United States.

Methods. We examined death certificate information from public use MCOD data obtained from the National Center for Health Statistics. All-cause mortality associated with HCV, as defined by ICD-10 codes (B17.1 and B18.2), was evaluated. The age-adjusted crude mortality rate was calculated. Overall HCV-associated mortality, stratified by race and gender, was analyzed.

Results. From January 1, 2010 to April 26, 2019, the number of deaths associated with HCV, as listed in death certificates decreased from 19,613 to 17,253. This represents an average of 4% decrease in mortality each year. Crude age-adjusted mortality decreased from 5.01 (95% CI 4.93–5.08) deaths per 100,000 people in 2014 to 4.13 (95% CI 4.07–4.20) deaths per 100,000 people in 2017. Males had age-adjusted mortality of 6.82 (95% CI 6.76–6.88) and females had age-adjusted mortality of 2.59 (95% CI 2.55–2.63). African Americans had age-adjusted mortality of 7.50 (95% CI 7.37–7.63), and whites had age-adjusted mortality of 4.39 (95% CI 4.35–4.42) during the three-year period.

Conclusion. After the introduction of DAAs in 2014, mortality associated with HCV significantly decreased in the United States. There were differences in mortality rates by gender and race, which may reflect differences in HCV seroprevalence. With the availability of effective, well-tolerated HCV treatment, aggressive HCV screening and treatment, and linkage to care is warranted, especially in high-risk populations.

Disclosures. All Authors: No reported Disclosures.

2900. High Rates of Experienced and Witnessed Opioid Overdose in PWID Receiving HCV Treatment: Data From the ANCHOR Study

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Session: 310. Hepatitis C: Progress on Elimination and Treatment
Saturday, October 5, 2019: 4:15 PM

Background. People who inject drugs (PWID) have significant morbidity and mortality associated with hepatitis C (HCV); however, harms associated with ongoing injecting drug use (IDU)—such as opioid overdose—may pose a more imminent risk, and often are not addressed as part of HCV treatment. Naloxone distribution is a personal and witnessed overdose during and after HCV treatment. Dispensing naloxone of those who witnessed an overdose, 48 (81%) administered naloxone. Nineteen (40%) of which, 4 (4%) were fatal. The rate of experienced overdose was 15 overdoses per 100

Conclusions. After the introduction of DAAs in 2014, mortality associated with HCV significantly decreased in the United States. There were differences in mortality rates by gender and race, which may reflect differences in HCV seroprevalence. With the availability of effective, well-tolerated HCV treatment, aggressive HCV screening and treatment, and linkage to care is warranted, especially in high-risk populations.

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2902. Perioperative Antibiotic Levels in Preterm Infants After Maternal Tdap Immunization During Pregnancy

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Session: 311. Vaccination II - Other
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Background. Maternal immunization with tetanus, diphtheria, acellular pertussis vaccine (Tdap) in the third trimester reduces infant pertussis, but data are lacking on how this strategy impacts pertussis antibody levels in large cohorts of preterm infants.

Methods. We collected paired maternal delivery-cord sera from infants of women who received Tdap 27 days before birth. IgG to pertussis toxin (PT), filamentous hemagglutinin (FHA), fimbrial proteins (FIM) and pertactin (PRN) was quantified by Luminex assay (RU/mL). Mean geometric concentrations (GMCs) with 95% confidence intervals (CI) for pertussis antibodies were calculated. Four infant groups were compared by weeks of gestation: very (<32), moderate (32–33) and late preterm (34–36), and term (≥37).

Results. 344 preterm and 688 term mother-infant pairs were included. Among preterm infants, mean gestational age was 31.2 weeks (range 15.1–39.3); 37% were white, 37% Hispanic, 17% Black, 8% Asian and 1% other. Fifty-six were very preterm infants (16%, mean gestation 30.5 weeks), 82 moderate (24%, 33.1 weeks), and 206 late (60%, 35.4 weeks); 17% (59) were born ≥30 weeks. For preterm infants, Tdap was administered at a mean gestation of 29.9 weeks (very 27.9; moderate 29.7; late 30.6; [P < 0.001]), and the interval from Tdap to delivery (very 17.9; moderate 24; late 34.5; [P < 0.001]). Eleven (3%) women received Tdap during the second trimester (very 8, moderate 1, late 0.2). GMCs (95% CI) of pertussis-specific IgG at birth varied by gestation (table). Infant antibody levels as a proportion of maternal antibodies increased from 24 to 100% from 17 to 42 to 67% across the groups. In preterm and term infants, Tdap did not reduce pertussis risk in this large postmarketing study.

Conclusion. Although levels are lower than in term infants, maternal immunization with Tdap results in substantial pertussis-specific antibodies in most preterm infan ts, especially late preterm infants.

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2903. Post PCV13 Dynamics of NonVaccine Serotype (NVT): Disproportionate Increase of the Additional PCV20 Candidate Serotypes in Respiratory and Invasive Disease in Young Children

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Background. Measles, a vaccine-preventable viral illness that can cause serious complications, was declared eliminated from the United States in 2000 because of a successful measles vaccination program. Recent years have seen an increase in the number of measles cases and outbreaks. We summarized measles epidemiology in the United States during 2017–2019.

Methods. We reviewed US national surveillance data on confirmed measles cases reported to the Centers for Disease Control and Prevention during January 1, 2017–April 26, 2019. We describe the demographic characteristics, vaccination status, and disease epidemiology of measles cases.

Results. During 2017–April 2019, 1,196 measles cases were reported in 37 US States and Washington DC, including 146 (12%) importations from 37 countries; 108 (74%) of importations were US residents returning from travel abroad, of which 56 (56%) were unvaccinated and 31 (29%) had unknown vaccinations status. Among 1,148 cases who were US-residents, the highest incidence of measles was among infants and children aged 6–12 and 12–15 months (112 cases [9.1% of all cases] and 106 cases [27% of vaccine-person years], respectively). Among US-resident cases, 846 (74%) were unvaccinated and 163 (14%) had unknown vaccination status; 777 (68%) were considered to have preventable measles (i.e., were eligible for vaccination but unvaccinated). Among the 1,196 cases, 85 were single cases, and the remaining

Conclusions. Outbreaks of measles in the United States result from recurring measles introductions and subsequent measles spread, especially in under-immunized close-knit communities. To sustain measles elimination, it will be necessary to maintain timely routine high coverage with MMR vaccine, improve implementation of pretravel recommendations to minimize importations, and close immunity gaps in communities of US residents who remain unvaccinated.

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