Jennifer E Layden, MD, PhD Director, Office of Public Health Data, Surveillance, Technology (OPHDST) Centers for Disease Control and Prevention

Email:	;	
	Cell phone:	

POSITIONS:

Office of Public Health Data, Surveillance, Technology (OPHDST)
Centers for Disease Control and Prevention

Director 08/2023-present

Acting Director 11/2022-08/2023

Key Roles, Duties, and Accomplishments:

- Lead organizational effort to establish and stand up new office, OPHDST, at CDC
 - Established organizational structure incorporating private industry principles
 - o Oversee change management efforts for over 250 incoming staff
- Lead efforts to recruit and hire data scientists and technologists to new office, including external candidates from private industry, as well as key leadership positions for new office
- Lead strategic development and execution of CDC's Public Health Data Strategy (PHDS)
- Lead the Agency's Data Modernization (DMI)
- Oversee the budget execution
 - o Increased funding to STLT partners through the public health infrastructure grant and ELC mechanisms; over \$1 Billion direct to jurisdictions over last 4 years.
- Represent Agency with external partners, meetings, and in legislative briefings
- Expand external partnerships, particularly with healthcare sector, and private industry partners
- Participate in Agency senior leadership and ITDG executive leadership meetings

Associate Deputy Director to the Deputy Director for Public Health Science and Surveillance 12/20-11/22 Centers for Disease Control and Prevention

Key Roles, Duties, and Accomplishments:

- Provide scientific and programmatic leadership to the Deputy Director for Public Health Science and Surveillance
- Lead and participate in cross agency strategic planning sessions for the Agency's Data Modernization Initiative (DMI)
- Lead and direct DMI cross agency coordination to align activities with the strategic vision, identify measurable key results and develop implementation road maps
- Provide scientific and leadership direction for DMI budgetary decisions and investment evaluation of the Agency's enterprise wide DMI activities
- Lead and convene cross agency scientific and technical experts to direct data policy efforts aligned with the DMI strategic vision
- Represent Agency and build partnerships with state and local public health partners, federal agencies, healthcare sector, and other essential partners
- Participate in Agency senior leadership and ITDG executive leadership meetings
- Provide scientific leadership within the community of practice to promote scientific integrity and programmatic operational effectiveness

Deputy Director, Office of Science (OS) Centers for Disease Control and Prevention

9/2020-12/2021

Supervisor: Dr Rebecca Bunnell

Key Roles, Duties, and Accomplishments:

- Office of Science, Data Modernization and Innovation Initiatives:
 - o Strategic development of OS's first data science plan to support Agency's DMI vision
 - Recruit/hire OS's first senior advisor for data science and senior data policy lead
 - Lead cross agency efforts to release the first COVID-19 public use case data set with geographic variables, leading to over 216,000 views and 22,500 downloads
 - Budget oversite of OS's data and innovation efforts, including successful development of data policy, open data, and innovation proposals
- Office of Science, scientific and programmatic leadership to the Director, Office of Science
 - o Provide scientific leadership and support to the Director, Office of Science
 - o Represent OS in Agency leadership meetings and external partnership engagements
 - o Provide scientific and leadership support to OS's office leaders and activities
 - Directly manage data science team members
- Co-Lead, Vaccine Task Force (VTF), COVID-19 response; deployment (June 2021-October 2021)
 - Strategic leadership in developing priorities for VTF
 - o Direct and coordinate VTF COVID-19 vaccine booster dose planning efforts
 - o Strategic leadership for long term care booster and pediatric vaccine programmatic efforts
 - o Leadership and oversite of COVID-19 vaccine data and clinical guidance policy decisions
 - Directed effort to implement a vaccine implementation and evaluation unit, recruiting new team leads, and coordinating efforts across task forces
 - Provide scientific expertise and strategic vision in strengthening stakeholder collaboration, including with federal agencies, jurisdictional and organizational partners
 - o Manage and direct recruitment efforts for VTF, which included over 400 team members
- Lead, Strategic Science Unit (SSU) for COVID-19 response
 - Led efforts to stand up new response unit, recruiting and managing leads for 4 new teams
 - o Developed systematic approach for quarterly update of response scientific priorities
 - Directed effort to create real time, open access dashboard to visualize CDC's scientific publication and research impact

Deputy Commissioner / Chief Medical Officer Chicago Department of Public Health

1/2020-9/2020

Supervisor: Dr. Allison Arwady, Commissioner

Key Roles, Duties and Accomplishments:

- Incident Manager for COVID-19 IM Response:
 - o Strategic leadership of scientific and response priorities and activities
 - Led efforts to establish health department's first ever molecular lab and bio-repository via a public health-academic partnership, leading to sequencing of over 1,500 sequences from 10 healthcare facilities in the first 5 months
 - Led efforts to create Agency's first Datahub, a cloud based platform to enable health systems, providers, and laboratories to send automated electronic submission of common core data elements
 - Hired Agency's first Chief Informatics officer

- Directed development of public health orders and policy decisions to advance response efforts, including public health data reporting requirements
- Initiated COVID-19 sentinel surveillance protocol across 5 hospitals in first two months of response
- Scientific leadership in budget development and oversite for initial federal COVID-19 ELC funding award (\$187 Million)
- Represent department in engagement with state, federal, and city governmental agencies, Mayor's office, and city wide health systems.
- Media spokesperson for response activities
- Scientific expertise as evidenced by high quality scientific publications, including in Lancet and Nature Medicine

State Epidemiologist / Chief Medical Officer Illinois Department of Public Health (IDPH)

06/2016-1/2020

Supervisor: Dr Nirav Shah, Agency Director

Overview: Directed IDPH's outbreak response / disease investigations, provided leadership to
agency wide epidemiologists, scientific and clinical leadership and direction to the state
immunization program and immunization registry program, oversaw reportable disease surveillance
and reporting efforts, coordinated with federal partners, state agencies, local health departments,
health systems and medical societies, and provided scientific and clinical leadership and direction to
the Director, policy and legislative teams.

Key roles, duties and accomplishments:

- Outbreak response management and leadership, including for EVALI, Hepatitis A, measles and other outbreaks and investigations
- Scientific expertise as evidenced by high quality scientific publications, including in NEJM
 and Clinical Infectious Diseases, invited presentations at national conferences, scientific
 reviewer for journals, invited editorials, Charles C Shepard award
- CSTE leadership advisory committee
- Scientific and clinical leadership to state immunization and communicable disease programs
- o Supervise and direct surveillance and reporting of reportable diseases
- Represented state as voting member for CSTE surveillance case definitions
- Clinical director for state public health lab
- Advanced academic partnerships by establishing Academic Public Health Department agreement with two state Universities
- Spokesperson and representative for agency with state, federal, and local governmental agencies, state health systems, and medical societies
- Media spokesperson during outbreak investigations
- o Increased epidemiologic capacity by re-starting state's Epidemiologic Intelligence Service Program and recruiting epidemiology and informatic fellows
- o Implemented first statewide Narcan Standing Order

Associate Professor of Medicine University of Illinois at Chicago

10/2016-8/2020

Attending on Inpatient transplant infectious disease service, 6 weeks/year

Assistant Professor of Public Health and Medicine Loyola University Chicago

5/2012-10/2016

Key Duties and Accomplishments:

- Led funded, independent research laboratory on viral hepatitis. Developed scientific priorities, secured funding, directed budget, maintained external, cross discipline collaboration
- Scientific expertise as evidenced by high quality scientific publications, including in *Clinical Infectious Disease*, *Hepatology*, *Transplantation*, presentations at national and international conferences, scientific and editorial reviewer for journals, invited editorials
- Served as Medical Director of Clinical Research Office (CRO)'s Biobank and Biostatistical Centers, providing strategic leadership, directing effort to secure a certificate of confidentiality for CRO Biobank, and development of a universal ID for CRO supported studies (SMART-ID)
- Developed and taught initial Infectious Disease Epidemiology Course for MPH program
- Inpatient transplant infectious disease consultative service 6 weeks/year
- Served as Department of Medicine Chair Search Committee Member
- Master's and Doctoral level thesis committee member

Assistant Professor of Medicine and Public Health

07/2010-5/2012

University of Illinois at Chicago

Key Duties and Accomplishments:

- NIH Career Development Award Recipient
- Scientific expertise as evidenced by high quality scientific publications, including in Nature, JAMA
- Developed pre-transplant infectious disease evaluation clinic and protocols
- Adjunct Instructor for School of Public Health
- Inpatient transplant infectious disease consultative service

EDUCATION:

1992-1996 University of Notre Dame, Notre Dame, IN. Bachelor of Science

Cum Laude

Varsity Women's Basketball team member 1992-1994

1999-2005 University of Illinois at Chicago, Chicago, IL. MD

James Scholar Independent Research Scholar

• Kate and Michael Barany Graduating Student Research Award

2000-2005 University of Illinois at Chicago, Chicago, IL PhD, Epidemiology

• School of Public Health Epidemiology / Biostatistical Research Award

Post-Graduate Education:

Medical Scientist Training Program (MSTP):

2005-2007 Intern and resident in Medicine University of Illinois at Chicago, Chicago, IL 2007-2010 Fellow in Infectious Diseases University of Illinois at Chicago, Chicago, IL

Specialty Boards / Medical Licensure

2008 Illinois medical license

American Board of Internal Medicine specialty boards Internal medicine, Infectious diseases

Association Memberships:

Council for State and Territorial Epidemiologists (CSTE) 2016-2021

Sub-committees: Vaping Taskforce leadership, infectious disease sub-committee, Legionella case definition position statement committee member

Illinois Public Health Association2017-2020Infectious Disease Society of America2010-2016American Transplant Society2010-2016

Volunteer / Board Memberships:

University of Illinois at Chicago School of Public Health Partner Executive Committee		
University of Illinois at Chicago Diabetes Center Board Member	2018-2021	
Youth community sports coach		
Old St Mary's School Athletic Board Member		

PEER REVIEWED PUBLICATIONS (In chronological order):

- **1) Layden JE**, Layden TJ. Viral kinetics of the Hepatitis C virus: new insights and remaining limitations. Hepatology. 2001;120(6):1546-1549.
- **2)** Layden JE, Layden TJ. How Can Mathematics Help Us Understand Hepatitis C Virus. Gastroenterology, 2002;35(4):967-970.
- 3) Layden TJ, Layden JE, Reddy KR, Poulakos J, Neumann AU. Induction therapy with Consensus IFN (CIFN) does not improve Sustained Viral Response rates in chronic hepatitis C virus. Journal of Viral Hepatitis, 2002; 9(5);339-344.
- **4) Layden JE.**, Layden TJ, Reddy KR, Levy-Drummer RS, Poulakos J, Neumann AU. 1st phase viral kinetic parameters as predictors of treatment response and their influence on the 2nd phase viral decline. Journal of Viral Hepatitis, 2002; 9(5):340-345.
- **5) Layden JE.**, Neumann AU, Layden TJ. Author's reply: First Phase parameters in Hepatitis C viral kinetics. Journal of Viral Hepatitis, 2002; 9(6):466.
- 6) Cotler S, Layden JE, Neumann AU, Jensen D. First phase hepatitis C viral kinetics in previous non-responders. Journal of Viral Hepatitis, 2003;10(1):43-49.
- 7) Layden TJ, Layden JE., Ribeiro R., Perelson AS. Mathematical Modeling of Viral Kinetics: A Tool to Understand and Optimize Therapy. Clinics in Liver Disease. 2003;7(1):163-178.
- 8) Layden-Almer JE., Ribiero R, Wiley T, Perelson AS, Layden TJ. Differences in early viral dynamics and treatment response between HCV infected African Americans and Caucasians treated with IFN and ribavirin. Hepatology, 2003 37(6):1343-50.
- 9) Perelson AS, Ribeiro RM, Layden-Almer JE, Layden TJ. Viral Kinetics and Hepatitis C. Hepatology. 2003 38(6):1588-90.
- **10)** Ribeiro R, **Layden-Almer JE**., Powers K, Layden TJ, Perelson AS. Dynamics of ALT change during high dose daily IFN therapy for HCV infection. Hepatology 2003 38(2):509-17.
- **11)** Layden-Almer JE, Layden TJ. Viral kinetics in special patient populations. Seminars in Liver Disease. Semin Liver Dis. 2003;23 Suppl 1:29-33.
- **12)** Dixit NM, **Layden-Almer JE**, Layden TJ, Perelson AS.Unraveling a mystery: How ribavirin improves interferon response rates in hepatitis C virus infection. Nature Dec 2004 16;432(7019):922-4.

- **13)** Olshansky SJ, Ludwig DS, Hershow R, Passaro D, **Layden-Almer JE** et al. Will Human Life Expectancy Decline in the 21st Century? NEJM 2005;352(11):1138-45.
- **14)** Olshansky SJ, Ludwig DS, Hershow R, Passaro D, **Layden-Almer JE** et al. Misdirection on the road to Shangri-La. Sci Aging Knowledge Env. 2005;22.
- **15)** Guzman G, Alagiozia-AngelovaA, **Layden-Almer JE** et al. p53 and Ki-67 expressions in primary Hepatocellular carcinoma and serum alpha fetoprotein as predictors of earlier recurrence in liver transplant patients. Mod Pathol. 2005;18(11):498-503.
- **16)** Lepe R, **Layden-Almer JE**, Layden TJ, Cotler S. Ethnic differences in the presentation of chronic hepatitis C. J Viral Hepat. 2006 Feb;13(2):116-20.
- **17) Layden-Almer JE**, Kuiken C, Ribeiro R, Kunstman K, Perelson AS, Layden TJ, Wolinsky S. HCV NS5A 1a Pretreatment sequence variation in African Americans and Caucasians. J Infect Dis. 2005 Sep 15;192(6):1078-87
- **18)** Layden-Almer JE, Cotler SJ, Layden TJ. Viral kinetics in the treatment for chronic Hepatitis C. J Viral Hepatitis. 2006 Aug;13(8):499-504.
- **19)** Cotler S, Guzman G, Layden-Almer JE, Mazzone T, Layden TJ, Zhus X. Measurement of liver fat content using selective saturation at 3.0 T.Magn Reson Imaging. 2007;25(4):743-7.
- **20)** Cotler S, Kallwitz E, TenCate V, Brushan A, Berkes J, Benedetti E, **Layden-Almer JE**, Layden TJ, Guzman G. Diabetes and hepatic oxidative damage are associated with hepatitis C progression after liver transplantation. Transplantation. 2007 15;84(5):587-9.
- **21)** Kallwitz, E. Kumar, M, Berger, R, Layden-Almer, JE, Gupta, N, Cotler, SC. Ethnicity and nonalcoholic fatty liver disease in an obesity clinic: the impact of triglycerides. Dig Dis Sci. 2008 May;53(5):1358-63.
- **22)** Dahari H, **Layden-Almer JE**, Perelson AS, Layden TJ. Hepatitis C Viral Kinetics in Special Populations. Curr Hepat Rep; 2008:7(3):97-105.
- **23)** Kallwitz ER, Guzman G, Tencate V, Vitello J, **Layden-Almer J**, Berkes J, Patel R, Layden TJ, Cotler SJ. The histologic spectrum of liver disease in african-americans, non-hispanic whites and Hispanic obesity surgery patients. Am J Gastro 2009;104(1): 64-9.
- **24)** Owens C, Bui J, Knuttinen M, Gaba, R, **Layden,-Almer JE**. Intracardiac Migration of Inferior Vena Cava Filters: A Review of Published Data . Chest, 2009, 135.
- **25)** Dahari H, **Layden-Almer JE**, Kallwitz E, Ribeiro RM, Cotler SJ, Layden TJ, Perelson AS. A mathematical model of hepatitis C virus dynamics in patients with high baseline viral loads or advanced liver disease. Gastroenterology. 2009 136(4):1402-9.
- **26)** Kallwitz ER, **Layden-Almer J**, Dhamija M, Berkes J, Guzman G, Lepe R, Cotler SJ, Layden TJ. Ethnicity and Body Mass Index are Associated with Hepatitis C Presentation and Progression. Clin Gastroenterol Hepatol. 2010 8(1): 72-5.
- **27)** Grim S, Berger K, Teng C, Gupta S, **Layden**, **JE**, Janda W, Clark, NM. Timing of Susceptibility-Based Antifungal Drug Administration in Patients with Candida Bloodstream Infection: Correlation with Outcomes. Journal of Anti-microbial Chemotherapy.2012; 7(3):707-14.
- **28)** Layden, JE, Cotler, SC, Lucey M, Brown K, Eswaran S, Fimmel C, Layden, TJ, Clark, NM. Racial Differences in fibrosis progression after HCV related liver transplantation. Transplantation. 2012 Jul 27;94(2):178-84
- **29) Layden, JE**, Cotler, SC, Grim S, Fischer MJ, Lucey M, Clark NM. The impact of donor and recipient race on survival after HCV related liver transplantation. Transplantation; 2012; 93(4):444-9.
- **30)** Santayana EM, Grim SA, Janda WM, **Layden JE**, Lee TA, Clark NM. Risk factors and outcomes associated with vancomycin-resistant Enterococcus (VRE) infections with reduced susceptibility to linezolid. Diagn Microbiol Infect Di. 2012 Jun 29.
- **31)** Rowe J, Grim SA, Peace D, Lai C, Sweiss K, **Layden JE**, Clark NM. The significance of cytomegalovirus viremia at day 100 or more following allogeneic hematopoietic stem cell transplantation. 2013 Jul;27(4):510-6.
- **32)** Reid GE, Grim SA, **Layden JE**, Akkina S, Tang I, Campara M, Clark NM. <u>The use of fosfomycin to treat urinary tract infections in kidney transplant recipients.</u> Transplantation. 2013 Aug 15;96(3):e12-4.
- **33)** Cooper RS, **Layden JE.** Populations and polypills: if yes, then how? J Epidemiol Community Health. 2013 Nov 1;67(11):903-4

- **34)** Layden JE, Tayo B, Cotler SJ, Clark, NM, Baroidan K, Friedman S, Cooper RS. Association of Genetic Variants with Rapid Fibrosis Progression after Liver Transplantation for Hepatitis C. Transplantation. 2014 May 27:97(10):1072-8
- **35)** Akingbola TS, Tayo BO, Salako B, **Layden JE**, Hsu LL, Cooper RS, Gordeuk VR, Saraf SL. Comparison of Patients from Nigeria and U.S.A. Highlights Modifiable Risk Factors for Sickle Cell Complications. Hemoglobin. 2014;38(4):236-43
- **36)** Farni K, Shoham D.A, Cao G, Luke A, **Layden JE**, Cooper R.S, and Dugas L.R. Physical Activity and Pre-Diabetes-An Unacknowledged Mid-Life Crisis: Findings From NHANES 2003-2006. PeerJ. 2014 Aug 19;2:e499.
- **37)** Tayo BO, Akingbola TS, Salako BL, McKenzie CA, Reid M, **Layden** J, Osunkwo I, Plange-Rhule J, Luke A, Durazo-Arvizu R, Cooper RS. Vitamin D levels are low in adult patients with sickle cell in Jamaica and West Africa. BMC Hematol. 2014 Aug 16;14(1):12.
- **38)** Layden JE, Philliips R, Opare-Sem O, et al. Hepatitis C in Africa: Urgent Call for Action. Open Forum in Infectious Diseases. 2014; 1 (2): doi: 10.1093/ofid/ofu065.
- **39)** Layden JE, Phillips RO, Owusu-Ofori S, et al. High Frequency of Active HCV Infection Among Seropositive Cases in West Africa and Evidence for Multiple Transmission Pathways. Clin Infect Dis. 2015 Apr 1;60(7):1033-41
- **40)** Purdy MA, Forbi JC, Sue A, **Layden JE**, Switzer WM, Opare-Sem OK, Phillips RO, Khudyakov YE. <u>A reevaluation of the origin of hepatitis C virus genotype 2 in West Africa.</u> J Gen Virol. 2015 Apr 17. pii: vir.0.000153.
- **41)** Harbison JE, **Layden JE**, Xamplas C, et al. <u>Observed loss and ineffectiveness of mosquito larvicides applied</u> to catch basins in the northern suburbs of chicago IL, 2014. Environ Health Insights. 2015 Apr 21;9:1-5.
- **42)** Cheng A, Small C, Jose J, Dugas L, Reinsdorf R, Nelson K, **Layden JE**. Survey of pregnant women and practioners about HCV knowledge and willingness in a West African Teaching Hospital. Open Forum Infect Dis. 2015 Sep 1;2(4):ofv122. doi: 10.1093/ofid/ofv122
- **43)** Afshar M, Foster CL, **Layden JE**, Burnham EL. Azithromycin use and outcomes in severe sepsis patients with and without pneumonia. J Crit Care. 2015 Dec 21. pii: S0883-9441(15)00614-0.
- **44)** Forbi JC, **Layden JE**, Phillips RO, et al. Next-Generation Sequencing Reveals Frequent Opportunities for Exposure to Hepatitis C Virus in Ghana. <u>PLoS One.</u> 2015 Dec 18;10(12):e0145530.
- **45)** Grim SA, **Layden JE**, Roth P, et al. Latent tuberculosis in kidney and liver transplant patients: a review of treatment practices and outcomes. <u>Transpl Infect Dis.</u> 2015 Oct;17(5):768-77. doi: 10.1111/tid.12436.
- **46)** Roth P, Adams W, Grim S, Clark, NM, **Layden,** JE. Serial Quantiferon testing among solid organ transplant candidates. Transpl Infect Dis. 2015 Dec 15. doi: 10.1111/tid.12489
- **47)** Mora NM, Adams W, Dugas L, Small C, Cheng A, Kliethermes S, Scaglione S, **Layden JE**. Meta-analysis of HCV in Sub-saharan Africa. BMC ID. 2016, 16;283. DOI: 10.1186/s12879-016-1584-1.
- **48)** Kliethermes S, Gatenburg J, Mora NM, Philips R, **Layden JE**. Age- and Region- Specific Prevalence of Hepatitis C Virus in Ghana: A Population-Based Study. In review, BMJ Global Health.
- **49)** Lowery EM, Adams W, Grim SA, Clark NM, Edwards L, **Layden JE**. Increased risk of PTLD in lung transplant recipients with cystic fibrosis. J Cyst Fibros. 2017 Nov;16(6):727-734
- **50)** Chen DS, Hamoudi W, Mustapha B, **Layden J**E et al. Strategies to manage hepatitis C virus infection disease burden-Volume 4. J Viral Hepat. 2017 Oct;24 Suppl 2:44-63.
- **51)** Polaris Observatory Collaborators. Global prevalence, treatment, and prevention of hepatitis B virus infection in 2016: a modelling study. Lancet Gastroenterol Hepatol . 2018 Jun;3(6):383-403.
- **52)** Kerins JL, Koske SE, Kazmierczak J, Austin C, Gowdy K, Dibernardo A; Seoul Virus Working Group; Canadian Seoul Virus Investigation Group (Federal); Canadian Seoul Virus Investigation Group (Provincial); Contributors. Outbreak of Seoul Virus Among Rats and Rat Owners United States and Canada, 2017. MMWR. 2018 Feb 2;67(4):131-134.
- **53)** Mortiz E, **Layden, JE.** Notes from the Field: Outbreak of Severe Illness Linked to the Vitamin K Antagonist Brodifacoum and Use of Synthetic Cannabinoids Illinois, March-April 2018. MMWR Morb Mortal Wkly Rep. 2018 Jun 1;67(21):607-608

- 54) Chan HLY, Chen CJ, Omede O, Al Qamish J, Al Naamani K, Bane A, Tan SS, Simonova M, Cardenas I, Derbala M, Akin O, Phillips RO, Abdelmageed MK, Abdulla M, Adda D, Al Baqali A, Al Dweik N, Al Ejji K, Al Ghazzawi I, Al Kaabi S, Al Sadadi M, Lao WC, Layden J, Mustapha B, Nersesov A, Ngige E, Sultan K, Tchernev K, Tsang OTY, Yesmembetov KI, Youbi M, Yuen MF, Nde H. The present and future disease burden of hepatitis C virus infections with today's treatment paradigm: Volume 4. J Viral Hep. 2017 Oct;24 Suppl 2:25-43.
- 55) Maaroufi A, Vince A, Himatt SM, Mohamed R, Fung J, Opare-Sem O, Workneh A, Njouom R, Al Ghazzawi I, Abdulla M, Kaliaskarova KS, Owusu-Ofori S, Abdelmageed MK, Adda D, Akin O, Al Baqali A, Al Dweik N, Al Ejji K, Al Kaabi S, Al Naamani K, Layden J, Nersesov A, Ngige E, , Tchernev K, Tsang OTY, Tsang S, Vi R, Wani HU, Yacoub R, Yesmembetov KI, Youbi M, Yuen MF, Razavi-Shearer K. Historical epidemiology of hepatitis C virus in select countries-volume 4. J Vir. Hepatitis. J Viral Hepat . 2017 Oct;24 Suppl 2:8-24.
- **56)** Abbasi AB, Salisbury-Afshar E, Jovanov D, Berberet C, Arunkumar P, Aks SE, **Layden JE**, Pho MT. Health Care Utilization of Opioid Overdose Decedents with No Opioid Analgesic Prescription History. J Urban Health. 2019; 96(1): 38-48.
- **57)** Novosad SA, Lake J, Nguyen D et al.Multi-Center Outbreak of Gram-Negative Bacteremia in Hemodialysis Patients. Am J Kidney Dis. 2019 Jul 26. pii: S0272-6386(19)30797.
- **58)** Navon L, Moritz E, Austin C, Wahl M, Aks S, **Layden JE**. The Public Health Response to a Large Poisoning Outbreak Involving an Illicit Substance: Synthetic Cannabinoids Contaminated With a Long-Acting Anticoagulant Rodenticide, Illinois, March-July, 2018.J Public Health Manag Pract. 2019 Apr 5
- **59)** Echevarria D, Gutfraind A, Boodram B, **Layden JE**, Ozik J, Page K, Cotler SJ, Major M, Dahari H. Modeling indicates efficient vaccine-based interventions for the elimination of hepatitis C virus among persons who inject drugs in metropolitan Chicago. Vaccine. 2019 May 1;37(19):2608-2616
- **60)** Layden JE, Ghinai I, Pray I, et al. Pulmonary Illness related to E-Cigarette Product Use: Illinois and Wisconsin.J. N Engl J Med. 2019 Sep 6. doi: 10.1056/NEJMoa1911614
- 61) Ghinai I, Pray IW, Navon L, O'Laughlin K, Saathoff-Huber L, Hoots B, Kimball A, Tenforde MW, Chevinsky JR, Layer M, Ezike N, Meiman J, Layden JE. E-cigarette Product Use, or Vaping, Among Persons with Associated Lung Injury Illinois and Wisconsin, April-September 2019. MMWR Morb Mortal Wkly Rep. 2019 Oct 4;68(39):865-869.Siegel DA, Jatlaoui TC, Koumans EH, Kiernan EA, Layer M, Cates JE, Kimball A, Weissman DN, Petersen EE, Reagan-Steiner S, Godfred-Cato S, Moulia D, Moritz E, Lehnert JD, Mitchko J, London J, Zaki SR, King BA, Jones CM, Patel A, Delman DM, Koppaka R; Lung Injury Response Clinical Working Group; Lung Injury Response Epidemiology/Surveillance Group. Update: Interim Guidance for Health Care Providers Evaluating and Caring for Patients with Suspected E-cigarette, or Vaping, Product Use Associated Lung Injury United States, October 2019. MMWR Morb Mortal Wkly Rep. 2019 Oct 18;68(41):919-927.
- **62)** Chatham-Stephens K, Roguski K, Jang Y, Cho P, Jatlaoui TC, Kabbani S, Glidden E, Ussery EN, Trivers KF, Evans ME, King BA, Rose DA, Jones CM, Baldwin G, Delaney LJ, Briss P, Ritchey MD; Lung Injury Response Epidemiology/Surveillance Task Force; Lung Injury Response Clinical Task Force. Characteristics of Hospitalized and Nonhospitalized Patients in a Nationwide Outbreak of E-cigarette, or Vaping, Product Use-Associated Lung Injury United States, November 2019. MMWR. 2019 Nov 22;68(46):1076-1080.
- 63) Moritz ED, Zapata LB, Lekiachvili A, Glidden E, Annor FB, Werner AK, Ussery EN, Hughes MM, Kimball A, DeSisto CL, Kenemer B, Shamout M, Garcia MC, Reagan-Steiner S, Petersen EE, Koumans EH, Ritchey MD, King BA, Jones CM, Briss PA, Delaney L, Patel A, Polen KD, Sives K, Meaney-Delman D, Chatham-Stephens K; Lung Injury Response Epidemiology/Surveillance Group; Lung Injury Response Epidemiology/Surveillance Task . Force. Update: Characteristics of Patients in a National Outbreak of E-cigarette, or Vaping, Product Use-Associated Lung Injuries United States, October 2019. MMWR. 2019 Nov 1;68(43):985-989
- **64)** Ghinai I, Navon L, Gunn JKL, Duca LM, Brister S, Love S, Brink R, Fajardo G, Johnson J, Saathoff-Huber L, King BA, Jones CM, Krishnasamy VP, **Layden JE.** Characteristics of Persons Who Report Using Only Nicotine-Containing Products Among Interviewed Patients with E-cigarette, or Vaping, Product Use-Associated Lung Injury Illinois, August-December 2019. MMWR Morb Mortal Wkly Rep . 2020 Jan 24;69(3):84-89
- **65)** Abbasi AB, Salisbury-Afshar E, Berberet CE, **Layden JE**, Pho MT. Opioid Prescribing Patterns Before Fatal Opioid Overdose Amer Journal of Pr Med. 2020 Feb;58(2):250-253. doi: 10.1016/j.amepre.2019.09.022

- **66)** Schier JG, Meiman JG, **Layden J**. Severe Pulmonary Disease Associated with Electronic-Cigarette-Product Use Interim Guidance. MMWR Morb Mortal Wkly Rep. 2019 Sep 13;68(36):787-790
- **67)** Hartnett KP, Kite-Powell A, Patel MT, Haag BL, Sheppard MJ, Dias TP, King BA, Melstrom PC, Ritchey MD, Stein Z, Idaikkadar N, Vivolo-Kantor AM, Rose DA, Briss PA, **Layden JE**, Rodgers L, Adjemian J. Syndromic Surveillance for E-Cigarette, or Vaping, Product Use-Associated Lung Injury. N Engl J Med. 2019 Dec 20
- **68)** Layden JE, King B, Meiman J. Pulmonary Illness related to E-cigarette Product Use. Reply. N Engl J Med. 2019 Nov 20
- **69)** Ghinai I, **Layden, JE**. Web Exclusive. Annals for Hospitalists Inpatient Notes Clinical Pearls-E-Cigarette, or Vaping, Product Use-Associated Lung Injury. Ann Intern Med. 2019 Dec 17;171(12):HO2-HO3. doi: 10.7326/M19-3574.
- **70)** Navon L, Jones CM, Ghinai I, King BA, Briss PA, Hacker KA, **Layden JE.** Risk Factors for E-Cigarette, or Vaping, Product Use-Associated Lung Injury (EVALI) Among Adults Who Use E-Cigarette, or Vaping, Products Illinois, July-October 2019. MMWR Morb Mortal Wkly Rep. 2019 Nov 15;68(45):1034-1039. Doi
- 71) Blount BC, Karwowski MP, Shields PG, Morel-Espinosa M, Valentin-Blasini L, Gardner M, Braselton M, Brosius CR, Caron KT, Chambers D, Corstvet J, Cowan E, De Jesús VR, Espinosa P, Fernandez C, Holder C, Kuklenyik Z, Kusovschi JD, Newman C, Reis GB, Rees J, Reese C, Silva L, Seyler T, Song MA, Sosnoff C, Spitzer CR, Tevis D, Wang L, Watson C, Wewers MD, Xia B, Heitkemper DT, Ghinai I, Layden J, Briss P, King BA, Delaney LJ, Jones CM, Baldwin GT, Patel A, Meaney-Delman D, Rose D, Krishnasamy V, Barr JR, Thomas J, Pirkle JL; Lung Injury Response Laboratory Working Group. Vitamin E Acetate in Bronchoalveolar-Lavage Fluid Associated with EVALI. N Engl J Med. 2019 Dec 20. doi: 10.1056/NEJMoa1916433.
- **72)** Ghinai I, McPherson T, Hunter J, Layden, JE. First known person-to-person transmission of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in the USA. Lancet. 2020 Apr 4;395(10230):1137-1144
- 73) Ghinai I, Woods S, Ritger KA, McPherson TD, Black SR, Sparrow L, Fricchione MJ, Kerins JL, Pacilli M, Ruestow PS, Arwady MA, Beavers SF, Payne DC, Kirking HL, Layden JE. Community Transmission of SARS-CoV-2 at Two Family Gatherings Chicago, Illinois, February-March 2020. MMWR. 2020 Apr 17;69(15):446-450.
- **74)** COVID-Investigation Team. Clinical and virologic characteristics of the first 12 patients with coronavirus disease 2019 (COVID-19) in the United States. Nature Medicine. 2020 Jun;26(6):861-868.
- **75)** Navon L, Ghinai I, **Layden, JE**. 2020 Sep 2;15(9):e0238342. Notes from the Field: Characteristics of Tetrahydrocannabinol-Containing E-cigarette, or Vaping, Products Used by Adults Illinois, September-October 2019. MMWR. 2020 Jul 24;69(29):973-975
- 76) Knust B, Brown S, de St Maurice A, Whitmer S, Koske SE, Ervin E, Patel K, Graziano J, Morales-Betoulle ME, House J, Cannon D, Kerins J, Holzbauer S, Austin C, Gibbons-Burgener S, Colton L, Dunn J, Zufan S, Choi MJ, Davis WR, Chiang CF, Manning CR, Roesch L, Shoemaker T, Purpura L, McQuiston J, Peterson D, Radcliffe R, Garvey A, Christel E, Morgan L, Scheftel J, Kazmierczak J, Layden JE, Klena JD, Nichol ST, Rollin PE; Multistate Seoul Virus Outbreak Investigation Team. Seoul Virus Infection and Spread in United States Home-Based Ratteries: Rat and Human Testing Results From a Multistate Outbreak Investigation. J Infect Dis. 2020 Sep 14;222(8):1311-1319. doi: 10.1093/infdis/jiaa307.
- 77) McPherson TD, Ghinai I, Binder AM, Freeman BD, Hoskin Snelling C, Hunter JC, Anderson KM, Davenport P, Rudd DL, Zafer M, Christiansen D, Joshi K, Rubin R, Black SR, Fricchione MJ, Pacilli M, Walblay KA, Jacobs MW, Lester SN, Midgley CM, Rasheed MAU, Reese HE, Verani JR, Wallace M, Watson JT, Thornburg NJ, Layden JE, Kirking HL. Lack of Serologic Evidence of Infection Among Health Care Personnel and Other Contacts of First 2 Confirmed Patients With COVID-19 in Illinois, 2020. Public Health Reports. 2020 Oct 27;33354920966064.
- **78)** Layden JE, Meiman JG. Pulmonary Disease Related to E-Cigarette Use. Reply. NEJM. 2020 Aug 20;383(8):793.
- **79)** Burke RM, Balter S, Barnes E, Barry V, Bartlett K, Beer KD, Benowitz I, Biggs HM, Bruce H, Bryant-Genevier J, Cates J, Chatham-Stephens K, Chea N, Chiou H, Christiansen D, Chu VT, Clark S, Cody SH, Cohen M, Conners EE, Dasari V, Dawson P, DeSalvo T, Donahue M, Dratch A, Duca L, Duchin J, Dyal JW, Feldstein LR, Fenstersheib M, Fischer M, Fisher R, Foo C, **Layden J**, Leidman E, Lindquist S, Lindstrom S, Link-Gelles R,

Marlow M, Mattison CP, McClung N, McPherson TD, Mello L, Midgley CM, Novosad S, Patel MT, Pettrone K, Pillai SK, Pray IW, Reese HE, Rhodes H, Robinson S, Rolfes M, Routh J, Rubin R, Rudman SL, Russell D, Scott S, Shetty V, Smith-Jeffcoat SE, Soda EA, Spitters C, Stierman B, Sunenshine R, Terashita D, Traub E, Vahey GM, Verani JR, Wallace M, Westercamp M, Wortham J, Xie A, Yousaf A, Zahn M. Enhanced contact investigations for nine early travel-related cases of SARS-CoV-2 in the United States. PLOS One. 2020 Sep 2;15(9):e0238342.

- **80)** Mannheim J, Gretsch S, **Layden JE**, Fricchione MJ. Characteristics of Hospitalized Pediatric Coronavirus Disease 2019 Cases in Chicago, Illinois, March-April 2020. J Pediatric Infect Dis Soc . 2020 Nov 10;9(5):519-522.
- 81) Ghinai I, Davis ES, Mayer S, Toews KA, Huggett TD, Snow-Hill N, Perez O, Hayden MK, Tehrani S, Landi AJ, Crane S, Bell E, Hermes JM, Desai K, Godbee M, Jhaveri N, Borah B, Cable T, Staszcuk R, Figueroa E, Leo P, Detmer WM, Lyon E, Carreon S, Hoferka S, Ritger KA, Jasmin W, Nagireddy P, Seo JY, Fricchione MJ, Kerins JL, Black SR, Butler LM, Howard K, McCauley M, Fraley T, Arwady MA, Gretsch S, Cunningham M, Pacilli M, Ruestow PS, Mosites E, Avery E, Longcoy J, Lynch EB, Layden JE. Open Forum Infect Dis . 2020 Oct 12;7(11).
- **82)** Tilmon S, Aronsohn A, Boodram B, Canary L, Goel S, Hamlish T, Kemble S, Lauderdale DS, **Layden J**, Lee K, Millman AJ, Nelson N, Ritger K, Rodriguez I, Shurupova N, Wolf J, Johnson D. J Public Health (Oxf) 2021 Jun 22;fdab190. HepCCATT: a multilevel intervention for hepatitis C among vulnerable populations in Chicago
- 83) English K, Lei U, Shipman-Amuwo F, Burkey M; MSP1, González JG, Richardson S, Chavez-Torres M, Arwady MA, Anderson C, Layden JE, Ruestow P, Pacilli M, Ghinai I. Community-Based Testing for SARS-CoV-2 Chicago, Illinois, May-November 2020. MMWR Morb Mortal Wkly Rep. 2021 May 14;70(19):707-711
- **84)** Hota B, Casey P, McIntyre AF, Khan J, Rab S, Chopra A, Lateef O, **Layden JE.** A Standard-Based Citywide Health Information Exchange for Public Health in Response to COVID-19: Development Study. JMIR. 2022 Sep 27;8(9):e35973.

PREVIOUS ACADEMIC RESEARCH SUPPORT / GRANT FUNDING:

Ending transmission of HIV, HCV, and STDs and overdose in rural communities of people who inject drugs (ETHIC)		
Source: NIH;1UG3DA044829-01 (PI: Pho P; Role: Co-Investigator	05/2017-05/2019	
Molecular aspects of Hepatitis B Genotype E Infection In West Africa	10/2015-10/2016	
Source: Gilead Science Liver Research Scholar, Gilead Science (Role-PI)		
Determinants and Consequences of Low Vitamin D in Populations of African Descent	10/2012-02/2016	
Source: NIH; 5R01DK090360 (PI: Durazo-Arvizu; Role: Co-Investigator)		
Population survey of HCV in Obuasi, Ghana	10/2012-10/2015	
Source: LUC Research Committee New Investigator Award (Role: PI)		
The Impact of Zetia receptor polymorphisms on HCV related outcomes	09/2013-06/2015	
Source: Ralph and Marian C. Falk Medical Research Trust (Role: Co-PI)		
Genetic Determinants of HCV progression post-transplantation	01/2011-05/2012	
Source: NIH CCTS KL2RR029878 (Role: PI)		