

COMMONWEALTH OF MASSACHUSETTS

BARNSTABLE, SS

SUPERIOR COURT
C.A. NO. _____

AIDS SUPPORT GROUP OF CAPE COD,)
INC.,)
Plaintiff)
v.)
TOWN OF BARNSTABLE, BOARD OF)
HEALTH OF THE TOWN OF BARNSTABLE,)
THOMAS MCKEAN, in his official capacity as)
Director of Public Health of the Town of)
Barnstable,)
Defendants)

AFFIDAVIT OF CAMILLA S. GRAHAM

I, Camilla S. Graham, state as follows:

1. I am a physician in the Division of Infectious Disease at Beth Israel Deaconess Medical Center in Boston, Massachusetts. I provide medical care to persons infected with HIV, hepatitis B and/or hepatitis C infections.
2. I received my MD from the Medical College of Pennsylvania in 1994 and earned my MPH from the Harvard School of Public Health in 2002. I currently serve as an Assistant Professor in Medicine at Harvard Medical School.
3. I am the associate editor of the Viral Hepatitis Section of the Clinical Infectious Diseases journal and worked with the Infectious Diseases Society of America to develop a hepatitis C virus module for infectious disease certification.
4. I have presented at the Annual HIV/AIDS Conference, the Center for Disease Control and Prevention, and Presidential Advisory Council on HIV/AIDS.

5. I was a member of the Advisory Committee on HIV, Viral Hepatitis and STD Prevention and Treatment, which advises the Secretary of Health and Human Services and I have worked closely with over ten federal agencies on viral hepatitis policies. I help lead a national working group of physicians and advocates who focus on legislative and policy interventions to improve the diagnosis and access to treatment for people with viral hepatitis. I have presented on the medical consequences of hepatitis B and C at US congressional briefings and individual congressional meetings. I am working with the Foundation for Innovative New Diagnostics to ensure that advances in hepatitis C diagnostics and drug development are available to people living in resource limited settings.
6. Providing injection drug users with access to clean needles is essential in preventing the spread of HIV, hepatitis C (“HCV”), and hepatitis B (“HBV”).
7. The sharing of injection drug equipment, such as needles, syringes, rinse water, or other equipment (works) used to prepare injection drugs with an infected person is one of the primary sources of HIV, HCV, and HBV transmission in the United States. CDC, *HIV Transmission*, (January 2015) at <http://www.cdc.gov/hiv/basics/transmission.html>; CDC, *Hepatitis C FAQs for the Public*, (October 2015) at <http://www.cdc.gov/hepatitis/hcv/cfaq.htm#cFAQ031>; CDC, *Hepatitis C FAQs for the Public*, (October 2015) at <http://www.cdc.gov/hepatitis/hcv/cfaq.htm#cFAQ031>; CDC, *Hepatitis B FAQs for the Public*, (October 2015) at <http://www.cdc.gov/hepatitis/hbv/bfaq.htm>.
8. There are currently 1.2 million people in the United States living with HIV, 3.2 million people in the United States living with chronic HCV infection, and 1.2 million people in

the United States living with chronic HBV. Every year 50,000 new people are diagnosed with HIV, 29,700 with HCV, and 19,800 with HBV. CDC, *HIV in the United States: At a Glance*, (July 2015) at <http://www.cdc.gov/hiv/statistics/basics/ataglance.html>; CDC, *Hepatitis C FAQs for the Public*, (October 2015) at <http://www.cdc.gov/hepatitis/hcv/cfaq.htm#eFAQ31>; CDC, *Hepatitis B FAQs for the Public*, (October 2015) at <http://www.cdc.gov/hepatitis/hbv/bfaq.htm>.

9. In Massachusetts, there are currently between 26,000 and 27,000 people living with HIV or AIDS, and 197,000 people living with chronic HCV. Massachusetts Department of Public Health Office of HIV/AIDS, *Massachusetts HIV/AIDS Data Fact Sheet*, (2015) at <http://www.mass.gov/eohhs/docs/dph/aids/2015-profiles/epidemic-glance.pdf>; Massachusetts Health Council, Inc., *Massachusetts Report on the Preventable Determinants of Health*, (2014) at <http://c.ymcdn.com/sites/www.mahealthcouncil.org/resource/resmgr/Docs/2014-HSIR.pdf>.
10. In 2012, 344.3 of every 100,000 residents of Barnstable County were infected with hepatitis C. The prevalence of HCV among young adults in Barnstable County is of great concern. The County leads Massachusetts in the rate of new infections of HCV among people aged 15 to 25. Vaira Harik et al., Barnstable County Dep't of Human Services, *Analysis of Substance Abuse on Cape Cod: A Baseline Assessment*, 74 (March 2015) at <http://www.bchumanservices.net/library/2015/03/RSAC-Baseline-Report-FULL-REPORT-3-11-15-Final.pdf>.
11. HCV is the leading cause of liver transplantation in the United States. National Institute of Health, *Liver Transplantation* (June 2010) at <http://www.niddk.nih.gov/health->

information/health-topics/liver-disease/liver-transplant/Documents/livertransplant_508.pdf. Even after waiting years for a liver, following transplantation recipients can suffer from bleeding damage to the bile ducts, blood clots in the liver's blood vessels, infection, and possibly rejection of the new liver by the body's immune system. National Institute of Health, *Liver Transplantation* (June 2010) at http://www.niddk.nih.gov/health-information/health-topics/liver-disease/liver-transplant/Documents/livertransplant_508.pdf. To prevent rejection of the new liver, recipients receive immunosuppressive medications. The treatment results in a suppressed immune system and patients may develop diabetes, high blood pressure, and kidney damage. National Institute of Health, *Liver Transplantation* (June 2010) at http://www.niddk.nih.gov/health-information/health-topics/liver-disease/liver-transplant/Documents/livertransplant_508.pdf.

12. In addition to the human impact of these diseases, the economic impact can be devastating. The lifetime cost of treating HIV is an estimated \$379,668. CDC, *HIV Cost-effectiveness*, (April 2013) at <http://www.cdc.gov/hiv/prevention/ongoing/costeffectiveness>. A new breakthrough drug that has very high cure rates for HCV costs an estimated \$100,000 for a full 12-week course of the treatment. Paul J. Thuluvath, *Hepatitis C: A Complete Guide for Patients and Families*, 155-156 (Johns Hopkins Univ. Press, 2015); Robert Weisman, *Demand for Expensive Hepatitis C Drug Strains Insurers*, *The Boston Globe* (June 1, 2014).
13. Without access to clean needles, people who inject drugs (PWIDs) will continue to transmit HIV, HCV, and HBV to others throughout Barnstable County and Massachusetts. Most people become infected with the hepatitis C virus by sharing

needles or other equipment to inject drugs. CDC, *Hepatitis C FAQs for the Public*, CDC (October 2015) at <http://www.cdc.gov/hepatitis/hcv/cfaq.htm#cFAQ31>; CDC, *Syringe Exchange Programs – United States, 2008*, (November 2010) at <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5945a4.htm/Syringe-Exchange-Programs-United-States-2008>.

14. Despite the legalization of over-the-counter syringe sales in Massachusetts' pharmacies, there are still major challenges to syringe access for some PWIDs and as a result, the shared use of injection equipment is the primary way that HIV and HCV are transmitted among PWIDs. Mass. Dep't of Public Health, Bureau of Infectious Disease, *Shifting Epidemics: HIV and Hepatitis C Infection Among Injection Drug Users in Massachusetts*, 1, 11 (2014) at <http://www.mass.gov/eohhs/docs/dph/aids/shifting-epidemics-report.pdf>. These barriers include the cost of syringes, stigma, and pharmacies' refusal to sell syringes to those they believe use syringes for the injection of drugs.
15. The most recent surveys of active PWIDs indicate that approximately one third of young (aged 18–30 years) PWIDs are HCV-infected. Older and former PWIDs typically have a much higher prevalence (approximately 70%–90%) of HCV infection, reflecting the *increased* risk of continued injection drug use. CDC, *Hepatitis C FAQs for Health Professionals*, (October 2015) at <http://www.cdc.gov/hepatitis/hcv/hcvfaq.htm#section2>.
16. In 2013, 7% (3,096) of the estimated 47,352 diagnoses of HIV infection in the United States were attributed to PWID. National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, *HIV and Injection Drug Use*, (April 2015) at <http://www.cdc.gov/hiv/pdf/g-1/cdc-hiv-PWID-fact-sheet.pdf>. A survey conducted by the CDC in 2009 found that 12% of injection drug users in the Northeast acquired HIV

infection. CDC, *HIV Infection and HIV-Associated Behaviors Among Injecting Drug Users – 20 Cities, United States - 2009*, (March 2012) at <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6108a1.htm>.

17. When the prevalence of HIV, HCV, and HBV among PWIDs is combined with Massachusetts' growing opioid crisis, the potential for a medical and public health crisis is startling. Between 2002 and 2009, the Massachusetts Department of Health observed an increase of HCV among people aged 15-24 years old. Most of these new infections were injection drug users "who had started opioid use with oral oxycodone around 1-1.5 years before transition to injection of heroin." Howard Koh and Ronald O. Valdiserri, U.S. Dep't of Health and Human Services, *Hepatitis C Virus Infection in Young Persons Who Inject Drugs*, 5 (May 2013) at <https://www.aids.gov/pdf/hcv-and-young-pwid-consultation-report.pdf>.
18. From 2012 to 2014, the number of confirmed cases of unintentional opioid overdose deaths in Massachusetts rose by 57%. In 2014, more than 1,200 people in Massachusetts died from unintentional opioid overdoses, 51 in Barnstable County alone. Mass. Dep't of Public Health, *Data Brief: Fatal Opioid-related Overdoses among Massachusetts Residents*, (August 2015) at <http://www.mass.gov/cobhs/docs/dph/quality/drugcontrol/county-level-pmp/data-brief-aug-2015-overdose-county.pdf>. The figures for 2015 indicate the crisis is not improving and that hundreds have already died from overdoses. Michael Levenson, *Despite Efforts, Mass. Opioid Deaths on Pace to Match 2014*, The Boston Globe (August 5, 2015).
19. Programs that provide PWIDs access to clean needles also serve as excellent locations to distribute Naloxone. The distribution of Naloxone to active PWIDs and their families is

a cost effective means of reducing the rates of overdose. Phillip Coffin and Sean Sullivan, *Cost-Effectiveness of Distributing Naloxone to Heroin Users for Lay Overdose Reversal*, 158 *Annals of Internal Medicine* 1 (2013) at http://prescribetoprevent.org/wp-content/uploads/Coffin_Cost-effectiveness-article.pdf.

20. There is a consensus in the federal agencies, as well as the scientific and medical communities, that programs that provide access to clean needles help control the spread of HIV, HCV and HBV, and do not increase substance abuse. The United States Secretary for Health and Human Services and the Surgeon General declared that there is “conclusive scientific evidence” that programs that provide access to clean needles: (1) decrease new HIV infections; (2) increase the numbers of injection drug users referred to and retained in substance abuse treatment; and (3) play a unique role in reaching and serving the most disenfranchised populations at high risk for HIV infection and engaging these populations in meaningful prevention interventions and medical care. See U.S. Department of Health and Human Services, *Evidence-Based Findings On the Efficacy of Syringe-Exchange Programs: An Analysis From the Assistant Secretary For Health And Surgeon General of the Scientific Research Completed Since April 1998* (2000) at <http://www.csam-asam.org/evidence-based-findings-efficacy-syringe-exchange-programs-analysis-scientific-research-completed-ap>.

21. Countless studies have demonstrated that programs, such as the one run by AIDS Support Group Cape Cod, which provide access to clean needles, prevent the spread of disease and improve public health. See CDC, *Syringe Exchange Programs – United States, 2008*, (2010) (“Multiple reviews have concluded that syringe exchange leads to reductions in injecting risk behaviors among PWIDs.”) at

[http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5945a4.htm/Syringe-Exchange-](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5945a4.htm/Syringe-Exchange-Programs-United-States-2008)

[Programs-United-States-2008](#); U.S. Dep't of Health and Human Services, *Hepatitis C*

Virus Infection in Young Persons Who Inject Drugs, 13 (May 2013) (“Structural

interventions, such as access to sterile injection equipment . . . have successfully

addressed many of the health issues of active drug users.”) at

<https://www.aids.gov/pdf/hcv-and-young-pwid-consultation-report.pdf>; Sharon Stancliff

et al., *Syringe Access for The Prevention of Blood Borne Infections Among Injection*

Drug Users, BMC Public Health, 3 (Nov. 21, 2003) (“Syringe exchange programs have

been extensively evaluated and have been found to be effective in preventing disease

without promoting drug use.” (citations omitted) at

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC317318/pdf/1471-2458-3-37.pdf>.

22. In addition to reducing disease while not increasing substance abuse, needle access programs have also increased the rates at which people seek treatment. “[Syringe service programs] (SSPs) are widely considered to be an effective way of reducing HIV transmission among individuals who inject illicit drugs and there is ample evidence that SSPs also promote entry and retention into treatment. . . . The Surgeon General of the United States Public Health Service has therefore determined that a demonstration syringe services program would be effective in reducing drug abuse and the risk that the public will become infected with the etiologic agent for acquired immune deficiency syndrome.” Kathleen Sebelius, Secretary of Health and Human Services, *Determination That a Demonstration Needle Exchange Program Would be Effective in Reducing Drug Abuse and the Risk of AIDS Infection Among Intravenous Drug Users*, U.S. Dep't of Health and Human Services (Feb. 23, 2011) at

<https://www.federalregister.gov/articles/2011/02/23/2011-3990/determination-that-a-demonstration-needle-exchange-program-would-be-effective-in-reducing-drug-abuse>.

23. In addition, needle access programs can reduce the number of improperly discarded syringes and needle sticks suffered by police officers. Coalition for Syringe Access, *Lifting the Ban* (at http://nvhr.org/sites/default/files/.users/u27/CSA_OnePager.pdf.)
24. When HIV enters a community that has a high rate of PWIDs and limited access to clean needles, the impact can be devastating. This past spring in a rural Indiana county, over 150 PWIDs contracted HIV after sharing needles. CDC, *The Anatomy of an HIV Outbreak Response in a Rural Community* (June 2015) at <http://blogs.cdc.gov/publichealthmatters/2015/06/the-anatomy-of-an-hiv-outbreak-response-in-a-rural-community>.
25. If the PWIDs of Barnstable County are not provided with easy access to clean needles and other equipment, the rates of HIV, HCV, and HBV infections in the County will definitely increase and we will create the potential for a catastrophic outbreak. Furthermore, the closure of AIDS Support Group Cape Cod's Hyannis location reduces Naloxone access for those highest at risk for overdose and in turn eliminates the possibility of countless overdose reversals.

SIGNED UNDER THE PENALTIES OF PERJURY THIS 3rd DAY NOVEMBER, 2015.


Camilla S. Graham, MD, MPH