



# The Face of Sexually Transmitted Infections

An In-Depth Look at the Epidemic Impacting  
Polk County, Iowa and the United States

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Polk County Health Department Annual Report 2018-2019

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**Tom Newton**, Vice President of Network Engagement - Wellmark Blue Cross & Blue Shield

# Director's Letter

This year we are trying something a little different with our annual report. The report will focus on sexual health and wellbeing, one of the priorities identified in last year's report. It will tell the story of the rise of sexually transmitted infections (STI's), including contributing cultural factors, and the Polk County Health Department's efforts to address the epidemic.

## **Why are we focusing our annual report on the story of sexually transmitted infections?**

Sexually transmitted infections are at an epidemic level in Polk County and we want to start a community conversation. The epidemic is not just a Polk County issue. It is a state and national issue, too. On October 8, 2019, the CDC released a report that showed combined sexually transmitted infection cases of chlamydia, gonorrhea, and syphilis had reached an all-time high nationally in 2018. Similarly, in 2018, the Polk County Health Department investigated 5,323 cases of chlamydia, gonorrhea, syphilis, and HIV, a new high, as compared to 2,057 total cases for the same infections in 2014. This is a 159% increase from 2014 to 2018. In 2019, we are on track to investigate over 6,000 cases of sexually transmitted infections.

## **Who is affected by sexually transmitted infections?**

The data in Polk County show that no one is immune from a sexually transmitted infection. Myths continue, including: you can tell that someone has an STI by looking at them, or that people with STI's are "dirty". Both are false. All demographic groups have incidence of infection. However, one demographic group carries a disproportionate share of the disease burden: our youth, ages twelve to twenty-four. In Polk County in 2018, youth ages 12-24 accounted for 60% of reported chlamydia cases and 56% of reported gonorrhea cases.

## **What is causing the rise in sexually transmitted infections?**

There is a lack of knowledge and reliable information about STI prevention and testing. For youth, the lack of comprehensive sexual health education in school is a contributing factor. Also, the stigma around sex influences adult-youth and physician-patient conversations, impacting knowledge, testing, and treatment. We cannot overlook cultural influences.



Hook-up apps and the anonymity they provide makes it difficult to identify and treat partners. This perpetuates the spread of disease. Asymptomatic, undiagnosed disease is also on the rise, contributing to the spread of STI's.

## **What is the Polk County Health Department doing to address the STI epidemic?**

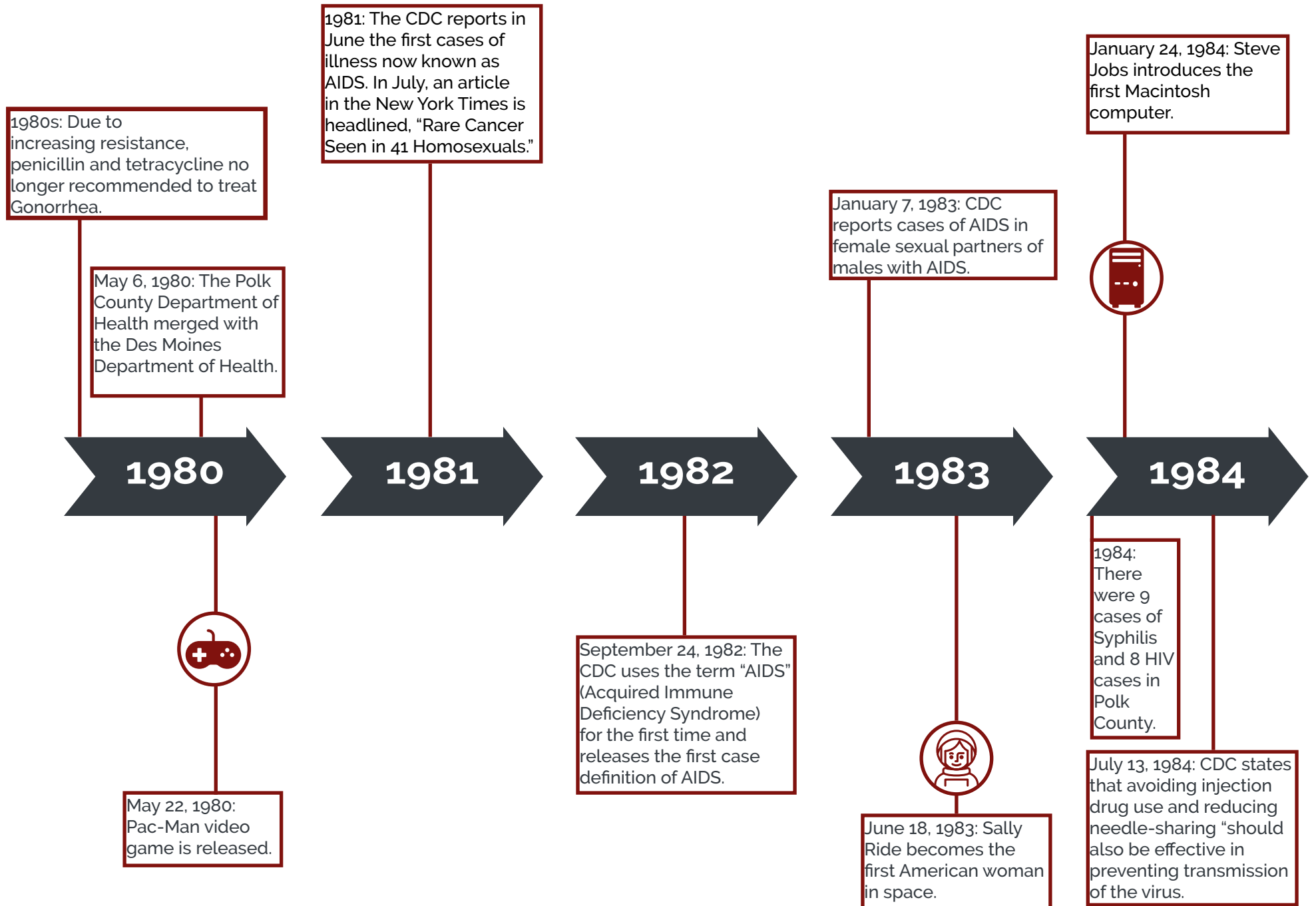
As you will see in the report, we have engaged our community partners, initiated changes in our own clinic, shared best practices, and reached upstream to educate and change behavior. It will take a community-wide response to slow and reverse the trend.

Our work continues to support our mission: To create the conditions for all people to live healthy lives by engaging residents, reducing health disparities and attending to the needs of our most vulnerable families. You will find information about our programs and their impact in our community at the end of the annual report. I am proud of what we have accomplished this year and the difference we have made in Polk County.

A handwritten signature in black ink, appearing to read 'Helen Eddy', written in a cursive style.

Helen Eddy, Director

# 1980 - 1984



# 1985 - 1989

1985: Iowa begins reporting Chlamydia testing cases.

March 2, 1985: FDA licenses the first commercial blood test, ELISA, to detect HIV. Blood banks begins screening the U.S. blood supply.

1985

August 27, 1985: Ryan White, an Indiana teenager who contracted AIDS through contaminated blood products used to treat his hemophilia, is refused entry to his middle school.

1986: Polk County hires its first Public Health Investigator.

1986: there were 2,832 cases of Chlamydia 3,996 cases of Gonorrhea, 83 Syphilis cases and 66 cases of HIV in Iowa.

1986: There were 10 confirmed cases of Syphilis in Polk County.

1986

October 24, 1986: CDC reports that AIDS cases are disproportionately affecting African-Americans and Latinos. This is particularly true for African American and Latino children, who make up 90% of perinatally acquired AIDS cases.

1987: Surgeon General C. Everett Kopp tries to get safer-sex ads for condom use broadcast on TV but the networks fear the FCC and won't use the word condom.

April 7, 1987: FDA declares HIV prevention as a new indication for male condoms.



1987

May 15, 1987: The U.S. Public Health Service adds HIV as a "dangerous contagious disease" to its immigration exclusion list and mandates testing for all visa applicants. The HIV ban will not be lifted until January 4, 2010.

1988: There were 31 confirmed cases of HIV in Polk County.



1988

1988: CDs outsell vinyl records and tapes for the first time.

December 1, 1988: World AIDS Day is observed for the first time. The date is designated by WHO and supported by the UN.

November 9, 1989: Berlin Wall falls.

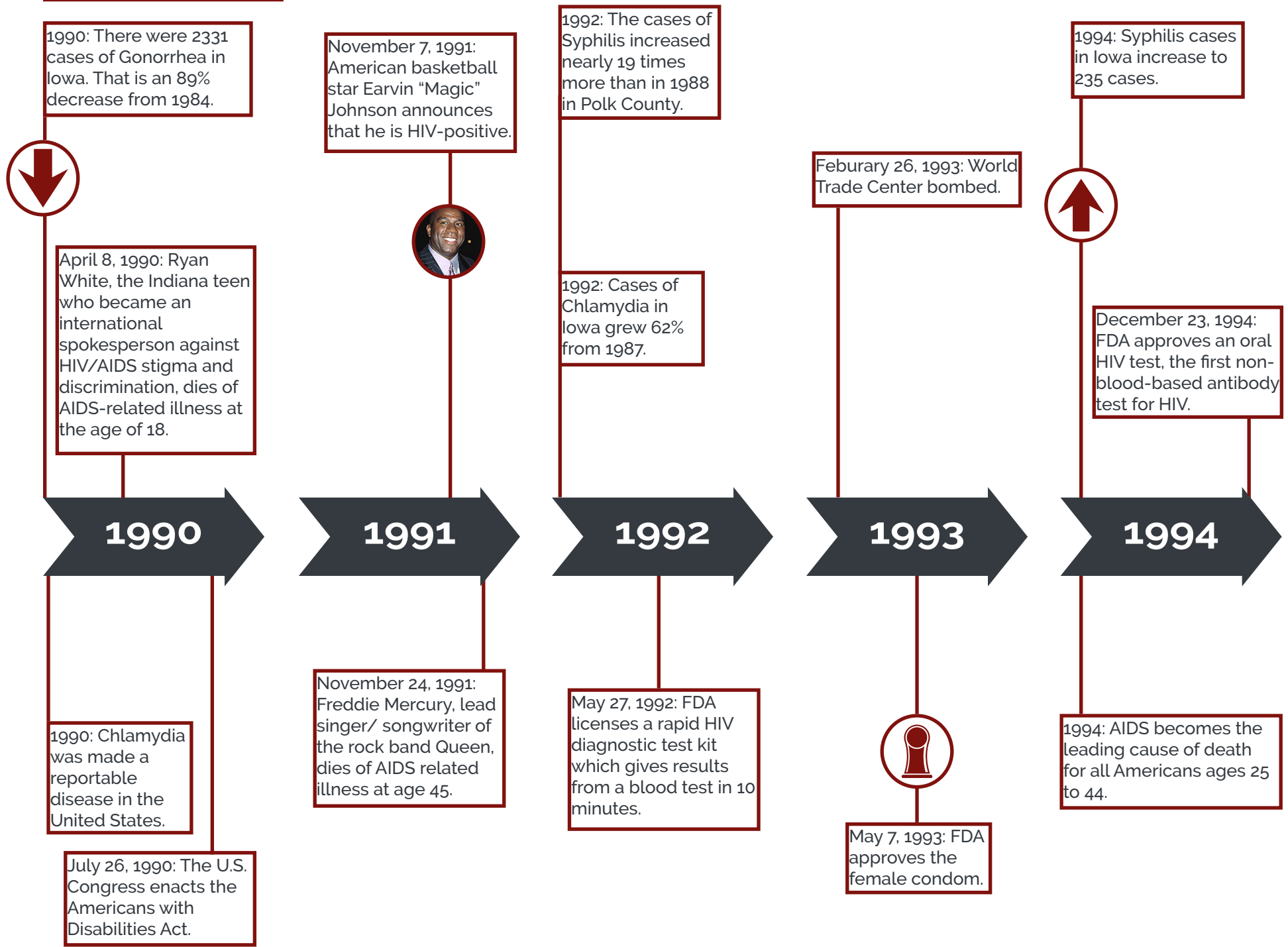
1989: HIV cases increased 350% from 1984 in Iowa.

1989: World.std.com becomes the first commercial provider of dial-up access to the Internet.

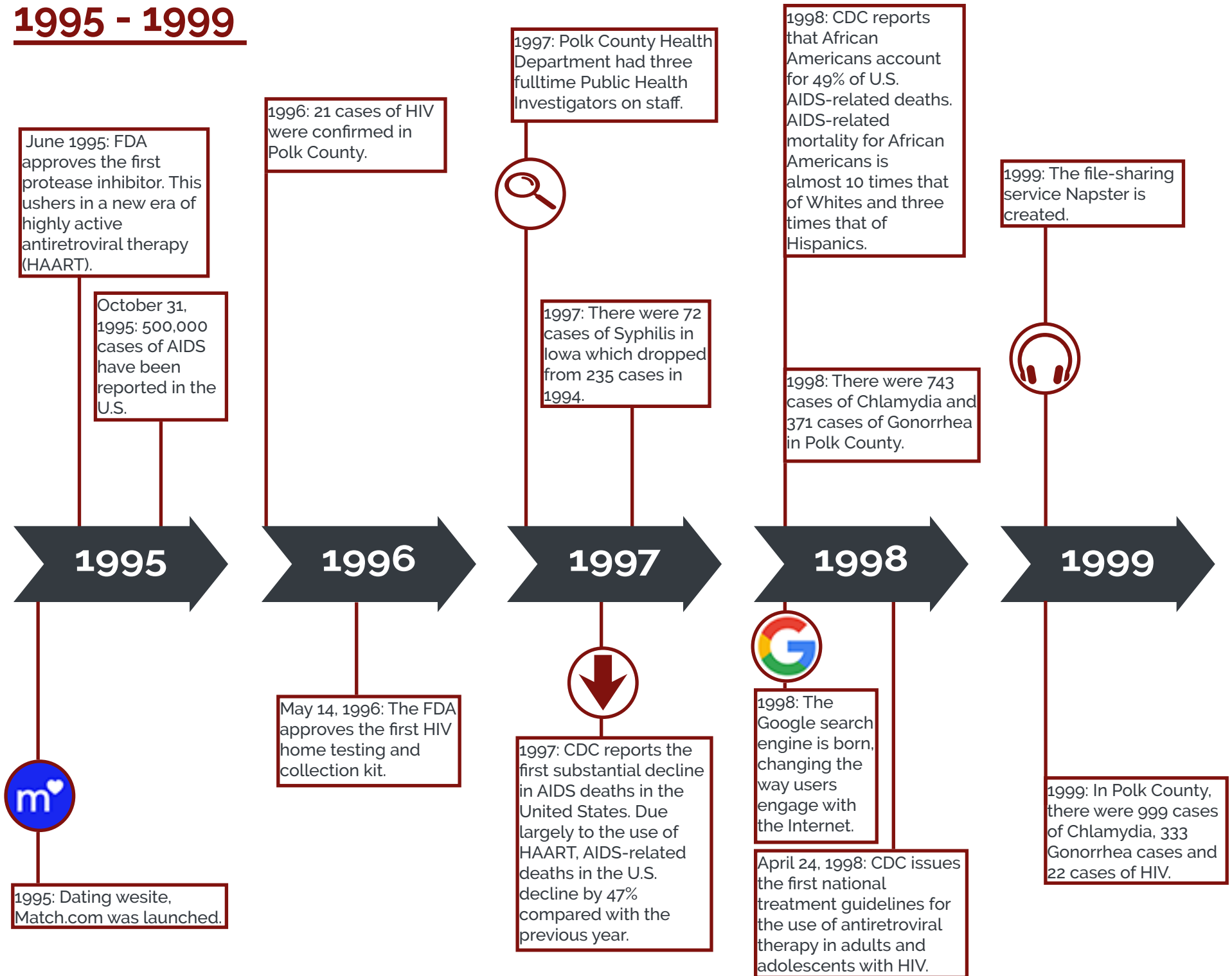
1989

August 18, 1989: CDC reports that the number of reported AIDS cases in the United States has reached 100,000.

# 1990 - 1994

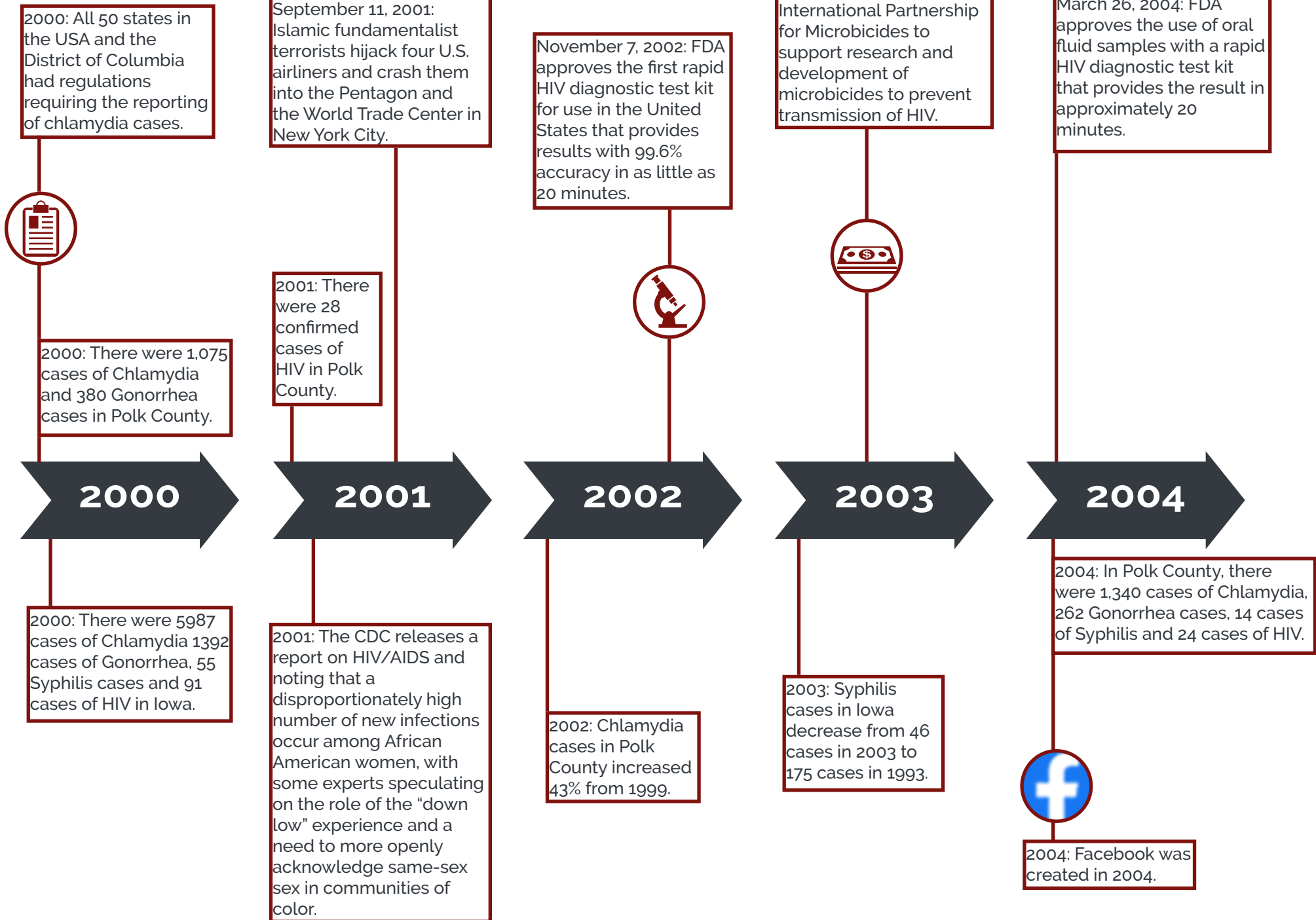


# 1995 - 1999





# 2000 - 2004



# 2005 - 2009

2005: The rate of reported chlamydia infection among women was more than three times higher than the rate among men, largely reflecting the greater number of women screened for chlamydia.

2005: In Polk County, there were 1540 cases of Chlamydia and 366 Gonorrhea cases.

2005



2005: YouTube.com launches. The social news site Reddit is also founded.

September 25, 2006: In New Orleans, the Louisiana Superdome reopens after repairs caused by Hurricane Katrina damage.

2006: Chlamydia cases spiked to 8,390 in Iowa.

2006

May 25, 2006: Scientists announce they have spotted the signs of an HIV-like virus in chimpanzees in southern Cameroon.

2007: OkCupid and Zoosk combine social networking and online dating. Both sites rise quickly in popularity among young daters in the Web 2.0 era.



2007

2007: Gonorrhea cases in Polk County increased 29% from 1998.

November 13, 2007: CDC reports that four transplant recipients have contracted both HIV and hepatitis C from an organ donor—the first known cases in more than a decade of the virus being spread by organ transplants.

2008: Chlamydia cases in Polk County increased 165% from 1998.

2008: There are 9372 cases of Chlamydia 1700 cases of Gonorrhea, 75 Syphilis cases and 100 cases of HIV in Iowa.

2008



August 17, 2008: Michael Phelps, the United States swimmer from Baltimore, wins his 8th Gold Medal of the Beijing Summer Olympic Games, surpassing the record of seven won by Mark Spitz.

March 25, 2009: Grindr, a dating application is launched.



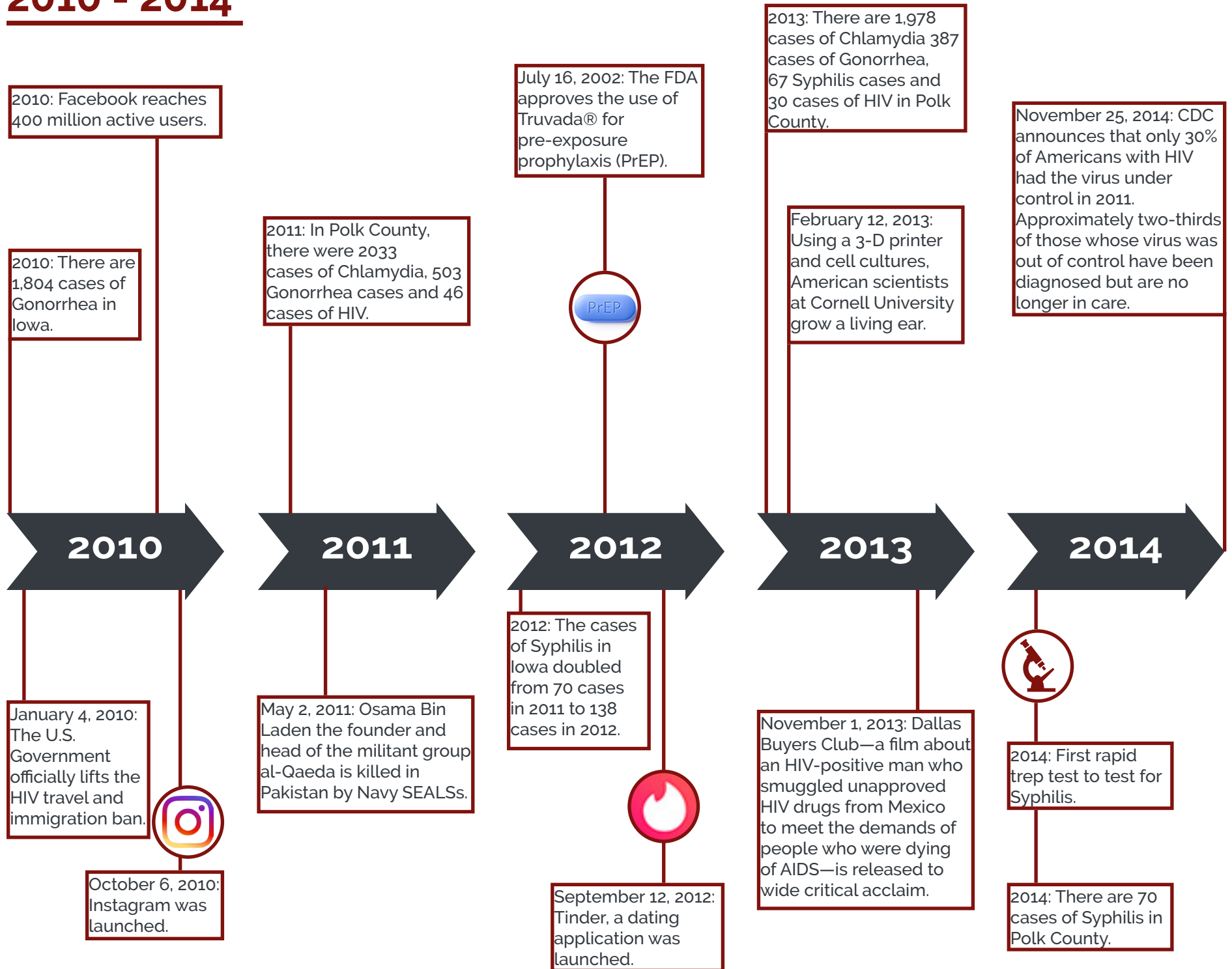
2009: In Polk County, there were 1,632 cases of Chlamydia, 258 Gonorrhea cases, 10 cases of Syphilis and 42 cases of HIV.

2009

2009: The Internet marks its 40th anniversary.

January 20, 2009: Barack Obama takes the oath of office for President of the United States, becoming the first African-American president in the history of the nation.

# 2010 - 2014



# 2015 - 2019

2015: There are 12,133 cases of Chlamydia 2223 cases of Gonorrhea, 228 Syphilis cases and 123 cases of HIV in Iowa.

2015: Ceftriaxone plus azithromycin is the ONLY recommended treated for treating Gonorrhea.



2015



November 17, 2015: Actor Charlie Sheen announces his HIV-positive status in a nationally televised interview.

November 2, 2016: Chicago Cubs win their first World Series since 1908, defeating the Cleveland Indians 4 games to 3.



2016: There are 2,787 cases of Chlamydia, 787 cases of Gonorrhea, 95 Syphilis cases and 33 cases of HIV in Polk County.

2016

November 2016: The Health Department started utilizing the BD MAX. The BD MAX is a laboratory instrument used in the testing for gonorrhea, chlamydia, and trichomonas.

2017: Cases of Gonorrhea in Polk County increased 88% from 2012.



2017: There are 30 cases of HIV in Polk County.

2017

June 6, 2017: The New York Times reports that, as a group, America's black gay and bisexual men have a higher HIV prevalence rate than any nation in the world.

2018: Polk County Health Department hired its fourth full time public health investigator.

2018: Gonorrhea cases grew 264% from 2008 in Polk County.

2018: Syphilis cases in Iowa grew 300% from 2011 to 2017.

2018

2018: Cases of Chlamydia in Polk County grew 58% from 2008.

August 1, 2018: Researchers at Los Alamos National Laboratory demonstrate that computer simulations can accurately predict the transmission of HIV across populations.

March 25, 2019: Surgeons at Johns Hopkins Medical Center in Baltimore, Maryland, perform the first living donor HIV-to-HIV kidney transplant in the United States.

2019

# Polk County Health Department Success Stories



## Increasing Retesting Among Health Department Patients

Between years 2016-2018, a total of 724 individuals were diagnosed with chlamydia at the Polk County Health Department STI clinic. About only 1 in 4 of these patients came back for retesting, most of whom came back considerably earlier or later than the CDC recommended 90-day period. The Health Department wants to address this situation by increasing retesting among chlamydia patients. Improving practices represents an opportunity to address two common causes of chlamydia infection/reinfection: patient behavior and lack of partner treatment. To address this task, a working group formed by the Health Department leadership, clinic and planning staff conducted a series of meetings to identify barriers and opportunities for retesting among patients and clinic operations. This group identified as a vision for the Health Department to “reduce the burden of chlamydia among Polk County residents, normalize testing and retesting among patients as ways to stay disease-free, and to normalize clinic operations that ensure patients will complete their chlamydia treatment and retest within recommended CDC timeframe.”

In order to achieve this vision, the Health Department will be testing a series of medical, data, and educational strategies to address barriers that may prevent patients from being retested. A pilot project will be conducted by the end of 2019 at the Health Department STI clinic to evaluate the impact of using testing reminder calls, provider-to-patient messages about retesting, and use of educational prompts in clinic areas. It is our hope that this project will provide valuable information about patient behavior, clinic operations and ways to improve retesting among patients.

## Introducing Self-Collections to Expand STI Testing in Polk County

In April the lab increased their role within the STI clinic at Polk County Health Department. Beginning April 1st, patients were able to visit the STI clinic on a “walk-in” basis if they meet certain criteria. Patients who are asymptomatic and have not been named as a contact to an STI can walk-in during the hours of 8:30 AM and 3:00 PM (with a break between 11:30 AM and 1:00 PM) and be seen by laboratory staff. After the patient has registered at the front desk, they are given a form to fill out that includes a risk assessment and all necessary information for data collection. The lab staff is then notified of a visit and goes to the front to greet and take the patient to a room or the laboratory. While in a private room or the privacy of the lab, the laboratory staff goes over the patient form and risk assessments. From the questions asked on the risk assessment the laboratory staff is able to determine which tests would best benefit the patient. HIV, Hepatitis C, Syphilis, Urine gonorrhea, chlamydia, and trichomonas, and Oral/Rectal gonorrhea and chlamydia tests are offered during this visit. Once the testing is explained and the patient is ready, the laboratory staff collects the blood, urine and oral swabs, and the patient collects their own rectal swabs. All paperwork, computer work, and specimen processing is done by the laboratory staff. The patient is provided with their HIV results during their initial visit, and given information on how and when to obtain their additional testing.

This type of visit has been extremely successful. Over the two quarters that this visit has been in process the number of HIV tests administered in our STI clinic has nearly doubled. Being able to see asymptomatic, non-contact patients via the “lab-only” visit has allowed symptomatic patients, contacts, and concerned patients to be seen in a more timely manner.



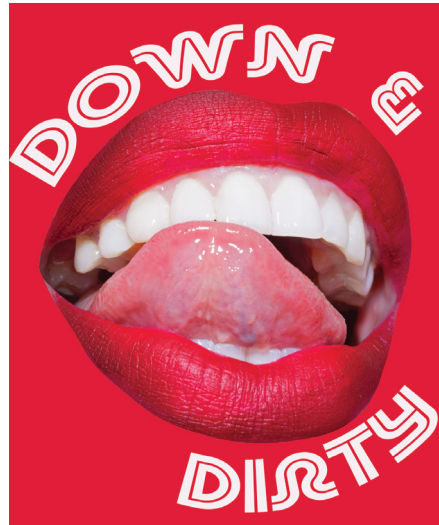
# Polk County Health Department Success Stories

## Health Department Launches YouTube Channel and Podcast for Sexual Health Education

Sexually Transmitted Infections (STIs) are at epidemic levels in Iowa and the United States. The Centers for Disease Control and Prevention estimate that youth ages 15 – 24 make up just over one quarter of the sexually active population, but account for half of the 20 million new STIs in the United States each year. Many questions can be generated from this statistic. Where are they getting their information about sex and STIs? What are they learning in school? Our research indicated that teens and young adults lack correct and accurate health information that can prevent STIs, pregnancy and other health consequences.

Teens and young adults are immersed in the online world. According to *Common Sense Media*, teens spend an average of nine hours a day online. This means they get a majority of their information including health information from online resources. The internet can be filled with misleading, inaccurate health information. Instead of trying to reach students at school with education, we decided to bring the education to them through podcasts and YouTube videos. The intent is to give them a place to find reliable and evidence-based information about sexual health that they need to be informed. Even as adults, talking about sex with primary care providers or partners can be awkward and uncomfortable.

Through both of these platforms, our goal is



to spread awareness and start the conversation within our community about the importance of sexual health.

Sex n' Stuff is a YouTube channel geared toward 12 – 17 year olds. Videos last anywhere from one to 10 minutes on topics

such as what is sex, STIs, consent, male and female reproductive anatomy, how male and female reproductive anatomy works, how to put a condom on, etc. Down and Dirty is a podcast for 18 – 24 year olds. Topics covered are reproductive health, STIs, consent, sexual assault, LGBTQ+ sexual health, healthy relationships, and more. Topics for both initiatives were generated from the STI prevention work we do in the community, information our public health investigators gather and input from community partners.

Videos and the podcast are promoted on the Health Department's Facebook page and Instagram account. A local marketing firm created Snapchat filters and geo-targeted them around areas where teens and young adults hang out. For listeners of the podcast, Snapchat filters were targeted to local bars, music festivals, art festivals and college campuses in Polk County. For YouTube videos, Snapchat filters was used to target major high school events such as football games.

This project is still in its infancy; we have seen positive outcomes. Our social media presence is greatly growing. Our followers on both Facebook and Instagram are liking posts, sharing content and responding to Facebook and Instagram advertisements. Conversations with community partners has opened the door to increased sexual health education in the community. The Health Department is excited about launching this new sexual health initiative and cannot wait to see what the future holds for the podcast and YouTube channel!

# Polk County Health Department Success Stories

## Health Department Hires New Public Health Investigator

In September of 2018, the Health Department added another Public Health Investigator to our team. PHIs are responsible for following up on all positive HIV, Syphilis and the majority of Gonorrhea cases in Polk County. Their responsibilities are not only to inform patients of their infections, but ensure the patient gets into treatment, and/or properly treated, and offer that patient Partner Services (the task of confidentially informing partners of potential exposures). With the ever increasing numbers of STIs reported in Polk County, filling this position was essential to deliver quality care to the patients/clients, as well as to assist in the overall goal of reducing the number of infections. Polk County Public Health Investigators investigated almost 2,000 more cases in between 2018, compared to 2014. This number continues to rise.

## Health Department Focuses on Improving Dual Reporting

Health care providers in the state are required to report every STI case identified. Iowa is a dual-reporting state, so both labs and providers are required to complete an Iowa Confidential Report of Sexually Transmitted Disease and fax that to Iowa Department of Public Health. The provider information is critical for verification of how and when the patient was treated, and to know whether the patient might be pregnant, where the STI presents a medical risk to both mother and baby.

In 2019, we have focused on providing health care systems in Polk County a more detailed look into how well they are doing reporting. We have been able to identify the percentage of STI cases where treatment was reported appropriately, specific to individual clinics. Once those low reporting clinics have been identified, we have provided educational outreach and assistance to help increase reporting percentages by providers. While doing this, provider and medical staff knowledge has also increased on public health's role in STI follow up.

## Building Relationships with Medical Residents

A new innovation in our efforts to expand STI testing and treatment through our partners in the medical community began in the summer of 2019. Several medical systems invited us to meet to explore, educate and implement STI best practices (sexual history, extragenital testing, bringing in sexual partners for testing/treatment, retesting in 90 days, and in-house expertise):

- A physician from Blank Children's hospital is doing her MPH practicum at PCHD to identify knowledge barriers and introduce best practices for chlamydia testing and treatment.
- A second year resident at Unity Point Family Medicine is working to improve gonorrhea and chlamydia retesting rates at 90 days at E 9th and University.
- Health Department staff presented to 37 residents, faculty and interested providers at Broadlawns on July 16th.
- Health Department staff presented to 52 residents, faculty and providers from Blank and Methodist on August 27th.

## Community Conversations around STI Treatment and Prevention

Representative from all seven medical systems in Polk County met with PCHD on November 12th to discuss a unified response to the STI epidemic. It is the first time all 8 health providers have met for a conversation, which focused on community education needs, barriers to testing, ways to disseminate data and best practices, and opportunities to share how we do things. Reversing the STI trends will require these providers working together to provide more testing, treatment and prevention messages. The systems—Broadlawns, Des Moines University Clinic, MercyOne, Polk County Health Department, Primary Health Care, UnityPoint Health and Veterans Administration will meet again in the spring of 2020 to assess progress and refine their approach.



# 2018-2019 Data and Statistics

## Sexually Transmitted Infection Cases Investigations

- Chlamydia 3,871\*
- Gonorrhea 1,652\*
- Syphilis 178\*
- HIV 42\*
- Total: 5,743\*

\*These STI cases are investigated by our Public Health Investigators.

## Tuberculosis (TB) Cases

- 12 cases of active TB managed
- 26 cases of latent TB patients exposed to an active case received directly observed treatment (DOT)
- 307 new latent TB cases contacted
- 54.3% latent TB cases closed due to patients completed Direct Observation Therapy (DOT)
- 100% active and latent TB contacts to active TB cases received case management by nurses and DOT

## Communicable Disease Investigations

- 595 cases of communicable diseases investigated
- 100% follow up on school reports of greater than 10% absent

## Outbreak Investigations

Communicable Disease team investigated 58 outbreaks. Foodborne and communicable disease outbreaks included:

- 1 Scabies, E. coli,
- 2 Unknown GI
- 3 Salmonella
- 7 Enteric
- 10 Norovirus
- 16 Influenza

100% of outbreaks where necessary ill/well individuals interviewed  
91.3% of substantiated foodborne complaints had stool specimens collected

## Communicable Disease Investigation

- Communicable Disease team investigated 595 cases of common communicable diseases
- Staff provided 100% follow up on school reports of greater than 10% absent

## Childhood Immunizations

- 2187 Polk County children were immunized
- 89.5% of these children were eligible for the Vaccines for Children Program (VFC)
- 1959 of the 2187 were immunized through the VFC Program

## Adult Immunizations

- 3621 adults were immunized
- 545 immunizations were given
- 830 of those 3621 were to individuals wishing to adjust their immigration status

## Travel Immunizations

- 2,035 individuals were immunized
- 4299 immunizations were given

## Influenza Immunizations

- 7,788 individuals were immunized for influenza
- 54 community flu clinics were provided to Polk County residents
- 11.9% of children were eligible for the Vaccines for Children Program

## School Immunization Audits

- 150 schools were audited in Polk County
- Staff reviewed 87,542 student immunization records
- 87.05% of records up to date
- 99.43 % of students were fully vaccinated



# 2018-2019 Data and Statistics

## Community Health Screenings

- Health Department staff hosted six screening events at community settings. Our staff tested individuals for cholesterol, glucose and blood pressure. Food pantries were visited twice a month.
- 571 individuals were screened at community events
- 144 individuals were screens at food pantries
- 293 flu immunizations were also given at two community events
- Participated in four back-to-school events
- 75 individuals were immunized and 174 immunizations were given

## Media Relations and Social Media

- 6 press releases were sent to the media and translated into Spanish for Spanish media partners
- 100% of media releases were covered by our Spanish media partners
- 123 articles were written for the media outlets
- 31 media inquiries were made by media channels and 81% were unsolicited inquiries
  
- 320 Facebook posts, 260 Twitter posts and 88 Instagram posts were posted to the Health Department's social media pages
- 3.5% increase in Twitter followers, 21.5% in Facebook likes and 100% growth in Instagram followers

## Emergency Planning

- Health Department staff participated in one exercise to test their skills and experience related to a public health emergency.
- 100% of Health Department staff completed training in incident command system to further their knowledge regarding a natural, biological or chemical disaster.

## Sexually Transmitted Infection Outreach

- Provided STI testing at 28 outreach events
- At those 28 events, we provided 282 HIV tests,
- 45 hepatitis C tests, 2,037 urine tests for chlamydia and gonorrhea and 2,037 urine tests for trichomonas
- 100% of people tested positive did not know they were positive

## Polk County Healthy Women Program

- 1,017 women received services from the Polk County Health Women Program
- 365 patients received case management from nurse case manager
- 15 Diagnosed with cancer of which, 13 had breast cancer, 2 cervical pre-cancer, 0 cervical cancer and 15 out of 15 initiated treatment
- 22.66% of patients were diagnosed with cancer at an early stage and 1.5% were diagnosed with cancer
- 145 participants participated in health coaching and 89.5% reported positive health outcomes

## Lead Remediation and Case Management and Healthy Homes Program

- 58 patients received case management due to evaluated blood levels
- 41 homes were remediated for lead hazards
- 92.7% of those homes were completed within 20 days
- 86 additional children are now living in lead safe homes
- 51 homes were inspected for home health hazards such as insects, mold, radon and other environmental toxics

# Timeline References

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## **Polk County and Iowa data provided by:**

Centers for Disease Control and Prevention  
Iowa Department of Public Health  
Polk County Health Department

\*CDC = The Centers for Disease Control and Prevention

\*FDA = Food and Drug Administration

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## **NOTICE DISCRIMINATION IS AGAINST THE LAW**

Polk County will provide programs and facilities which are accessible to people with disabilities and administer its programs/services in a manner that does not discriminate against any person because of race, color, religion, creed, sex, sexual orientation, gender identity, age, national origin, genetic information, disability or veteran or military status.

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# Our Mission

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To create the conditions for all people to live healthy lives by engaging residents, reducing health disparities and attending to the needs of our most vulnerable families.

Visit us online!



[polkcountyiowa.gov/health](http://polkcountyiowa.gov/health)



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