



H.I.V. (HUMAN IMMUNODEFICIENCY VIRUS)

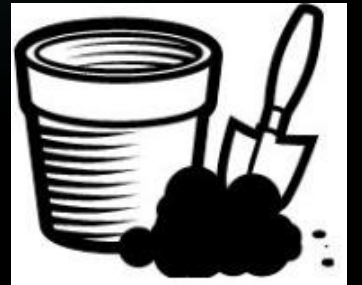
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What is communicable disease?

- ▶ A communicable disease is one that can be caught or transferred from one person to another.
- ▶ These types of diseases are spread through a variety of different ways these can include -

- ▶ Contact with blood and bodily fluids
- ▶ Breathing in an airborne virus
- ▶ Being bitten by an insect.



(Yang, 2016), Howie (1976).



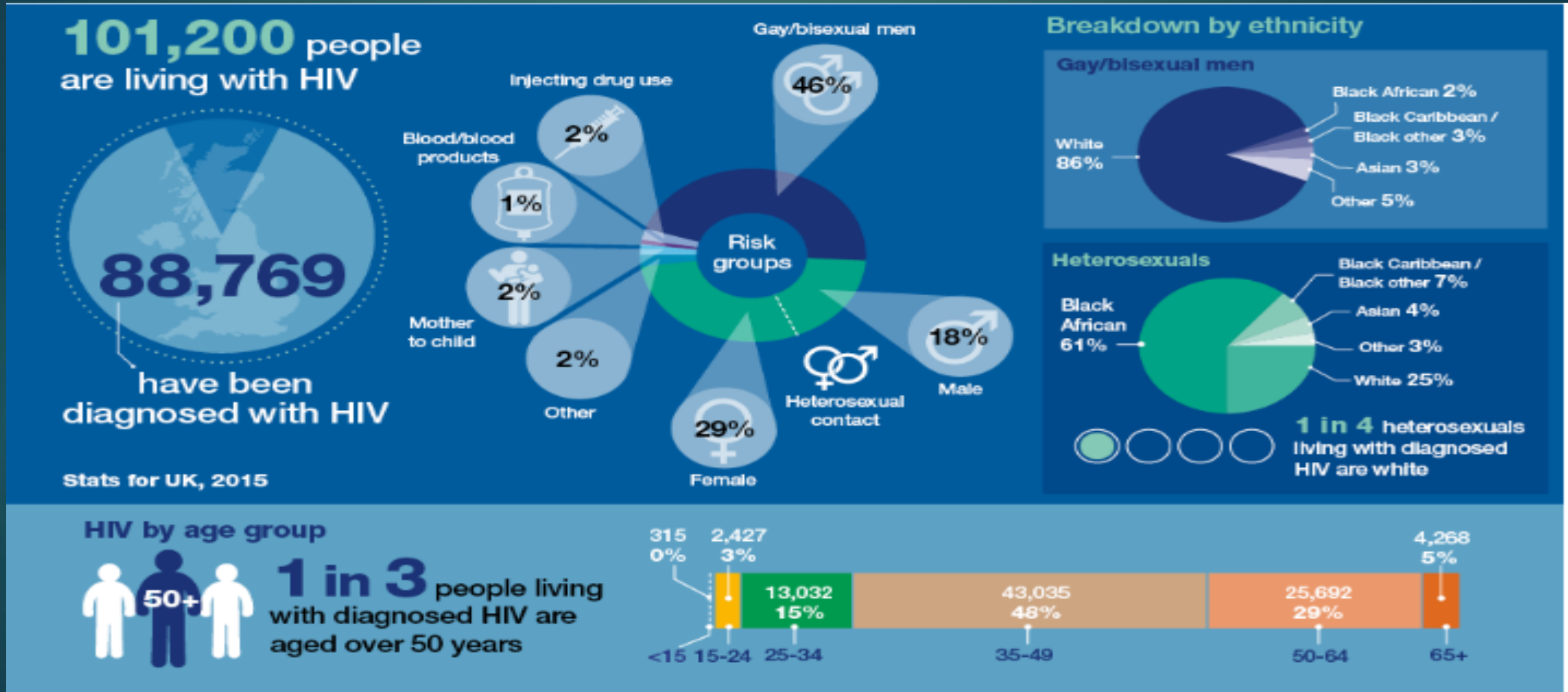
WHAT IS H.I.V.



- HIV short for human immunodeficiency virus is a virus that damages the cells in the immune system and weakens the ability to fight everyday infections and disease's even the most simple coughs and colds can make those suffering with HIV become extremely unwell. NHSWales (2018)
- 93,385 people received HIV care in 2017 356 of these people were children.
- From 2008 to 2017 the number of people receiving care increased by 54% (Nat.org.uk, 2019)

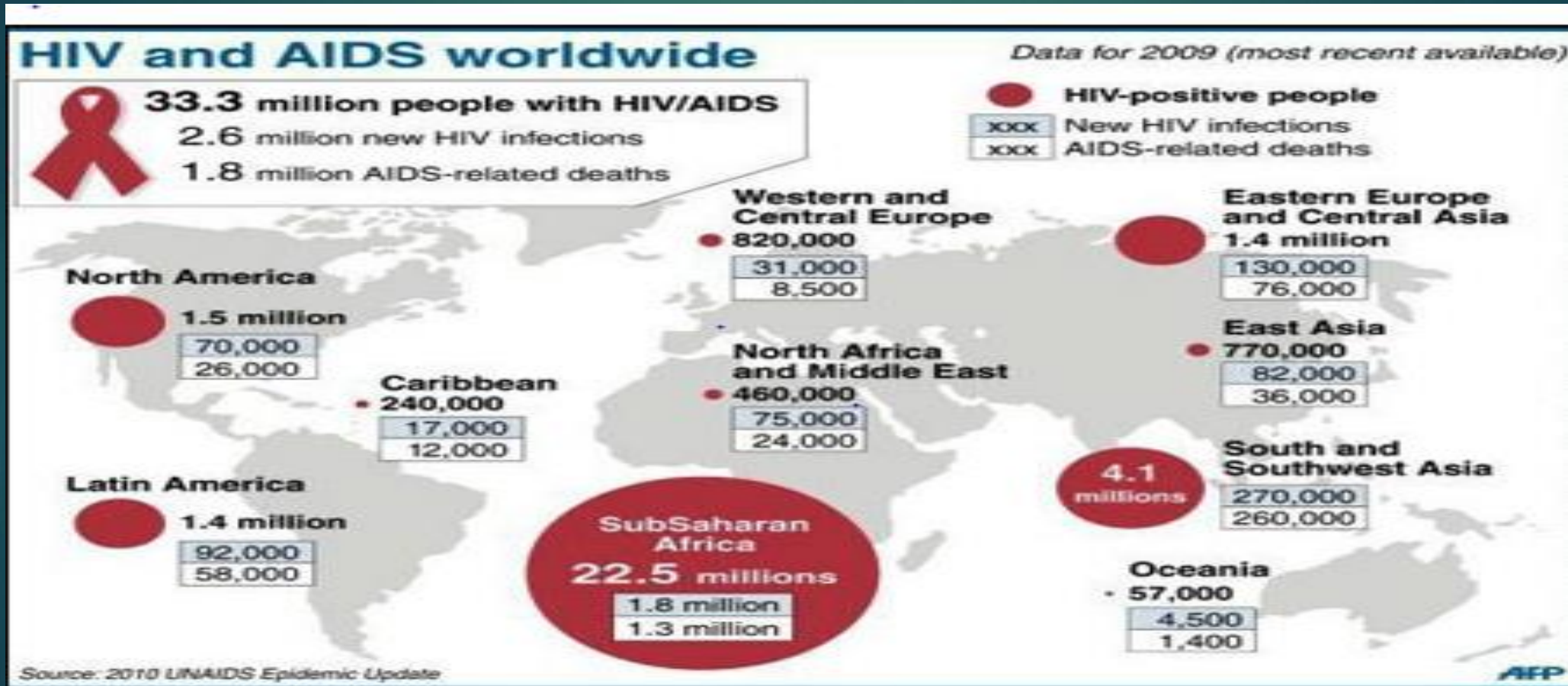
(Boseley, 2019)

Incidence and prevalence of HIV in the U.K.



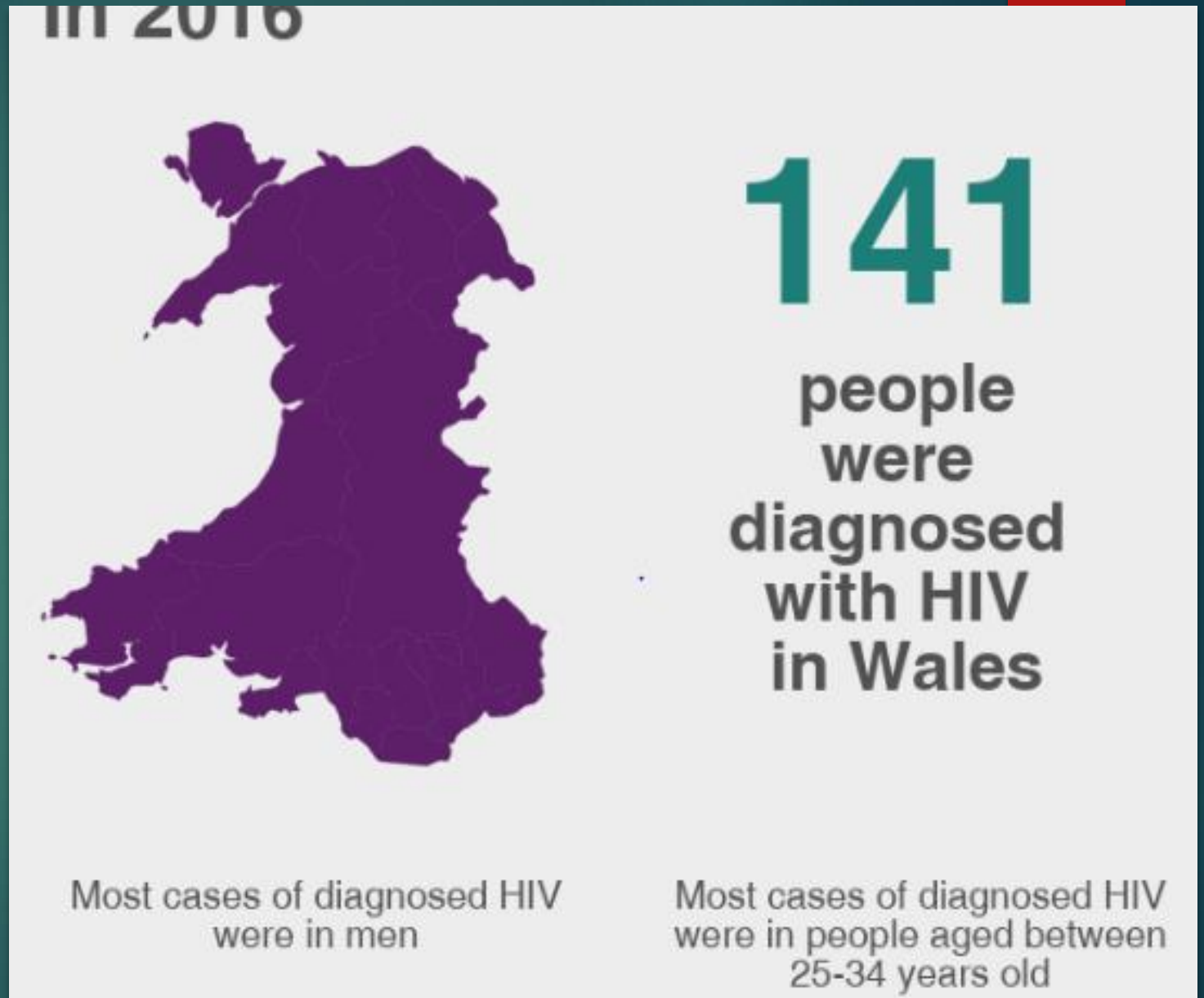
(GOV.UK, 2019), (Jennings et al., 2017) , (Elmahdi et al., 2014), (Mody et al., 2016)

Incidence and prevalence of HIV globally



Incidence and prevalence of HIV in Wales

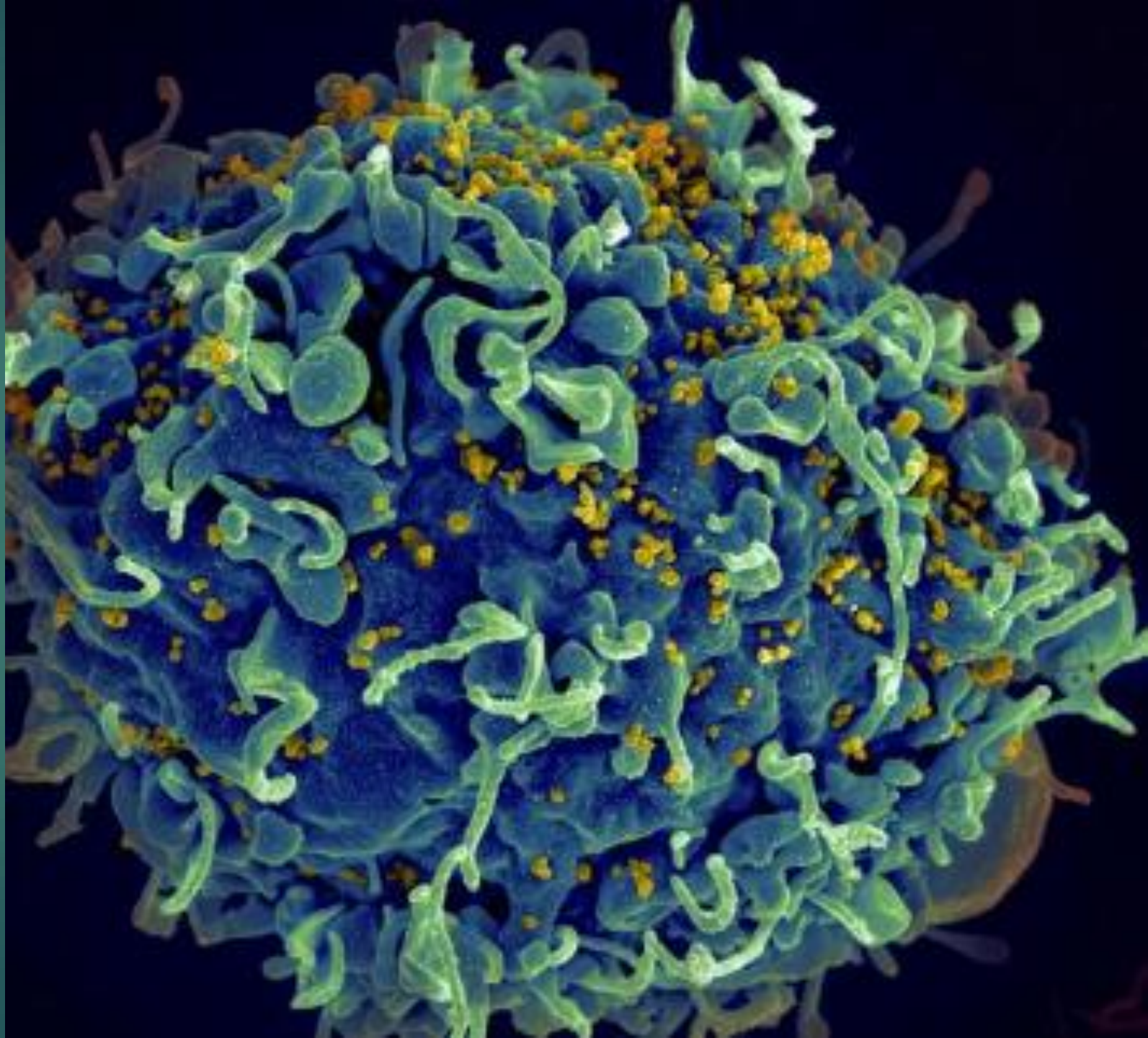
(Wales.nhs.uk, 2019)



Signs and Symptoms

- ▶ **Fever**
- ▶ **Headache**
- ▶ **Upset stomach**
- ▶ **Sore throat**
- ▶ **Swollen glands**
- ▶ **Rash**
- ▶ **Aches and pains in muscles and joints**

(Plannedparenthood.org, 2019)
, (Becker, 2016)



Treatments

- ▶ Many people with the HIV virus can continue to live long normal lives given the right treatment whilst there is no cure for HIV it can be kept under control with the correct care. Such as:
 - ▶ Prophylaxis (PEP)
 - ▶ Regular blood tests
 - ▶ Antiretroviral drugs (ART)

(Cdc.gov, 2019), (Labtestsonline.org, 2019)



Vaccinations

- ▶ Although there is no single vaccination to prevent or cure HIV, people with the virus can benefit from other vaccines against other illnesses. These are:



- ▶ Hepatitis B (HPV)
- ▶ Influenza (flu)
- ▶ Meningococcal
- ▶ Neumococcal (pneumonia)
 - ▶ Tetanus
 - ▶ Diphtheria
 - ▶ Pertussis



- ▶ Every 10 years, a repeat vaccine against tetanus and diphtheria is also recommended.
- ▶ Additional vaccines may be recommended for a person with HIV based on the person's age, previous vaccinations, risk factors for a particular disease, or certain HIV-related factors.

(AIDSinfo, 2019)

Preventative Methods

Cohen et al., (2008), Delpech, (2013) and Schaefer et al., (2019) all agree that whilst the use of ART has reduced the transmission of HIV we still require other methods of treatment as many carriers are not aware of their status therefore are not receiving treatment. However, there has been other strategies proven to be beneficial such as:

- ▶ Male circumcision
- ▶ Regular HIV testing
- ▶ Prompt treatment
- ▶ Safe sex
- ▶ HIV Pregnancy screening tests
- ▶ Only using sealed unused needles

Delpech also adds that where there has been a decrease in HIV diagnoses we have seen substantial increase in HIV testing especially in repeat testing.

HIV Trends in wales

**Persons seen for HIV care in the UK, by country and PHE region of residence:
2008-2017**

Country and PHE region of residence	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
London	26,902	28,269	29,680	31,074	32,446	33,744	35,188	36,425	36,742	36,436
Midlands and East of England	10,602	11,559	12,448	13,357	14,320	14,927	16,016	16,666	17,940	18,556
North of England	9,672	10,409	11,145	11,951	12,577	13,143	13,839	14,659	15,343	15,520
South of England	9,177	9,882	10,491	11,174	11,874	12,479	13,151	13,813	14,474	15,025
England total	56,353	60,119	63,764	67,556	71,217	74,293	78,194	81,563	84,499	85,537
Wales	1,085	1,200	1,328	1,485	1,550	1,678	1,857	1,941	2,028	2,114
Northern Ireland	401	440	490	568	666	760	801	931	999	1,073
Scotland	2,885	3,080	3,319	3,615	3,761	3,999	4,067	4,251	4,328	4,640
UK total	60,737	64,844	68,909	73,232	77,205	80,776	84,992	88,704	91,877	93,385

(GOV.UK, 2019),(Martin, 2018),(Sekhon and Minhas, 2016)

Impact hiv has on care srVICES and the society

- ▶ Increased demand of healthcare proffesionals (leaving us understaffed)
 - ▶ Increased service needs (added cost to providers)
 - ▶ More sickdays for people suffering HIV (increase in benefits payed out, and place of work understaffed)
- ▶ Burden of morbidity, added stress. (causing staff to burn out, become depressed – causing more sick days for healthcare professionals)

(Verma, 2016)

Conclusion

- By carrying out regular HIV testing we are able to reduce the number of HIV diagnoses
- We can also reduce this by raising awareness
- With the correct care a person with HIV can carry on to live a long health life
- In the future its belived that if kept uncontroll we can elliminated HIV getting to the stage of AIDS
- HIV is having an impact on the health care system if we can tackle this problem there will be room for us to grow in other departments.

References

- ▶ AIDSinfo. (2019). *HIV and Immunizations Understanding HIV/AIDS*. [online] Available at: <https://aidsinfo.nih.gov/understanding-hiv-aids/fact-sheets/21/57/hiv-and-immunizations> [Accessed 7 Mar. 2019].
- ▶ Becker, J. (2016). The early neurologic signs and symptoms of HIV infection. *Neurology*, 87(2), pp.126-127.
- ▶ Boseley, S. (2019). *HIV rates climbing among over-50s in UK and Europe, researchers warn*. [online] the Guardian. Available at: <https://www.theguardian.com/society/2017/sep/26/hiv-rates-climbing-among-over-50s-in-uk-and-europe-researchers-warn> [Accessed 17 Feb. 2019].
- ▶ Cdc.gov. (2019). *Pre-Exposure Prophylaxis (PrEP) | HIV Risk and Prevention | HIV/AIDS | CDC*. [online] Available at: <https://www.cdc.gov/hiv/risk/prep/index.html> [Accessed 7 Mar. 2019].
- ▶ Cohen, M., Hellmann, N., Levy, J., DeCock, K. and Lange, J. (2008). The spread, treatment, and prevention of HIV-1: evolution of a global pandemic. *Journal of Clinical Investigation*, 118(4), pp.1244-1254.
- ▶ Delpech, V. (2013). The HIV epidemic: global and UK trends. *Medicine*, 41(8), pp.417-419.
- ▶ Elmahdi, R., Ward, H., Cooke, G. and Fidler, S. (2014). Implementation of HIV testing is patchy in the UK. *BMJ*, 349(jul30 7), pp.g4842-g4842.
- ▶ GOV.UK. (2019). *HIV: annual data tables*. [online] Available at: <https://www.gov.uk/government/statistics/hiv-annual-data-tables> [Accessed 5 Mar. 2019].
- ▶ GOV.UK. (2019). *Health matters: increasing the uptake of HIV testing*. [online] Available at: <https://www.gov.uk/government/publications/health-matters-increasing-the-uptake-of-hiv-testing/health-matters-increasing-the-uptake-of-hiv-testing> [Accessed 14 Feb. 2019].
- ▶ Howie, J. (1976). The pattern of communicable diseases in the UK and abroad. *BMJ*, 2(6029), pp.217-219.

- Intechopen.com. (2019). *World AIDS Day Today: Pushing Towards Not Having One In The Future* | IntechOpen. [online] Available at: <https://www.intechopen.com/news/world-aids-day-today> [Accessed 26 Feb. 2019].
- Jennings, L., Conserve, D., Kajula, L., Iwelunmor, J. and Maman, S. (2017). Perceived Cost Advantages and Disadvantages of Purchasing HIV Self-Testing Kits among Urban Tanzanian Men: An Inductive Content Analysis. *Annals of Global Health*, 83(1), p.66.
- Labtestsonline.org. (2019). *HIV Antiretroviral Drug Resistance Testing, Genotypic*. [online] Available at: <https://labtestsonline.org/tests/hiv-antiretroviral-drug-resistance-testing-genotypic> [Accessed 1 Mar. 2019].
- Martin, C. (2018). The art of expanding HIV awareness. *The Lancet HIV*, 5(12), p.e687.
- Mody, N., Perry, N., Richardson, D., Barbour, L. and Fisher, M. (2016). Routine HIV testing in acute hospital admissions. *HIV Medicine*, 17(8), pp.634-634.
- Nat.org.uk. (2019). *UK HIV Statistics | National AIDS Trust - NAT*. [online] Available at: <https://www.nat.org.uk/we-inform/HIV-statistics/UK-statistics> [Accessed 15 Feb. 2019].
- Plannedparenthood.org. (2019). *What Are the Symptoms & Signs of HIV / AIDS?*. [online] Available at: <https://www.plannedparenthood.org/learn/stds-hiv-safer-sex/hiv-aids/what-are-symptoms-hivaids> [Accessed 4 Mar. 2019].
- Schaefer, R., Gregson, S., Fearon, E., Hensen, B., Hallett, T. and Hargreaves, J. (2019). HIV prevention cascades: a unifying framework to replicate the successes of treatment cascades. *The Lancet HIV*, 6(1), pp.e60-e66.
- Sekhon, H. and Minhas, S. (2016). Adolescent Health and Awareness about HIV. *International Journal of Pharma Research and Health Sciences*, 4(4), pp.1327-1331.

- Verma, S. (2016). Health Sector Response to HIV in the SAARC Region. *SAARC Journal of Tuberculosis, Lung Diseases and HIV/AIDS*, 12(1).
- Wales.nhs.uk. (2019). *Public Health Wales | About HIV*. [online] Available at: <http://www.wales.nhs.uk/sitesplus/888/page/88728> [Accessed 1 Mar. 2019].
- Wales.nhs.uk. (2019). *Public Health Wales | HIV in Wales*. [online] Available at: <http://www.wales.nhs.uk/sitesplus/888/page/88730> [Accessed 2 Mar. 2019].
- Yang, A. (2016). Integrating Care for Communicable Disease and Non-Communicable Disease. *Cambridge Medicine Journal*.