

POLIO

INFLUENZA

MALARIA

C-DIFF

Communicable Disease

DIPHTHERIA

MEASLES

HIV

TUBERCULOSIS

Introduction

HIV – The reason I have chosen HIV as a communicable disease is : -

- Stigma
- Awareness
- Explore the disease in depth.

What is a communicable disease?

- Disease that can be 'caught'
- An infectious disease transmissible (as from person to person) by direct contact with an affected individual. (Webster, 2019)
- A communicable disease is an illness transmitted through contact with microorganisms. People, animals, food, surfaces, and air can all be carriers of the microorganisms that pass infectious illnesses from one host to the next. (NHS, 2019)

- Examples
- Hepatitis
- Polio
- Influenza
- Malaria
- HIV/AIDS
- Clostridium Difficile





HIV

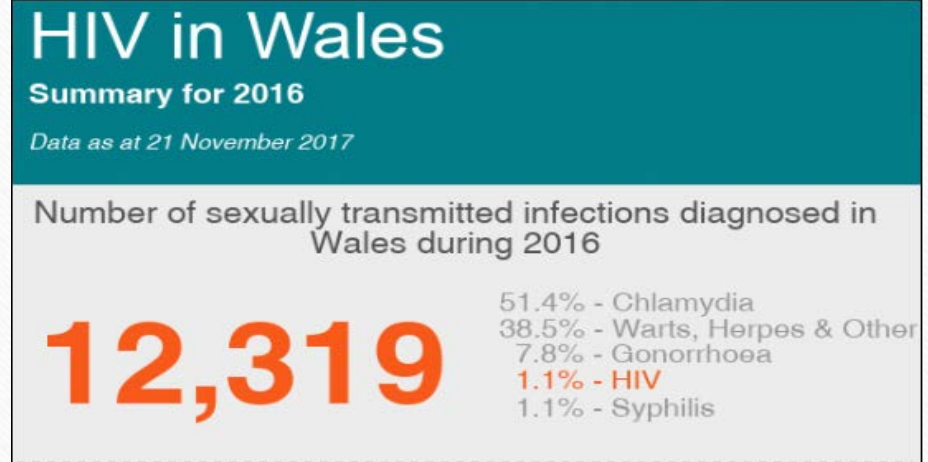


- **HIV (human immunodeficiency virus) is a virus that damages the cells in your immune system and weakens your ability to fight everyday infections and disease. (NHS, 2018)**
- **There is currently no cure for HIV although with early diagnosis and effective drug treatments this enables most to live a long and healthy life.**
- **Most people develop 'flu like symptoms' a month after the virus has entered the immune system. As the virus continues to multiply and destroy immune cells symptoms worsen and become chronic. (NHS, 2018)**
- Fever
- Fatigue
- Swollen Lymph Nodes (First Sign of HIV)
- Weight Loss
- Diarrhoea
- Shingles

If untreated HIV can develop into AIDS this would happen within ten years of initially contracting HIV.

HIV Prevalence In Wales

- In 2016 141 people were diagnosed with HIV in Wales. 110 out of 141 were men.
- Between 2007-2016 a total of 1,563 were diagnosed with HIV in Wales 1,114 were men and 392 were women.
- This may seem a lot however out of the 12,319 cases of sexually transmitted disease diagnosed in Wales in 2016 only 1.1% was deemed to be HIV.



(Wales.nhs.uk, 2016)

However, as seen in this table HIV has unfortunately increased. In 2017 there were 32 new diagnosis for HIV in Wales alone, and by 2018 the diagnosis increased by 34% as 43 new diagnoses were made.

	Diagnoses			Screens		
	Q1 2017-Q2 2017	Q1 2018-Q2 2018	% Change	Q1 2017-Q2 2017	Q1 2018-Q2 2018	% Change
Chlamydia	3230	3099	-4%	32391	34331	6%
Warts (1st episode)	1452	1364	-6%	-	-	-
Herpes (1st episode)	662	725	10%	-	-	-
Gonorrhoea	566	601	6%	32374	34314	6%
HIV (new diagnosis)	32	43	34%	17365	18193	5%
Syphilis	106	93	-12%	16988	17861	5%
LGV	0	5	-	-	-	-
Hepatitis A (acute)	0	0	-	-	-	-
Hepatitis B (1st diagnosis)	8	6	-25%	-	-	-
Hepatitis C (1st diagnosis)	16	12	-25%	-	-	-

(Wales.nhs.uk, 2019)

It is evident to see that there has been an increase of males that have been newly diagnosed with HIV in 2017 and 2018 and a decrease of females and as seen in this table in 2018 there were 40 males diagnosed in comparison to only 3 females, giving males an increase of 67% in comparison to previous years.

	Q1 2017-Q2 2017			Q1 2018-Q2 2018			% Change		
	Male*	*of which MSM	Female	Male*	*of which MSM	Female	Male*	*of which MSM	Female
Chlamydia	1422	161	1808	1364	202	1735	-4%	25%	-4%
Warts (1st episode)	771	59	681	752	42	612	-2%	-29%	-10%
Herpes (1st episode)	226	19	436	245	15	480	8%	-21%	10%
Gonorrhoea	369	212	197	426	258	175	15%	22%	-11%
HIV (new diagnosis)	24	13	8	40	24	3	67%	85%	-63%
Syphilis	95	75	11	82	61	11	-14%	-19%	0%
LGV	0	0	0	5	3	0	-	-	-
Hepatitis A (acute)	0	0	0	0	0	0	-	-	-
Hepatitis B (1st diagnosis)	4	0	4	5	0	1	25%	-	-75%
Hepatitis C (1st diagnosis)	9	3	7	8	2	4	-11%	-	-43%

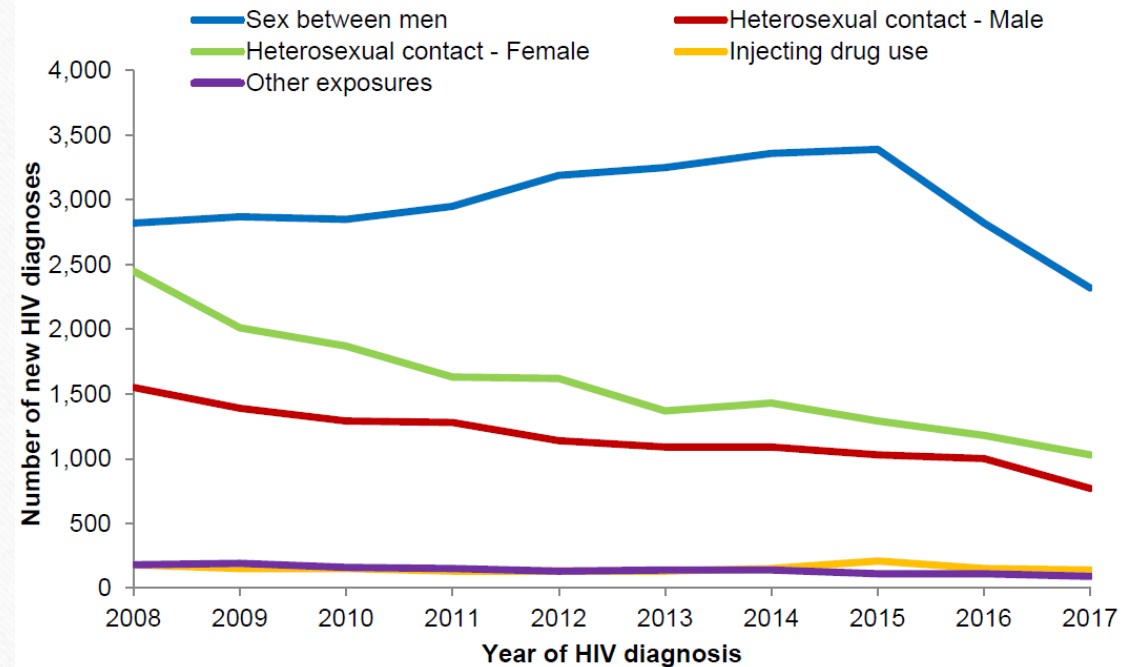
(Wales.nhs.uk, 2019)

By looking at this table retrieved from public health Wales it is clear to see the contrast in the groups most exposed to contracting HIV. Gay men are evidently more at risk with around 2,500 new diagnoses in 2017 although lower than the peak of 3,500 in 2015 this is still a high number of diagnoses. HIV contraction by injecting drugs was at a rise in 2015 but was still low in comparison to sex between men with less than 500 diagnoses. (Assets.publishing.service.gov.uk, 2019)

All groups had decreased in the number of diagnoses by 2017.

Cardiff was shown to have the highest number of people who were diagnosed with HIV from 2009-2017. The lowest diagnosis rate was Blaenau Gwent with only 3 cases, closely followed by Ceredigion with only 8.

(Wales.nhs.uk, 2019)



(Assets.publishing.service.gov.uk, 2019)

HIV cases rising in Wales at fastest ever rate

TODAY Wales on Sunday can reveal the truth about HIV in Wales - the number of people across the nation diagnosed with the Aids-related virus is growing at an unprecedented rate. (walesonline, 2018)

TREATMENT

Although there is no cure for HIV there are medications and treatment plans available to ensure most individuals can live a long and healthy life.

Prophylaxis (PEP) – Must be taken within 72 hours.
Must be taken every day for one month.

If an individual tests positive.

- Regular blood tests to monitor the HIV in the blood. (Viral load test)
- CD4 lymphocyte cell count – measures how much the HIV has affected the immune system.
- Antiretroviral drugs- commonly used to treat HIV, allows immune system to repair itself and prevent further damage.
- Patients will take between 1-5 pills a day.

(nhs.uk, 2019)



VACCINATIONS

Preventative vaccinations – Complex development since 1980's.

- Was initially based on eliciting antibody responses.
- HIV develops at a rapid rate therefore the initial vaccinations failed.
- 1984 – it is declared HIV vaccine will be available for testing in two years.
- 1987 – First trial opened.
- A single injection to prevent HIV was created in 2009 named RV 144 and was trialled in Thailand, however infection rate was 31.2 and therefore not low enough to license it.
- 2016 - HVTN 702, part of the P5 research endeavour, launched to test whether a new version of the RV144 HIV vaccine candidate safely prevents HIV infection among adults in South Africa.

(Niaid.nih.gov, 2018)



Preventative Methods

Treatment as prevention – treatment lowers viral load to undetectable over time, when levels become undetectable it becomes untransmittable (U=U) this meaning HIV cannot be passed on through sexual contact.

Condoms – There are both male and female condoms available that come in different colours, flavours and materials.

Lubricant – Can make sex safer by ensuring the condom does not tear and also ensuring there are no vaginal or anal tears caused by dryness.

Sharing needles – Sharing needles or injecting equipment such as needles, swabs or spoons can expose an individual to HIV or Hep C.

Screening for HIV in pregnancy – All pregnant women are offered HIV screening via blood test, HIV can be passed on to baby during pregnancy if untreated.

(nhs.uk, 2018)

Implications for healthcare professionals

- Emotional Aspects – It is vitally important that healthcare professionals remain neutral and offer emotional support to those with HIV
(The code, 2010)
- Health Promotion – As with any chronic disease it is important that measures to maximise prevention of disease are put in place. (Knott, 2018)
- Reproductive and sexual health - Primary care teams should be supportive, uncritical and non-prejudiced.
(Health Education England, 2019)
- Confidentiality – Confidentiality is as important for HIV patients as it is to all other patient particularly sensitive therefore patients with HIV may be more concerned about confidential patients. (Knott, 2018)



Conclusion

- HIV is not a cut and dry case, it is extremely complex and must be handled with sensitivity, empathy and with a non-judgemental attitude.
- People with HIV CAN live a normal, healthy and happy life.
- Treatment has developed dramatically and if taken correctly there are few limitations for a person with HIV.

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