Emergency Contraception, Post Exposure Prophylaxis and Sexual Infections

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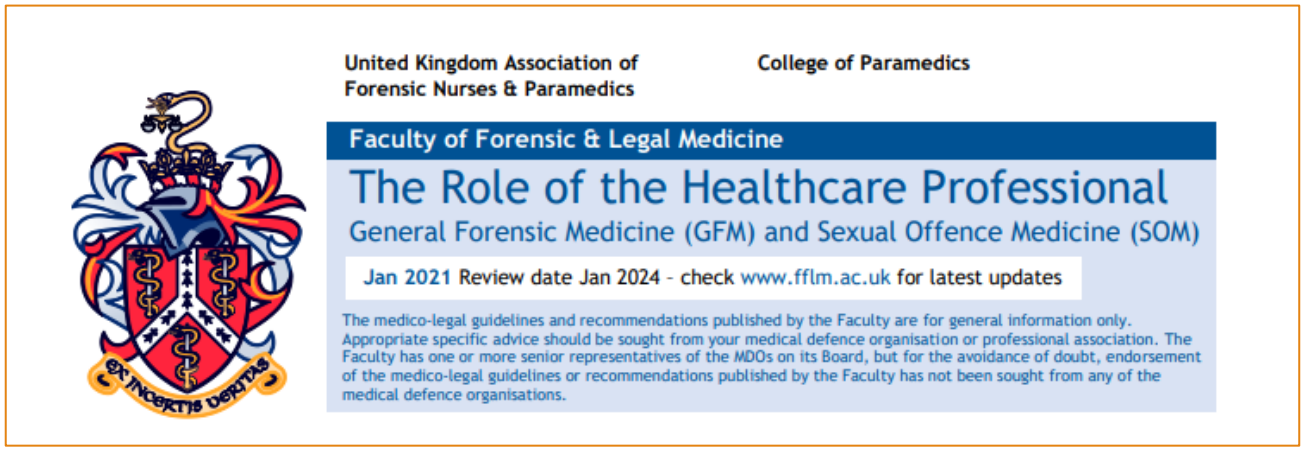
HDUHB

Objectives

- What is expected in the acute presentation?
- Emergency contraception
- PEP guidelines
- Sexually Transmitted Infections
- Questions

The acute presentation



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The Role of the Healthcare Professional

General Forensic Medicine (GFM) and Sexual Offence Medicine (SOM)

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*"Arrange appropriate treatment/referral, **including for emergency contraception**, post-exposure prophylaxis and screening for sexual transmitted infections"*

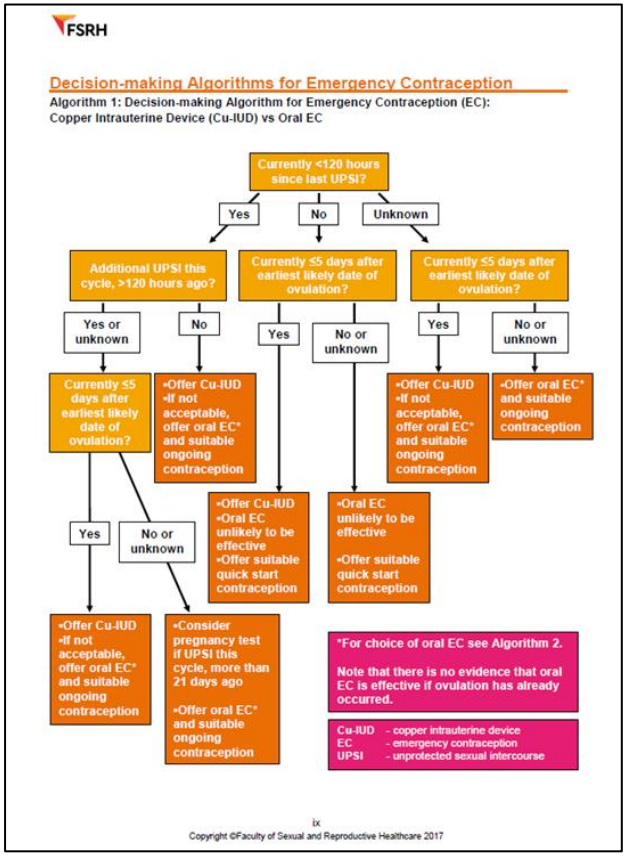
Emergency contraception

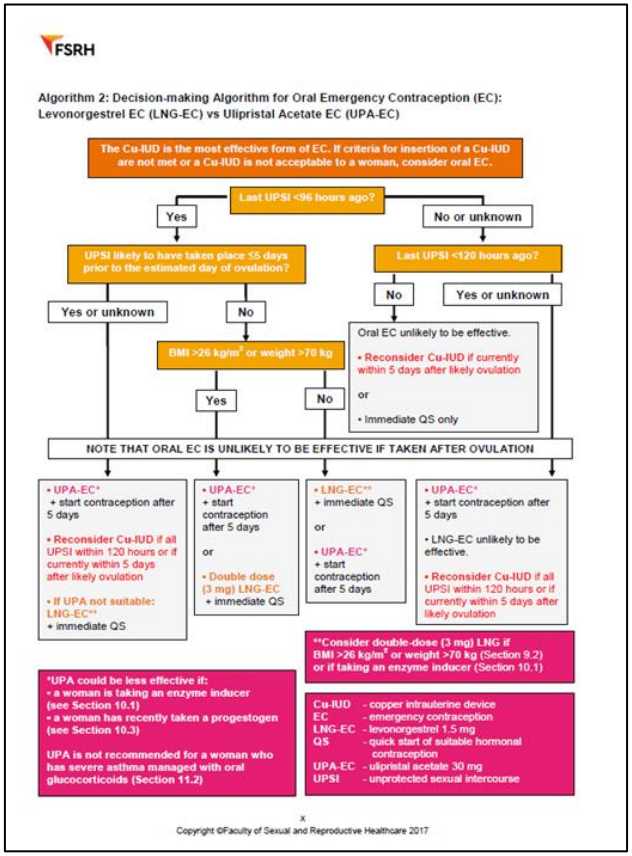
FSRH Clinical Guideline: Emergency Contraception (March 2017, amended December 2020)

When is emergency contraception (EC) indicated?

D	Women who do not wish to conceive should be offered EC after unprotected sexual intercourse (UPSI) that has taken place on any day of a natural menstrual cycle.
✓	Women who do not wish to conceive should be offered EC after: • UPSI from Day 21 after childbirth (unless the criteria for lactational amenorrhoea are met). • UPSI from Day 5 after abortion, miscarriage, ectopic pregnancy or uterine evacuation for gestational trophoblastic disease (GTD).
✓	Women who do not wish to conceive should be offered EC after UPSI if their regular contraception has been compromised or has been used incorrectly.

Decision making tool





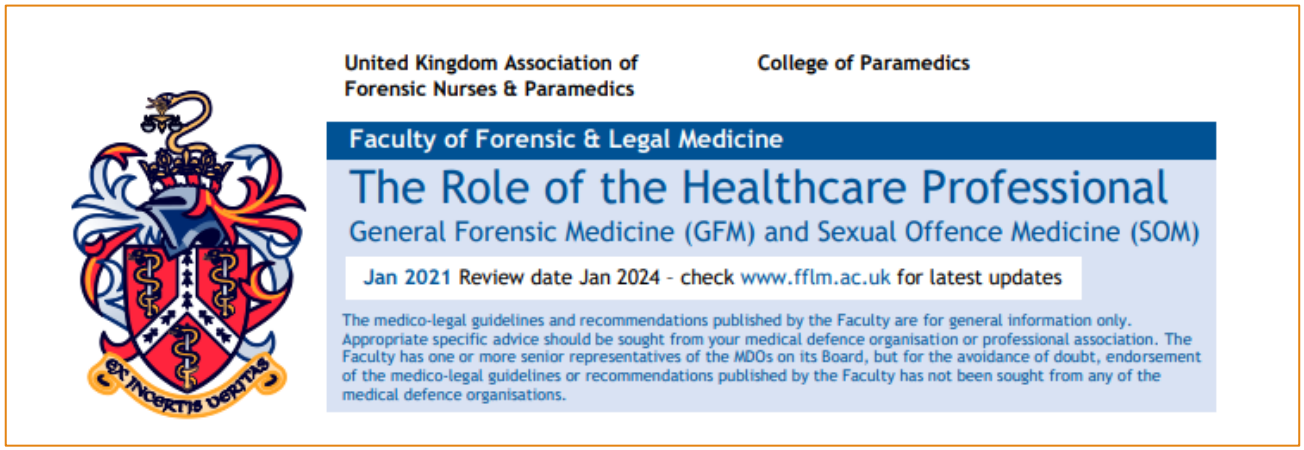
What type of EC to offer?

- Ulipristal acetate EC (UPA-EC)
  - Effective up to 120hrs after UPSI. More effective than LNG-EC
- Levonorgestrel 1500mg (LNG-EC)
  - Licensed for use up to 72 hours. No effect if ovulation has occurred
- Copper IUD (Cu-IUD)
  - The Cu-IUD is the most effective method of EC and can be fitted up to 5 days after UPSI or 5 days after earliest time of ovulation

EC advice and follow-up

- ❑ No EC is 100%
- ❑ Provide written information on emergency contraception, ongoing pregnancy risk if further UPSI occurs, and possible side effects
- ❑ Ensure they understand the importance of a further pregnancy test at 3 weeks after UPA-EC or LNG-EC
- ❑ Provide information about Cu-IUD, where to access and latest possible date to access
- ❑ Provide information about ongoing contraception and local SRH services

The acute presentation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What is PEPSE

- PEPSE is a combination of anti-retroviral medications (ART), taken for 28 days following a high risk exposure to reduce the risk of HIV transmission
- It should be commenced ideally within 24hrs but considered up to 72hrs
- Prescription (normally pre-packed):
  - **Truvada one tablet daily** (Tenofovir disoproxil ®245mg/Emtricitabine®200mg)
  - **Raltegravir 1200mg once daily** (600mg Isentress®)

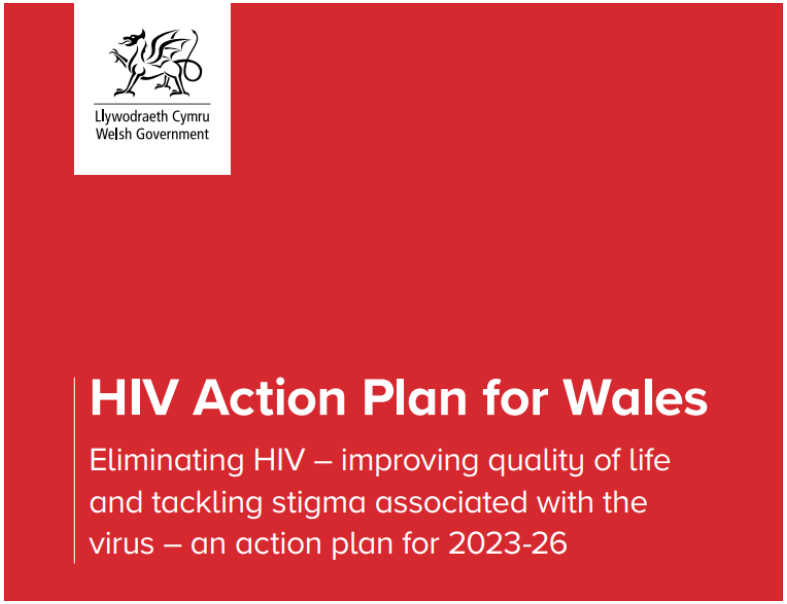
Number of individuals newly diagnosed with HIV, and rate per 100,000 population

Table 4: Number of individuals newly diagnosed with HIV and diagnosis rate per 100,000 population, by UK country and year, reported by UKHSA

	2017		2018		2019		2020		2021	
Country/ Region	New HIV diagnoses	Rate per 100,000 individuals	New HIV diagnoses	Rate per 100,000 individuals	New HIV diagnoses	Rate per 100,000 individuals	New HIV diagnoses	Rate per 100,000 individuals	New HIV diagnoses	Rate per 100,000 individuals
England	4,301	7.7	4,221	7.5	4,017	7.1	2,673	4.7	2,692	4.8
Northern Ireland	83	4.4	79	4.2	63	3.3	68	3.6	76	4.0
Scotland	265	4.9	222	4.1	197	3.6	-		-	
Wales	124	4.0	144	4.6	126	4.0	77	2.4	60	1.9
Total	4,773	7.2	4,666	7.0	4,403	6.6	2,818	4.2	2,828	4.2

- Year on year reduction in new HIV diagnosis in Wales
- 2021 saw the lowest recorded rate per 100,000 population
- In the UK in 2020 99% of those diagnosed with HIV have started treatment (Anti-retroviral treatment; ART), with 97% of these having a supressed viral load
- In Wales in 2020 of the 2,448 residents receiving care for HIV, 96% had an undetectable viral load
- U=U (Undetectable = Untransmissible)

HIV in Wales



- Between 2015-2021 75% reduction in new HIV diagnosis, in part due to availability of PrEP since 2017
- More people have been tested for HIV in the first quarter of 2022 than ever before (F2F and online)
- 30 Actions and 5 key areas: Prevention; testing; clinical care; living well with HIV; tackling HIV – related stigma
- Zero transmissions by 2030

When to prescribe PEPSE? BASHH *UK guideline for the use of HIV post-exposure prophylaxis 2021*

- *www.bashguidelines.org*
- Where there is significant risk of HIV exposure
- Risk will depend on
  - The type of sexual exposure
  - HIV viral load of the index case/perpetrator
  - The susceptibility of the recipient eg. Vaginal or anal trauma/ genital ulcer present
  - Multiple exposures within 72hrs

Risk of HIV transmission=
risk that source is HIV positive with a detectable VL (A) x risk per exposure (B)

Risk of Source (A)

TABLE 1 Number and prevalence of people with detectable (transmissible) levels of HIV per 1000 population aged 15–74 years, England 2018

	Estimated number of people with detectable HIV virus[a]	Estimated population size	Rate per 1000
Gay and bisexual men			
England	12,000	518,050	23.0
London	5000	155880	32.1
Elsewhere	7000	361090	20.9
Heterosexual men			
Black African	1900	331950	5.8
Non-black African	3840	19,563,630	0.2
Heterosexual women			
Black African	3240	373330	8.7
Non-black African	2530	20,308,360	0.1
PWID			
All	700	104,470	6.7
Men	400	77,340	5.3
Women	300	26,710	11.5

Risk per Exposure (B)

B. Risk of HIV transmission per exposure from a knwon HIV-positive individual not on ART	
Type of exposure	Estimated risk of HIV transmission per exposure from a known HIV-positive individual not on ART
Receptive anal intercourse (with ejaculation vs without)	1 in 90 (1 in 65 vs 1 in 170)
Insertive anal intercourse (circumcised vs uncircumcised)	1 in 666 (1 in 909 vs 1 in 161)
Receptive vaginal intercourse	1 in 1000
Insertive vaginal intercourse	1 in 1219
Semen splash in the eye	<1 in 10,000
Receptive oral sex	<1 in 10,000
Insertive oral sex	<1 in 10,000
Sharing injecting equipment (includes chemsex)	1 in 149

When to “consider”

Summary table of PEPSE prescribing recommendations . Please circle most appropriate.				
	Source HIV status			
	HIV-positive		Unknown HIV status	
	HIV VL unknown / detectable (>200 copies/mL)	HIV VL undetectable (<200 copies/mL)	From high prevalence country/risk-group (e.g. MSM)	From low prevalence country/group
Receptive anal sex	Recommend	Not Recommended Provided source has confirmed HIV VL<200c/mL for > six months	Recommend	Not Recommended
Insertive anal sex	Recommend	Not recommended	Consider	Not recommended
Receptive vaginal sex	Recommend	Not recommended	Generally not recommended	Not recommended
Insertive vaginal sex	Consider	Not recommended	Generally not recommended	Not recommended
Fellatio with ejaculation	Not recommended	Not recommended	Not recommended	Not recommended
Fellatio without ejaculation	Not recommended	Not recommended	Not recommended	Not recommended
Splash of semen into eye	Not recommended	Not recommended	Not recommended	Not recommended
Cunnilingus	Not recommended	Not recommended	Not recommended	Not recommended
Human bite	Not recommended	Not recommended	Not recommended	Not recommended

Factors increasing the risk of HIV transmission (*consider/generally not recommended)

1. A high plasma viral load (VL) in the index
2. Breaches in the mucosal barrier (eg. trauma, ulceration, first sex)
3. Menstruation or other bleeding (theoretical risk only)
4. Other STI present in either person
5. Pregnancy or post-partum
6. Multiple episodes of exposure in a short period of time
7. Individuals at higher risk of HIV transmission eg. transgender

Initiating PEPSE

Paperwork should be completed to show decision making process and prescribing

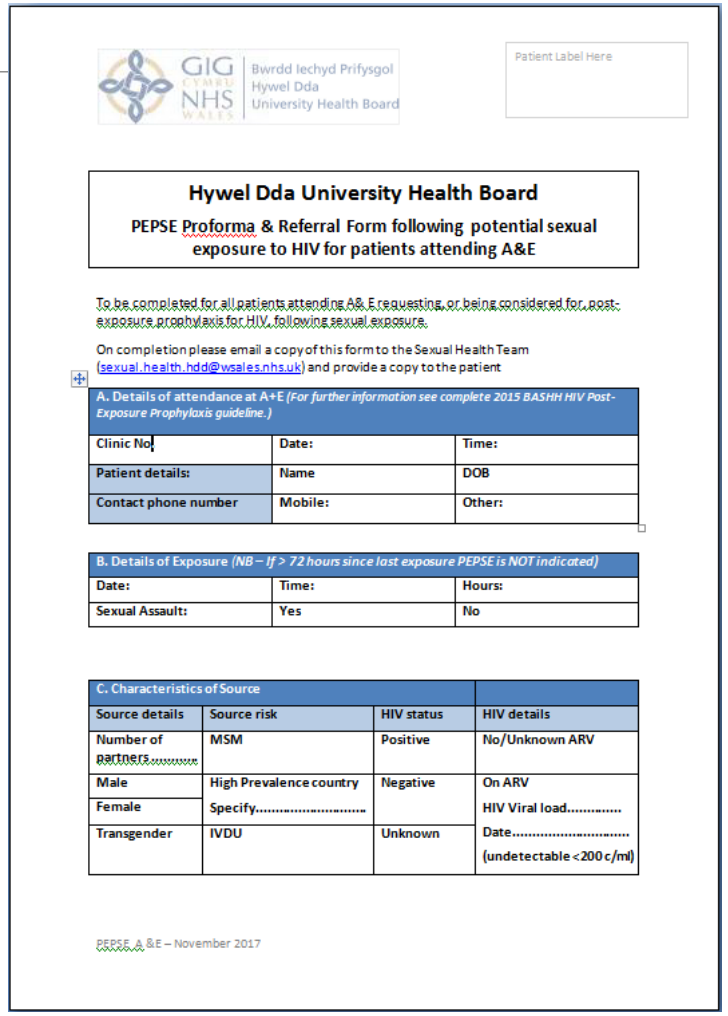
Complete baseline tests, (these need to be agreed locally).

Provide a 28 day pack of PEPSE

Arrange follow up at the Sexual Health Clinic (email/refer)

Provide Emergency Contraception, Hepatitis B vaccine following risk assessment

Provide information to the patient



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Patient Label Here

Hywel Dda University Health Board

PEPSE Proforma & Referral Form following potential sexual exposure to HIV for patients attending A&E

To be completed for all patients attending A& E requesting, or being considered for, post-exposure prophylaxis for HIV, following sexual exposure.

On completion please email a copy of this form to the Sexual Health Team (sexual.health.hdd@wsales.nhs.uk) and provide a copy to the patient

A. Details of attendance at A+E *(For further information see complete 2015 BASHH HIV Post-Exposure Prophylaxis guideline.)*		
Clinic No	Date:	Time:
Patient details:	Name	DOB
Contact phone number	Mobile:	Other:

B. Details of Exposure *(NB – If > 72 hours since last exposure PEPSE is NOT indicated)*		
Date:	Time:	Hours:
Sexual Assault:	Yes	No

C. Characteristics of Source			
Source details	Source risk	HIV status	HIV details
Number of partners.....	MSM	Positive	No/Unknown ARV
Male	High Prevalence country	Negative	On ARV
Female	Specify.....		HIV Viral load.....
Transgender	IVDU	Unknown	Date.....
			(undetectable <200 c/ml)

PEPSE A &E – November 2017

Tests (www.bash.org)

Gold Standard vs minimal testing

- POCT (4th generation)
- PT

	Baseline	2 weeks	12 weeks	6 months
SEXUAL EXPOSURES ONLY				
STI testing (per local policy)	✓	✓	✓Syphilis only (and other STIs If further unprotected sexual intercourse)	
ALL EXPOSURES				
Creatinine and eGFR	✓	Only if abnormalities at baseline		
Alanine transaminase	✓	Only if abnormalities at baseline or symptomatic		
Pregnancy test	✓	If appropriate	If appropriate	
HIV	**HIV-1 and HIV-2 Ag/Ab**		**HIV-1 and HIV-2 Ag/Ab**[a]	**Not required unless further exposures**
Hepatitis B	**HBsAb, HBsAg, HBcAb** *For immunocompetent adults who have completed HBV vaccination and responded (HBsAb ≥10 IU at any time), no baseline or follow-up HBV testing is required*		*If unvaccinated or HBsAb <10 IU at the time of exposure:* **HBsAb, HBsAg**	*Only advised if HBsAb remains <10 IU at 12 weeks:* **HBsAg**
Hepatitis C	**HCV Ab**		**HCV Ab** *If high risk exposure e.g. HCV+ index, then HCV PCR or HCV Ag is preferable as the window period is shorter for antigen-based tests and can be requested as early as 2 weeks post exposure*	*If high risk exposure, e.g. HCV+ index case and testing at week 12 negative:* **HCV Ab**

Missed PEPSE guidance

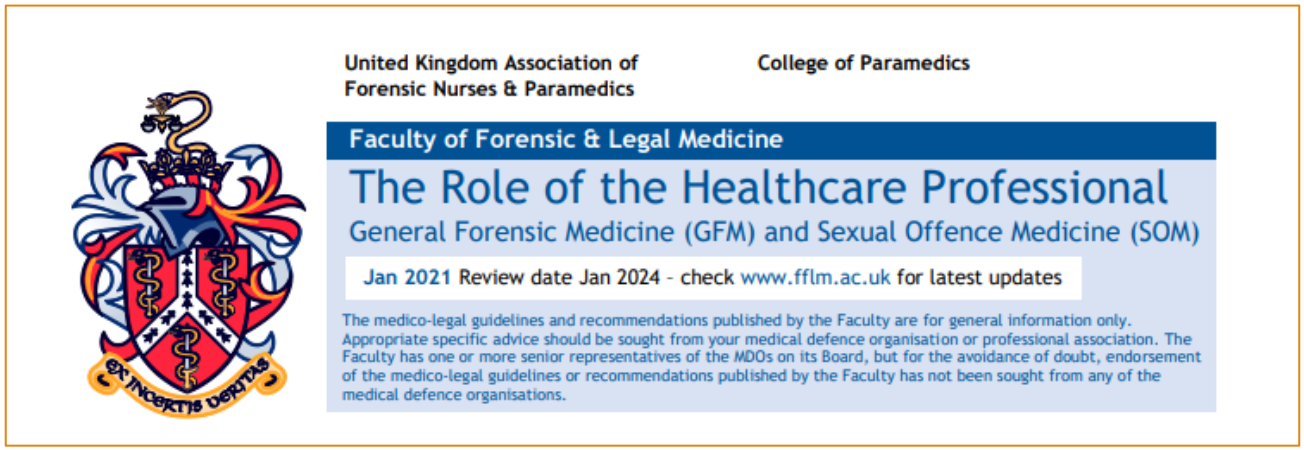
What if I miss my dose?

- If you forget to take a dose, take it as soon as you remember it
- However, if it is time for your next dose, skip the missed dose and go back to your regular schedule.
- Do not take a double dose to make up for a forgotten dose.
- If more than 48 h has elapsed since the last dose, then discontinue PEP.

Follow up

- Ensure patient has written information including what PEPSE is, how to take and what to do if they miss a dose/emergency contact details
- This may also include details of an online STI screening service (www.friskywales.org)
- Book a follow-up appointment with Sexual Health if able and provide a copy of the PEPSE paperwork/proforma

The acute presentation



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Heat table of diagnosis per 100,000 population, by disease and year in Wales

Table 3: Heat table of diagnoses per 100,000 population, by disease and year

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Chlamydia	195.9	208.3	217.2	212.7	244.6	254.2	239.8	250.7	154.4	252.6
Gonorrhoea	29.3	32.7	32.0	31.7	31.0	38.6	43.2	52.7	38.4	63.0
Syphilis	3.2	3.9	6.1	8.4	9.1	10.5	12.6	15.3	11.3	13.7
1st Herpes	34.7	36.8	39.9	39.4	48.0	45.5	50.5	51.9	32.1	33.1
1st Warts	108.6	106.6	103.9	101.4	102.3	95.5	86.0	74.6	38.7	38.1

- New diagnosis of all STIs fell during 2020, first year of Covid-19
- In 2021 Chlamydia and Gonorrhoea surpassed previous peaks
- In 2021 Syphilis almost as high as pre-pandemic levels, second highest incidence
- In 2021 1st Herpes and Warts diagnosis continues to drop

Sexually transmitted infections

- Consider baseline STI screening where appropriate
- Chlamydia and Gonorrhoea NAATS (2 weeks incubation)
  - Vulva-vaginal swab, can be self-taken
  - First-catch urine sample
  - For extra-genital samples (rectal and/or oral) swabs should be taken although sensitivities are variable
- Syphilis (up to 12 weeks incubation)
- Hepatitis B or A/B (**consider giving first vaccine at acute presentation**)
- Hepatitis C (MSM, People who inject drugs; PWID)

Follow up

- Provide information in a suitable format about STI, signs and symptoms, how and where to test
- Seek consent to refer to local sexual health clinic and provide information on type of assault, whether EC or PEPSE has been provided, what baseline tests have been taken, follow up arrangements
- Provide information on Test and Post (www.friskywales.org)
- Consider Chain of Evidence

Any questions?