

Prefixes

ILOs

After study of this chapter you should be able to:

1. Define a prefix and explain how prefixes are used.
2. Identify and define some of the prefixes used in medical terminology.
3. Use prefixes to form words used in medical terminology.
 - Added to the **front** of a term
 - May add meaning such as:
 - location of organ sub– = below
 - number of parts mono– = one
 - time (frequency) post– = after
 - Not all medical terms have a prefix
 - When written by itself, followed by a hyphen
 - intra–
 - hyper–
 - multi–

Prefixes for Numbers

Prefix	Meaning	Example Pronunciation	Definition	المعنى
Prim/i-	First	Primigravida Pri – mih – grav'ih - dah	Women pregnant for the first time	الحمل الأول أو أول حمل
Uni	One	Unilateral U – ni – lat – er - al	Affecting only one side	إصابة في جانب واحد
Mono-	One	Monoclonal Mon – o – klone'al	Pertaining to a cell colony arising from a single cell	وحيد النسيلة
Hemi-	half; one side	hemisphere HEM-i-sfe-r	one half of a rounded structure	نصف الكرة
Semi-	half; one side	semisolid sem-e--SOL-id	partially solid	شبه جامد
Bi-	Two, Twice	Bisexual Bi – seksh – e - wal	Possessing characters of both sexes	مزدوج الجنس
Di-	Two, Twice	Diplegia Di – ple 'je - ah	Paralysis affecting both sides of the body	شلل مزدوج
Diplo	Two(double), Twice	Diplopia Dih – plo 'pe - ah	Double vision	زغلة ازدواج رؤية
Tri-	Three	Tricuspid Tri – kus - pid	Having three points or cups, as a valve of the heart	صمام ثلاثي
Quadri-	Four	Quadriplegia kwad' – ri – ple je - ah	Paralysis of all four limbs	شلل رباعي
Tetra	Four	Tetrad Te - trad	A group or arrangement of four	مجموعات رباعية

Penta	Five	pentavalent pent – e – va - lent	Having a valence of five	خماسى التكافؤ
Hexa-	Six	Hexadactyly hek – sa – dak – te - le	The condition of having six fingers or toes on a hand or foot	أصبع زائدة فى اليد أو القدم
Multi	Many (more than one)	Multicellular mul ' – ti – sel – u - lar	Composed of many cells	متعدد الخلايا
Poly-	Many, much	Polymorphic pol – e – mor 'fik	Having many shapes	متعدد الأشكال

Fill in the blanks:

1. Monoclonal refers to a colony (clone) derived from..... cell(s).
2. The quadriceps muscle haspart(s).
3. To unify means to make two or more parts into part(s).
4. The term semilunar means moon(s).
5. A dichotomy haspart(s).
6. A multicellular organism hascell(s).
7. A tetralogy is composed ofelements or factors.
8. A triangle has angle(s).
9. Bipolar means havingpole(s).

Give a prefix that is similar in meaning to each of the following:

10. bi- _____
11. poly- _____
12. semi- _____
13. mon/o _____

Prefixes for colour

Prefix	Meaning	Example Pronunciation	Definition	المعنى
Alb	White	Albino Al – bi - no	A person with a white hair, very pale skin and non-pigmented iris	أبهق
Chlor/o	Green	Chlorophyll Klo – ro - fil	Any group of green pigments that are involved in oxygen producing photosynthesis	صبغة نباتية خضراء تستخدم فى التمثيل الضوئى
Chrom/o-	Color	Chromoprotien Kro – mo – pro - tein	A compound (as hemoglobin) of a protein with a metal – containing pigment (as heme) or a carotiniod	بروتين ملون
Cirrh/o	Orange – yellow	Cirrhosis Si – ro - sis	Disease characterized by orange – yellow discoloration of the affected organ	تشمع الكبد
Cyan/o-	Blue	Cyanosis Si 'ah – no - sis	A bluish discoloration of skin and mucous membranes	زرقة الجلد و الأغشية المخاطية
Erythr/o-	Red	Erythrocyte E – rith – ro - sit	A red blood cell containing hemoglobin and transporting oxygen	كره دموية حمراء تحتوى على هيموجلوبين و تنقل الأكسجين

Glauc/o	Greenish grey or silvery	Glaucoma Glaw – ko - ma	Eye disease characterized by an increase in intraocular pressure	مرض المياه الزرقاء بالعين
Leuk/o	White	Leucorrhea Lu – ko – re 'ah	White discharge from the vagina	افرازات مهبلية بيضاء
Luteo	Saffron yellow	Lutein Loo – te - in	A lipochrome from the corpus luteum, fat cells and egg yolk	دهن أصفر من الجسم الأصفر و صفار البيض
Melan/o	Black, dark	Melanoma Mel 'ah – no - mah	A skin tumor containing dark pigment	ورم اسود ميلانيني
Poli/o	Grey	Poliomyelitis Po 'le o mi 'li - tis	An acute viral disease due to attacking the grey matter of the spinal cord	شلل أطفال مرض فيروسى يهاجم الجزء الرمادى للحبل الشوكى
Xanth/o	yellow	Xanthochromia Zan 'th – kro – me - ah	Yellow discoloration of skin or spinal fluid	اصفرار الجلد أو السائل الشوكى

Match the following terms and write the appropriate letter to the left of each number:

- | | |
|-----------------------|---------------------------------------|
| _____ 1. melanocyte | a. pertaining to bluish discoloration |
| _____ 2. xanthoma | b. redness of the skin |
| _____ 3. cyanotic | c. yellow raised area on the skin |
| _____ 4. erythroderma | d. cell that produces dark pigment |
| _____ 5. leukemia | e. overgrowth of white blood cells |

Negative Prefixes

Prefix	Meaning	Example Pronunciation	Definition	المعنى
A -,an -	Not, Without,	Afebrile a – feb – ril	Without fever	غير حمى
	lack of, Absence	Anoxia an – ok – se - ah	Absence of oxygen supply to tissues	انعدام امدام الأكسجين
Anti -	Against	Antidote An 'ti - dote	A remedy that counteracts the effects of poisons	مضاد للسموم أو ترياق
Contra-	Against	Contralateral Kon – trah – lat 'er al	Pertaing to the opposite side	مقابل
De-	Down, loss, without, removal	Detoxify De – tok 'sih - fi	To remove a poison (toxin)	نازع سم
Dis-	Absence, removal, separation	Disinfect Dis – in - fekt	To remove infectious organisms	مطهر

In-, im- (used before b, m, p)	Not	insignificant in-sig-NIF-i-cant	not important	غير مهم
		Impotence Im 'po - tens	Unable to copulate because of inability to have and maintain an erection	ضعف جنسى
Un -	Not	Unconscious Un – kon 'shus	Not responsive	فاقد الوعى

Identify and define the prefix in each of the following words:

The term	Prefix	Meaning of Prefix
1. amorphous(without form)	a-	not, without, lack of, absence
2. antibody		
3. amnesia		
4. disintegrate		
5. contralateral		
6. incontinent		
7. dehumidify		
8. noncontributory		

Add a prefix to form the negative of each of the following words:

9. coordinated uncoordinated
10. adequate
11. infect
12. permeable (capable of being penetrated)

Prefixes for Positions, Directions and Time

Prefix	Meaning	Example Pronunciation	Definition	المعنى
Ab -	Away from	Abduction ab – duk – shun	To draw away from; to move away from midline	بعيداً عن الخط الأوسط للجسم
Ad -	Toward, near	Adduction ah – duk – shun	To draw toward a center or median line	قريب للخط الأوسط للجسم
Circum-	Around	Circumcision ser 'kum – sizz – un	Surgical removal of the foreskin of the penis	عملية الطهارة
Con -	With, together	Congenital kon – jen – ih - tal	Pertaining to conditions that are present at birth	وراثي
Dextr/o	Right	Dextrocardia desk – tro – kar 'de - ah	Location of the heart in the right side of the chest	حالة وجود القلب على الجانب الأيمن للصدر

Dia-	Through	Dialysis di - al 'ihsis	Separation by passage through a membrane	ديليز ه فصل المواد بالتمرير الغشائي
Ecto-	Out, outside	Ectopic ek - top - ik	Located away from a normal position	خارج الوضع الطبيعي
Ex/ o	Away from, outside	Excise ex - size	To cut out	استئصل
Endo -	In, within	Endoscope en 'do - skope	Device for viewing the inside of a cavity or organ	منظار لفحص الفجوات و الأعضاء
Epi -	Upon, over	Epigastric ep 'i - gas - tric	Pertaining to the upper and middle region of the abdomen	فوق المعدة أو البطن
Extra	Outside	Extrauterine ek 'strah - u - ter - in	Situated or occurring outside the uterus	متواجد خارج الرحم
In-	In, into, not	Infusion in - fu, zhun	Steeping a substance in water to obtain its soluble principles	خلاصة مائية أو منقوع مائي
Infra-	Below, under	Infrasternal in 'frah - ster - nal	Beneath the sternum	تحت القص

Intra-	Inside	Intracellular in – tra – sel – u - lar	Inside a cell	داخل الخلية
Ipsi-	Same, equal	Ipsilateral ip 'si – lat – er - al	Situated on or affecting the same side	على الجانبين
Iso-	Same, equal	Isograft i 'so - graft	Graft between two genetically identical individuals	زرع عضو في شخص متماثل وراثياً
Meso-	Middle	Mesoderm mez – o - derm	The middle of the three primary germ layers of the embryo	طبقة البشرة الوسطى في الجنين
Meta-	After, beyond	Metastasis me – tas – tah - sis	The transfer of disease e.g. cancer from one organ or part to another	انتشار المرض من عضو لآخر
Noct- Nyct-	Night	Nocturia nok – tu – re - ah	Excessive urination at night	سلس بولي ليلي
Pre-	Before, in front of	Premolar Pre - molar	The tooth preceding molar tooth	السن القاطعة قبل النايب

Peri-	Around, surrounding	Pericardium	The fibrous sac that surrounds the heart	غشاء القلب
Para-	Near, beside	Paramedical Par 'ah – medi - kal	Having some connection with or relation to the science or practice of medicine	عضو الفريق الطبي و الرعاية الصحية
Post-	After, behind	Postnatal Post – na ' - tal	Occurring after birth with reference to the newborn	يحدث بعد الولادة
Pro-	Before, in front of	Prophylaxis Pro – fih – lak 'sis	Prevention of disease	الوقاية من المرض
Retro-	Behind, backward	Retroperitoneal Ret 'ro – per – i – to – ne - al	Pertaining to, behind the peritoneum	خلف جدار البطن
Sub-	Under, near	Subcutaneous Sub 'ku – ta – ne - us	Beneath the skin	تحت الجلد
Trans-	Across through	Trans vaginal Tran 'vaj – l - nal	Through the vagina	عبر المهبل

Identify and define the prefix in each of the following words:

The term	Prefix	Meaning of Prefix
1. perforate		
2. adjacent		
3. abnormal		
4. diarrhea		
5. transfer		

Prefixes pertaining to Degree

Prefix	Meaning	Example Pronunciation	Definition	المعنى
Hyper-	Over, excess, abnormally high, increased	Hypertension hi – per – ten 'shun	High blood pressure	ضغط دم مرتفع
Hypo-	Under, below, abnormally low, decreased	Hypoventilation hi – po – ven – tih – la 'shun	Low amount of air entering the lung	انخفاض التهوية أو التنفس أو الهواء الداخل للرئة
Olig/o-	Few, scanty, deficiency of	Oligospermia ol – ih – go – sper 'me - ah	Low amount of sperm in the semen	انخفاض عدد الحيوانات المنوية
Pan-	All	Panplegia pan – ple 'je - ah	Total paralysis	شلل كلى
Super-	Above, excess	Superinfection su – per – in – fek 'shun	Second infection	عدوى ثانوية

Match the following terms and write the appropriate letter to the left of each number:

- _____ 1. pandemic a. located at the surface (above other structures)
 _____ 2. hyopsecretion b. less than the normal number of teeth
 _____ 3. hypertension c. underproduction of a substance
 _____ 4. oligodontia d. disease affecting an entire population
 _____ 5. superficial e. high blood pressure

Prefixes pertaining to Size and Comparison

Prefix	Meaning	Example Pronunciation	Definition	المعنى
Eu-	True, good, easy, normal	Euthanasia Uthan – naaze - ah	Easy or painless death	موت بدون ألم
Hetero-	Other, different, unequal	Heterosexual Het – er – o – sex 'u - al	Pertaining to the opposite sex	خاص بالجنس الأخر
Homo-, homeo-	Same, Unchanged	Homothermic Ho – mo – ther 'mik	Maintaining a constant body temperature, warm blooded	متماثل الحرارة ، نودم حار
Macro-	Large, Abnormally large	Macroscopic Mak – ro – skop 'ik	Visible with the naked eye	غير مجهرى و يرى بالعين المجردة

Mega- Megal-	Large, Abnormally large	Megabladder Meg – ah – blad 'er	Permanent enlargement of the bladder	تضخم المثانة
Micro-	Small	Microsurgery Mi 'kro - sur – jer - e	Surgery of extremely small structure under the microscope	جراحة ميكروسكوبية للأعضاء الدقيقة
Neo-	New	Neonate Ne 'o - nate	Newborn infant	طفل حديث الولادة
Normo-	Normal	Normovolemia No – mo – vol – e 'me - ah	Normal blood volume	حجم دم عادي
Poikil/o-	Varied, irregular	Poikiloderma Poy – kih – lo – der 'mah	Mottled condition of the skin	تعرج أو كرمشة الجلد - شيخوخة الجلد
Pseudo-	False	pseudoplegia s-u-d-o-PL-E-j -e-a	False paralysis	شلل زائف أو كاذب
Re-	Again, back	Reflux Re'fluks	Backward or return flow	تكثيف أو تدفق عكسي

Match the following terms and write the appropriate letter to the left of each number:

- _____ 1. reflux a. an irregularly shaped cell
_____ 2. orthodontic b. pertaining to normal body temperature
_____ 3. pseudoreaction c. backward flow
_____ 4. poikilocyte d. false response
_____ 5. normothermic e. pertaining to straight teeth

Identify and define the prefix in each of the following words:

	Prefix	Meaning of Prefix
6. equidistant		
7. orthopedics		
8. recuperate		
9. euthyroidism		
10. neocortex		
11. megacolon		
12. isometric		

Write the opposite of each of the following words:

13. heterogeneous (composed of different materials)

14. macroscopic (visible with the naked eye)

Miscellaneous Prefixes

Prefix	Meaning	Example Pronunciation	Definition	المعنى
Ana-	Up, apart	1- Anabolism ah – nab 'o – lizm 2- Analysis Ah – nal - ihsis	1- The type of metabolism in which body substances are made. 2- Breaking a part of a substance to know its content	بناء حيوى تحليل
Apo-	From	Apomorphine Ap – o – mor - fen	Derived from morphine	مشتق من المورفين
Ben-	Not bad	Benign Be - nine	Not malignant, favorable for recovery, tumors which do not spread	ورم حميد لا ينتشر لأعضاء أخرى
Brady-	Slow	Bradycardia Brad'e – kar – de – ah	Slowness of the heart rate	بطء ضربات القلب
Cata-	Down	Catabolism Kah – tab 'o - lizm	The type of metabolism in which substances are broken down	هدم حيوى

Dys-	Bad, painful	Dysuria Dis – u – re - ah	Painful of difficult urination	ألم و صعوبة فى التبول
Hydro-	Water	Hydrotherapy Hi 'dro – ther – a - pe	The treatment of disease by the internal or external use of water	علاج مائى
Mal-	Bad	Malignant Mah – lig 'nant	Growing worse; harmful, tending to cause death	خبىث
Py-	Pus	Pyogenic Pi 'o – jen - ik	Producing pus	صديدى أو منتج للصدىد
Tachy/-	Fast	Tachycardia Tak – e – kar – de - ah	Abnormally rapid heart rate	تسارع دقات القلب