



Department of Health

STATEWIDE NOTIFIABLE DISEASES WEEKLY REPORT

Epidemiology & Surveillance Program
Communicable Disease Control Directorate

Report for eight week period 27-NOV-22 to 21-JAN-23

GENERAL NOTES

1. Data are extracted on a weekly basis from the Western Australian Notifiable Infectious Diseases Database (WANIDD).
2. Data are provisional only and are subject to change.
3. For enquiries please contact the Communicable Disease Control Directorate (9222 0255) or a regional Public Health Unit.

SPECIFIC NOTES (numbers below refer to numbers in square brackets in tables)

1. If a disease is not listed it indicates that no notifications have been received in the preceding 12 months.
2. "Date of Onset" is a composite of the "true" date of onset provided by the notifying doctor, the date of specimen collection for laboratory notified cases, and when neither of these dates are available, the date of notification by the doctor or laboratory, or the date of receipt of the notification, whichever is earliest.

For blood-borne viruses (whether newly acquired or unspecified), leprosy, syphilis (non-infectious) and tuberculosis, data are provided by date of receipt at the PHU/CDCD.
3. Defined as mean of previous, comparable and subsequent 4-week periods for the past five years. For example, if the current 4-week period is April 2nd - 29th 2017, then this period is compared to the mean number of cases for fifteen 4-week intervals made up of March 5th - April 1st 2016, April 2nd - 29th 2016, and April 30th - May 27th 2016, and the corresponding periods for 2015, 2014, 2013 and 2012. That is, the comparison figure should represent an average expectation of the number of cases for a similar 4-week period of the year. For diseases that have been notifiable for less than 5 years, the mean figure for periods prior to the disease becoming notifiable will be 0.
4. Ratio = ratio of last 4 weeks total to mean of 15 four-week periods, as described in specific note 3.
5. Figures in parentheses are numbers of cases in corresponding period last year. If no figure appears, this indicates there were no cases.
6. Cumulative year-to-date rate. That is, total cases in the current year, divided by relevant population, expressed as cases per 100,000 population (crude notification rate). Population data are estimates based on Australian Bureau of Statistics population projection series 'B' for Western Australia using the Department of Health's Rates Calculator to derive regional populations.

Weekly surveillance reports can be accessed at:

http://ww2.health.wa.gov.au/Articles/F_I/Infectious-disease-data/Statewide-notifiable-diseases-weekly-report

Weekly Report for period 27-NOV-22 to 21-JAN-23

STATEWIDE notifications for past 8 weeks[1] (by date of onset[2])

Disease Category/Disease	Week Ending								Cumulative Total to end of week 3			Total Last 4 Weeks	Mean of 15 x 4 week periods[3]	Ratio [4]
	03/12	10/12	17/12	24/12	31/12	07/01	14/01	21/01	2023	2022	2021			
	Blood-borne diseases[2]													
Hepatitis B (newly acquired)	2			1		1			1	0	0	1	1.4	0.7
Hepatitis B (unspecified)	10	4	6	7	1	9	9	8	26	25	19	27	34.9	0.8
Hepatitis C (newly acquired)	1			2		1			1	6	2	1	7.7	0.1
Hepatitis C (unspecified)	12	10	15	8	12	8	15	14	37	42	53	49	66.7	0.7
Hepatitis D									0	0	0	0	0.4	0.0
Enteric diseases														
Campylobacteriosis	98	105	99	87	62	129	125	81	335	234	235	397	279.1	1.4
Cholera							1		1	0	0	1	0.0	0.0
Cryptosporidiosis	2	4	1	3	4	8	5	4	17	12	7	21	26.9	0.8
Hepatitis A		1		1					0	0	0	0	0.9	0.0
Listeriosis				1					0	0	1	0	0.7	0.0
Paratyphoid fever				1					0	0	0	0	0.6	0.0
Rotavirus	7	11	17	12	13	16	18	22	56	39	8	69	32.7	2.1
STEC/VTEC infection	5	5	10	8	6	7	9	5	21	10	14	27	11.5	2.4
Salmonellosis	32	39	23	18	16	22	30	32	84	70	90	100	149.1	0.7
Shigellosis	5	2	3	5	3	11	4	5	20	6	3	23	23.0	1.0
Typhoid			1		1				0	0	0	1	1.7	0.6
Vibrio parahaemolyticus									0	2	0	0	1.5	0.0
Yersiniosis	3		2	2	2	3		3	6	0	0	8	1.8	4.4
Sexually transmissible infections														
Chlamydia (genital)	215	260	220	178	63	202	244	247	693	698	682	756	872.1	0.9
Gonorrhoea	73	78	75	65	19	80	106	64	250	193	160	269	268.7	1.0
Syphilis (congenital)		1							0	1	0	0	0.2	0.0
Syphilis - Infectious	11	11	14	10	4	12	11	4	27	59	46	31	50.3	0.6
Syphilis - Non-Infectious	4	3	6	6		5	5	1	11	8	12	11	15.5	0.7
Vaccine preventable diseases														
Diphtheria									0	0	0	0	0.1	0.0
H. influenzae type b									0	0	0	0	0.1	0.0
Influenza	91	89	96	99	62	71	90	65	226	2	1	288	214.4	1.3
Mumps									0	0	0	0	1.0	0.0
Pertussis	1		3	2			1	1	2	3	3	2	43.1	0.0
Pneumococcal infection	3	4	2	3	4	2	2	2	6	6	6	10	10.0	1.0
Rubella (non-congenital)									0	0	0	0	0.0	0.0
Varicella (chicken pox)	8	10	13	9	13	5	3	4	12	13	16	25	42.7	0.6
Varicella (shingles)	48	59	41	53	32	37	37	17	91	154	177	123	189.4	0.6
Varicella (unspecified)	51	61	57	57	30	50	59	76	185	144	90	215	130.5	1.6
Vector-borne diseases														
Barmah Forest virus	1		1			1			1	1	2	1	1.8	0.6
Chikungunya									0	0	0	0	0.4	0.0
Dengue fever	4	3	3	1	2	3	3		6	0	0	8	10.3	0.8
Malaria	2	1	1	3		1	1	1	3	1	1	3	2.9	1.0
Murray Valley encephalitis virus									0	0	0	0	0.0	0.0
Ross River virus	3	1	2	3		2	3	2	7	90	87	7	61.9	0.1
Typhus	1					1	1		2	0	2	2	1.9	1.0
Zika virus									0	0	0	0	0.0	0.0
Zoonotic diseases														
Leptospirosis	1								0	0	1	0	0.7	0.0
Q Fever						1			1	0	0	1	0.5	1.9
Other diseases														
Acute post-streptococcal glomerulon									0	1	0	0	1.3	0.0
COVID-19	4	4	3	2	2	1		1	2	240	24	4	155.3	0.0
Creutzfeldt-Jakob disease									0	0	0	0	0.5	0.0
Legionellosis	1				1	1	1		2	5	0	3	3.4	0.9
Leprosy		1							0	1	0	0	0.1	0.0
Melioidosis				1		1			1	0	0	1	0.2	5.0
Meningococcal infection		1		1	1				0	2	2	1	2.1	0.5
Monkeypox virus									0	0	0	0	0.0	0.0
RSV	87	80	77	53	38	56	38	28	122	527	0	160	93.2	1.7
Tuberculosis	5	3	1	1		6		2	8	2	9	8	9.4	0.9
iGAS	6	5	5	12	6	6	5	3	14	9	0	20	2.7	7.3
Grand Total	797	856	797	715	397	759	826	692						

METROPOLITAN notifications for past 8 weeks[1] (by date of onset[2])

Disease Category/Disease	Week Ending								Cumulative Total to end of week 3			Total Last 4 Weeks	Mean of 15 x 4 week periods[3]	Ratio [4]
	03/12	10/12	17/12	24/12	31/12	07/01	14/01	21/01	2023	2022	2021			
	Blood-borne diseases[2]													
Hepatitis B (newly acquired)	1								0	0	0	0	0.9	0.0
Hepatitis B (unspecified)	9	3	4	5	1	8	6	6	20	17	13	21	27.5	0.8
Hepatitis C (newly acquired)	1			2		1			1	4	2	1	6.3	0.2
Hepatitis C (unspecified)	7	8	11	6	4	6	12	14	32	34	37	36	47.9	0.8
Hepatitis D									0	0	0	0	0.4	0.0
Enteric diseases														
Campylobacteriosis	68	81	79	71	44	108	98	61	267	193	200	311	220.0	1.4
Cholera							1		1	0	0	1	0.0	0.0
Cryptosporidiosis		1		2	2	4	1	1	6	7	7	8	20.9	0.4
Hepatitis A		1		1					0	0	0	0	0.9	0.0
Listeriosis				1					0	0	0	0	0.5	0.0
Paratyphoid fever				1					0	0	0	0	0.6	0.0
Rotavirus	7	8	14	11	10	13	16	21	50	32	7	60	28.7	2.1
STEC/VTEC infection	1	3	5	4	3	4	5	2	11	6	10	14	9.1	1.5
Salmonellosis	24	24	15	13	11	16	27	25	68	51	71	79	115.5	0.7
Shigellosis	2	1	2	3		8	3	5	16	5	1	16	12.6	1.3
Typhoid			1		1				0	0	0	1	1.7	0.6
Vibrio parahaemolyticus									0	2	0	0	1.5	0.0
Yersiniosis	3		2	1	2	3		2	5	0	0	7	1.7	4.0
Sexually transmissible infections														
Chlamydia (genital)	160	212	177	140	49	161	181	203	545	545	539	594	684.5	0.9
Gonorrhoea	48	53	55	54	8	62	76	50	188	130	91	196	177.8	1.1
Syphilis (congenital)		1							0	0	0	0	0.1	0.0
Syphilis - Infectious	7	8	12	7	2	5	5	4	14	40	26	16	32.1	0.5
Syphilis - Non-Infectious	2	1	3	6		3			3	4	10	3	11.6	0.3
Vaccine preventable diseases														
Diphtheria									0	0	0	0	0.1	0.0
Influenza	74	73	80	83	49	64	77	51	192	1	1	241	165.8	1.5
Pertussis	1		1				1	1	2	1	3	2	31.9	0.1
Pneumococcal infection	3	1	2	2	3	2	1		3	4	1	6	5.6	1.1
Rubella (non-congenital)									0	0	0	0	0.0	0.0
Varicella (chicken pox)	6	7	11	7	7	4	3	1	8	13	11	15	32.7	0.5
Varicella (shingles)	32	31	30	34	21	26	23	10	59	114	118	80	135.3	0.6
Varicella (unspecified)	46	59	56	54	29	41	57	71	169	134	88	198	125.9	1.6
Vector-borne diseases														
Barmah Forest virus	1		1			1			1	0	0	1	0.3	3.0
Chikungunya									0	0	0	0	0.1	0.0
Dengue fever	4	3	3	1	2	3	2		5	0	0	7	9.0	0.8
Malaria	2	1	1	2			1	1	2	1	0	2	2.3	0.9
Ross River virus	2			2		2	3	2	7	61	34	7	38.3	0.2
Typhus							1		1	0	0	1	0.9	1.1
Zika virus									0	0	0	0	0.0	0.0
Zoonotic diseases														
Q Fever									0	0	0	0	0.1	0.0
Other diseases														
Acute post-streptococcal glomerulon									0	0	0	0	0.0	0.0
Creutzfeldt-Jakob disease									0	0	0	0	0.5	0.0
Legionellosis	1				1	1	1		2	3	0	3	2.5	1.2
Leprosy		1							0	1	0	0	0.1	0.0
Meningococcal infection		1		1	1				0	2	1	1	1.3	0.8
Monkeypox virus									0	0	0	0	0.0	0.0
RSV	53	34	34	30	24	36	26	22	84	389	0	108	62.6	1.7
Tuberculosis	5	2				5		1	6	1	9	6	8.0	0.8
iGAS	5	3	3	8	6	5	2	3	10	4	0	16	1.8	8.9
Grand Total	575	621	602	552	280	592	629	557						

Notifications in last week and for last 4 weeks by REGION[1] (by date of onset[2])

Disease Category/Disease	Metropolitan area (North)			Metropolitan area (South)			Metropolitan area (East)		
	Last Week	Last 4 Weeks[5]	Cum. YTD Rate[6]	Last Week	Last 4 Weeks[5]	Cum. YTD Rate[6]	Last Week	Last 4 Weeks[5]	Cum. YTD Rate[6]
Blood-borne diseases[2]									
Hepatitis B (newly acquired)									
Hepatitis B (unspecified)	2	4 (4)	0.5	2	5 (5)	0.7	2	12 (9)	1.5
Hepatitis C (newly acquired)								1 (3)	0.1
Hepatitis C (unspecified)	3	5 (6)	0.7	3	11 (14)	1.3	8	20 (24)	2.4
Enteric diseases									
Campylobacteriosis	25	113 (77)	13.3	16	91 (75)	10.6	20	107 (80)	12.8
Cholera					1	0.1			
Cryptosporidiosis		2 (3)	0.1		3 (1)	0.3	1	3 (3)	0.4
Rotavirus	7	22 (10)	2.6	6	16 (18)	1.9	8	22 (15)	2.4
STEC/VTEC infection	1	4	0.3	1	5 (2)	0.6		5 (4)	0.7
Salmonellosis	13	33 (24)	4.2	8	30 (16)	3.4	4	16 (24)	1.9
Shigellosis	3	10 (3)	1.3	1	2 (2)	0.3	1	4 (1)	0.5
Typhoid		1							
Yersiniosis		3	0.3	1	2	0.1	1	2	0.3
Sexually transmissible infections									
Chlamydia (genital)	68	175 (189)	21.5	51	175 (173)	23.0	84	244 (270)	30.6
Gonorrhoea	16	59 (43)	7.4	14	61 (31)	8.7	20	76 (73)	9.9
Syphilis - Infectious		1 (9)	0.1	4	8 (8)	0.9		7 (25)	0.9
Syphilis - Non-Infectious		2 (3)	0.3					1 (2)	0.1
Vaccine preventable diseases									
Influenza	25	107	12.8	13	74	8.0	13	60 (1)	5.7
Pertussis		1 (1)	0.1	1	1	0.1			
Pneumococcal infection		1 (2)	0.1		2 (1)			3 (2)	0.3
Varicella (chicken pox)		8 (6)	0.7		3 (11)	0.3	1	4 (8)	0.1
Varicella (shingles)	2	23 (44)	2.0	4	31 (56)	3.2	4	26 (39)	2.9
Varicella (unspecified)	33	80 (51)	8.8	18	48 (64)	6.5	20	70 (59)	8.0
Vector-borne diseases									
Barmah Forest virus		1	0.1						
Dengue fever		3	0.4		3	0.1		1	0.1
Malaria	1	1	0.1					1 (1)	0.1
Ross River virus	1	2 (12)	0.3	1	4 (31)	0.6		1 (27)	0.1
Typhus		1	0.1						
Zoonotic diseases									
Q Fever									
Other diseases									
COVID-19									
Legionellosis		2 (2)	0.1					1 (2)	0.1
Melioidosis									
Meningococcal infection								1 (2)	
RSV	9	39 (138)	3.8	3	35 (168)	4.0	10	34 (176)	3.9
Tuberculosis		2	0.3		1	0.1	1	3 (5)	0.4
iGAS		4 (3)	0.1	1	6 (1)	0.4	2	6 (3)	0.8
Grand Total	209	709 (630)		148	618 (677)		200	731 (858)	

Notifications in last week and for last 4 weeks by REGION[1] (by date of onset[2])

Disease Category/Disease	Southwest			Great Southern			Coastal and Wheatbelt		
	Last Week	Last 4 Weeks[5]	Cum. YTD Rate[6]	Last Week	Last 4 Weeks[5]	Cum. YTD Rate[6]	Last Week	Last 4 Weeks[5]	Cum. YTD Rate[6]
Blood-borne diseases[2]									
Hepatitis B (newly acquired)		1	0.5						
Hepatitis B (unspecified)					1	1.6		1 (2)	1.4
Hepatitis C (newly acquired)									
Hepatitis C (unspecified)		2 (1)			1 (1)	1.6		1 (1)	
Enteric diseases									
Campylobacteriosis	9	35 (31)	14.0		14 (9)	17.9	3	11 (4)	12.2
Cholera									
Cryptosporidiosis	1	4 (4)	1.6						
Rotavirus	1	4 (2)	1.6						
STEC/VTEC infection	1	4	1.6		1	1.6		1 (2)	1.4
Salmonellosis	2	3 (7)	1.6	1	2	3.2		2 (1)	1.4
Shigellosis									
Typhoid									
Yersiniosis	1	1	0.5						
Sexually transmissible infections									
Chlamydia (genital)	11	47 (26)	23.7	1	6 (10)	4.9	2	9 (12)	10.8
Gonorrhoea	3	12 (4)	5.4	1	1 (1)	1.6		2 (2)	1.4
Syphilis - Infectious		1 (2)	0.5					1	1.4
Syphilis - Non-Infectious		1	0.5						
Vaccine preventable diseases									
Influenza	1	7 (1)	2.7		3	3.2		2	2.7
Pertussis									
Pneumococcal infection									
Varicella (chicken pox)	2	3	1.6		1			1	
Varicella (shingles)	4	21 (21)	9.2	1	8 (3)	9.7		2 (3)	
Varicella (unspecified)		1	0.5	1	3 (3)	4.9	2	4	5.4
Vector-borne diseases									
Barmah Forest virus									
Dengue fever									
Malaria									
Ross River virus									
Typhus									
Zoonotic diseases									
Q Fever		1	0.5						
Other diseases									
COVID-19		1 (2)							
Legionellosis									
Melioidosis									
Meningococcal infection									
RSV	1	5 (54)	2.7	1	4 (15)	6.5		3 (13)	2.7
Tuberculosis									
iGAS		1 (2)	0.5						
Grand Total	37	155 (157)		6	45 (42)		7	40 (40)	

Notifications in last week and for last 4 weeks by REGION[1] (by date of onset[2])

Disease Category/Disease	Midwest			Goldfields			Pilbara		
	Last Week	Last 4 Weeks[5]	Cum. YTD Rate[6]	Last Week	Last 4 Weeks[5]	Cum. YTD Rate[6]	Last Week	Last 4 Weeks[5]	Cum. YTD Rate[6]
Blood-borne diseases[2]									
Hepatitis B (newly acquired)									
Hepatitis B (unspecified)	1	1 (3)	1.7	1	1	2.0		2 (2)	3.4
Hepatitis C (newly acquired)									
Hepatitis C (unspecified)		4 (1)	5.1		2 (1)	2.0		3 (3)	
Enteric diseases									
Campylobacteriosis	2	5 (1)	8.6	1	3 (2)	4.0		3 (6)	1.7
Cholera									
Cryptosporidiosis									
Rotavirus					1			2 (1)	3.4
STEC/VTEC infection		1	1.7				1	1	1.7
Salmonellosis					1 (2)		1	3 (5)	5.1
Shigellosis					1	2.0			
Typhoid									
Yersiniosis									
Sexually transmissible infections									
Chlamydia (genital)	8	18 (24)	30.8	8	15 (23)	28.3	5	23 (24)	35.9
Gonorrhoea		3 (6)	1.7	2	12 (12)	20.2	2	12 (15)	20.5
Syphilis - Infectious		3 (2)	3.4					8 (7)	13.7
Syphilis - Non-Infectious	1	2	3.4		2 (1)	4.0		3 (1)	5.1
Vaccine preventable diseases									
Influenza		4	5.1		3	4.0		1	
Pertussis									
Pneumococcal infection				1	1 (2)	2.0	1	1	1.7
Varicella (chicken pox)				1	4	2.0			
Varicella (shingles)		1 (6)	1.7		2 (9)	2.0		1 (2)	1.7
Varicella (unspecified)	1	3 (6)	5.1						
Vector-borne diseases									
Barmah Forest virus									
Dengue fever									
Malaria					1	2.0			
Ross River virus									
Typhus									
Zoonotic diseases									
Q Fever									
Other diseases									
COVID-19	1	1 (2)	1.7						
Legionellosis									
Melioidosis									
Meningococcal infection									
RSV	2	8 (40)	10.3		3 (3)	6.1		11 (39)	8.5
Tuberculosis								1	1.7
iGAS								2 (1)	3.4
Grand Total	16	54 (91)		14	52 (55)		10	77 (106)	

Notifications in last week and for last 4 weeks by REGION[1] (by date of onset[2])

Disease Category/Disease	Kimberley			STATE TOTAL		
	Last Week	Last 4 Weeks[5]	Cum. YTD Rate[6]	Last Week	Last 4 Weeks[5]	Cum. YTD Rate[6]
Blood-borne diseases[2]						
Hepatitis B (newly acquired)				0	1 (0)	0.1
Hepatitis B (unspecified)				8	27 (29)	1.0
Hepatitis C (newly acquired)				0	1 (6)	0.0
Hepatitis C (unspecified)				14	49 (53)	1.4
Enteric diseases						
Campylobacteriosis	2	5 (2)	14.7	81	397 (288)	12.5
Cholera				0	1 (0)	0.0
Cryptosporidiosis	2	9 (3)	23.5	4	21 (15)	0.6
Rotavirus		1 (1)	2.9	22	69 (53)	2.1
STEC/VTEC infection	1	4 (1)	5.9	5	27 (10)	0.8
Salmonellosis	2	6 (5)	14.7	32	100 (87)	3.1
Shigellosis		6 (1)	8.8	5	23 (8)	0.7
Typhoid				0	1 (0)	0.0
Yersiniosis				3	8 (0)	0.2
Sexually transmissible infections						
Chlamydia (genital)	6	37 (45)	97.1	247	756 (805)	25.8
Gonorrhoea	5	27 (36)	67.6	64	269 (225)	9.3
Syphilis - Infectious		1 (7)		4	31 (66)	1.0
Syphilis - Non-Infectious				1	11 (11)	0.2
Vaccine preventable diseases						
Influenza	10	12	29.4	65	288 (2)	8.4
Pertussis				1	2 (4)	0.1
Pneumococcal infection		1		2	10 (7)	0.2
Varicella (chicken pox)				4	25 (26)	0.4
Varicella (shingles)	1	3 (4)	8.8	17	123 (188)	3.4
Varicella (unspecified)				76	215 (184)	6.9
Vector-borne diseases						
Barmah Forest virus				0	1 (1)	0.0
Dengue fever				0	8 (0)	0.2
Malaria				1	3 (1)	0.1
Ross River virus				2	7 (102)	0.3
Typhus				0	2 (1)	0.1
Zoonotic diseases						
Q Fever				0	1 (1)	0.0
Other diseases						
COVID-19		2	2.9	1	4 (270)	0.1
Legionellosis				0	3 (7)	0.1
Melioidosis		1	2.9	0	1 (0)	0.0
Meningococcal infection				0	1 (3)	0.0
RSV	2	15 (10)	35.3	28	160 (662)	4.5
Tuberculosis				2	8 (6)	0.1
iGAS				3	20 (12)	0.5
Grand Total	31	130 (115)		692	2674 (3139)	

Statewide Salmonella notifications for past 8 weeks (by date of onset[2])

	Week Ending								Cumulative Total to end of Week 3	
	03/12	10/12	17/12	24/12	31/12	07/01	14/01	21/01	2023	2022
	Salmonella Total	32	39	23	18	16	22	30	32	84
Serotype/Phage										
Salmonella Abony	1								0	0
Salmonella Agona	4								0	1
Salmonella Anatum	1					1	1		2	2
Salmonella Bareilly		1							0	0
Salmonella Bovismorbificans			1	1		1			1	1
Salmonella Brandenburg		1	1						0	0
Salmonella Chailey							1		1	0
Salmonella Chester	2	3	4	4	3	1	1	1	3	0
Salmonella Choleraesuis bv Decatur					1				0	0
Salmonella Corvallis		1							0	0
Salmonella Enteritidis	2		1		1	1	2		3	0
Salmonella Give			1						0	2
Salmonella Kentucky	1				2				0	0
Salmonella Kottbus						1	1		2	0
Salmonella Lansing		1							0	0
Salmonella Litchfield			1						0	1
Salmonella Montevideo						1			1	0
Salmonella Muenchen		1	2			1			1	1
Salmonella Newport				1		1			1	0
Salmonella Ohlstedt					1				0	0
Salmonella Oranienburg		1	1						0	3
Salmonella Paratyphi B bv Java		1	1			1	3		4	1
Salmonella Poona		1							0	0
Salmonella Potsdam	1					1			1	1
Salmonella Reading						1		1	2	1
Salmonella Saintpaul	1	1	2			4	2		6	2
Salmonella Singapore			1						0	0
Salmonella Stanley						1	1		2	5
Salmonella Thompson		1							0	1
Salmonella Typhimurium	15	16	3	6	2	1	9	3	13	34
Salmonella Virchow				1					0	2
Salmonella Wandsbek subsp II	1								0	0
Salmonella Weltevreden	1								0	0
Salmonella species	2	10	4	5	6	5	9	27	41	1