

Reporting Title: CBC with Differential, B
Performing Location: Rochester

Specimen Requirements:

Container/Tube: Lavender top (EDTA)

Specimen Volume: 3 mL

Specimen Minimum Volume:

1.5 mL

Specimen Type	Temperature	Time	Special Container
Whole Blood EDTA	Refrigerated (preferred)	48 hours	
	Ambient	24 hours	

Result Codes:

Result ID	Reporting Name	Type	Unit	LOINC®
HGB	Hemoglobin Also used by tests: HGB, HNH, CBCJD, CBCJ, CBCN	Numeric	g/dL	718-7
HCT	Hematocrit Also used by tests: HCT, HNH, CBCJD, CBCJ, CBCN	Numeric	%	4544-3
RBC	Erythrocytes Also used by tests: RETB, CBCN, CBCJD, CBCJ	Numeric	x10(12)/L	789-8
MCV	MCV Also used by tests: CBCN, CBCJ, CBCJD	Numeric	fL	787-2
RDW	RDW Also used by tests: CBCN	Numeric	%	788-0
WBC	Leukocytes Also used by tests: CBCN, CBCJD, CBCJ	Numeric	x10(9)/L	6690-2
NEUAA	Neutrophils, Abs Also used by tests: CBCJD	Numeric	x10(9)/L	751-8

Result ID	Reporting Name	Type	Unit	LOINC®
LYMAA	Lymphocytes, Abs Also used by tests: CBCJD	Numeric	x10(9)/L	731-0
MONAA	Monocytes, Abs Also used by tests: CBCJD	Numeric	x10(9)/L	742-7
EOSAA	Eosinophils, Abs Also used by tests: CBCJD	Numeric	x10(9)/L	711-2
BASAA	Basophils, Abs Also used by tests: CBCJD	Numeric	x10(9)/L	704-7
PLTC	Platelet Count Also used by tests: CBCJ, PLTC, CBCJD, CBCN	Numeric	x10(9)/L	777-3

LOINC and CPT codes are provided by the performing laboratory.

Supplemental Report:

No

CPT Code Information:

85025
85007 (if appropriate)
85060 (if appropriate)

Reflex Tests:

Test ID	Reporting Name	CPT Units	CPT Code	Always Performed	Orderable Separately
DIFFR	Morphology Eval (special Smear)			No	No
PINTP	Peripheral Smear Interpretation			No	No
PBPC	Peripheral Blood			Yes	No (Bill Only)
LCMSB	Leukemia/Lymphoma Phenotype			No	Yes
FCINT	Flow Cytometry Interp, 2-8 Markers			No	No (Bill Only)
FCIMS	Flow Cytometry Interp, 9-15 Markers			No	No (Bill Only)

Test ID	Reporting Name	CPT Units	CPT Code	Always Performed	Orderable Separately
FCINS	Flow Cytometry Interp,16 or greater			No	No (Bill Only)
FIRST	Flow Cytometry, Cell Surface, First			Yes	No (Bill Only)
ADD1	Flow Cytometry, Cell Surface, Addl			Yes	No (Bill Only)
CEE49	CD49d Cell Expression Evaluation, V			No	Yes

Result Codes for Reflex Tests:

Test ID	Result ID	Reporting Name	Type	Unit	LOINC®
DIFFR	SEGBA	Neutrophilic Segs and Bands	Numeric	%	23761-0
DIFFR	LYMPH	Lymphocytes	Numeric	%	26478-8
DIFFR	MONOC	Monocytes	Numeric	%	26485-3
DIFFR	EOS	Eosinophils	Numeric	%	714-6
DIFFR	BASO	Basophils	Numeric	%	707-0
DIFFR	META	Metamyelocytes	Numeric	%	740-1
DIFFR	MYEL	Myelocytes	Numeric	%	749-2
DIFFR	PROMY	Promyelocytes	Numeric	%	783-1
DIFFR	UBLS	Blasts	Numeric	%	709-6
DIFFR	PLSM	Plasma Cells	Numeric	%	79426-3
DIFFR	M_KR	Megakaryocytes	Numeric	/100 WBC	19252-6
DIFFR	NUCL	Nucleated RBC	Numeric	/100 WBC	19048-8
DIFFR	FRAGC	Fragile Cells	Alphanumeric		34992-8
DIFFR	BL_PR	Blasts and Promonocytes	Numeric	%	709-6
DIFFR	MANC	Manual Absolute Neutrophil Count	Numeric	x10(9)/L	753-4
DIFFR	INT01	Interpretation	Alphanumeric		59466-3
DIFFR	REV96	Reviewed by:	Alphanumeric		18771-6
PINTP	71447	Interpretation	Alphanumeric		14869-2
PINTP	71442	Participated in the Interpretation	Alphanumeric		No LOINC Needed

Test ID	Result ID	Reporting Name	Type	Unit	LOINC®
PINTP	71443	Report electronically signed by	Alphanumeric		19139-5
PINTP	71832	Case Number	Alphanumeric		80398-1

Reference Values:**RED BLOOD CELL COUNT (RBC)****Males:**

0-14 days: $4.10-5.55 \times 10(12)/L$
15 days-4 weeks: $3.16-4.63 \times 10(12)/L$
5 weeks-7 weeks: $3.02-4.22 \times 10(12)/L$
8 weeks-5 months: $3.43-4.80 \times 10(12)/L$
6 months-23 months: $4.03-5.07 \times 10(12)/L$
24 months-35 months: $3.89-4.97 \times 10(12)/L$
3-5 years: $4.00-5.10 \times 10(12)/L$
6-10 years: $4.10-5.20 \times 10(12)/L$
11-14 years: $4.20-5.30 \times 10(12)/L$
15-17 years: $4.30-5.70 \times 10(12)/L$
Adults: $4.35-5.65 \times 10(12)/L$

Females:

0-14 days: $4.12-5.74 \times 10(12)/L$
15 days-4 weeks: $3.32-4.80 \times 10(12)/L$
5 weeks-7 weeks: $2.93-3.87 \times 10(12)/L$
8 weeks-5 months: $3.45-4.75 \times 10(12)/L$
6 months-23 months: $3.97-5.01 \times 10(12)/L$
24 months-35 months: $3.84-4.92 \times 10(12)/L$
3-5 years: $4.00-5.10 \times 10(12)/L$
6-10 years: $4.10-5.20 \times 10(12)/L$
11-14 years: $4.10-5.10 \times 10(12)/L$
15-17 years: $3.80-5.00 \times 10(12)/L$
Adults: $3.92-5.13 \times 10(12)/L$

HEMOGLOBIN**Males:**

0-14 days: 13.9-19.1 g/dL
15 days-4 weeks: 10.0-15.3 g/dL
5 weeks-7 weeks: 8.9-12.7 g/dL
8 weeks-5 months: 9.6-12.4 g/dL
6 months-23 months: 10.1-12.5 g/dL
24 months-35 months: 10.2-12.7 g/dL
3-5 years: 11.4-14.3 g/dL
6-8 years: 11.5-14.3 g/dL
9-10 years: 11.8-14.7 g/dL
11-14 years: 12.4-15.7 g/dL
15-17 years: 13.3-16.9 g/dL
Adults: 13.2-16.6 g/dL

Females:

0-14 days: 13.4-20.0 g/dL
15 days-4 weeks: 10.8-14.6 g/dL
5 weeks-7 weeks: 9.2-11.4 g/dL
8 weeks-5 months: 9.9-12.4 g/dL
6 months-35 months: 10.2-12.7 g/dL
3-5 years: 11.4-14.3 g/dL
6-8 years: 11.5-14.3 g/dL
9-10 years: 11.8-14.7 g/dL
11-17 years: 11.9-14.8 g/dL
Adults: 11.6-15.0 g/dL

HEMATOCRIT

Males:

0-14 days: 39.8-53.6%
15 days-4 weeks: 30.5-45.0%
5 weeks-7 weeks: 26.8-37.5%
8 weeks-5 months: 28.6-37.2%
6 months-23 months: 30.8-37.8%
24 months-35 months: 31.0-37.7%
3-7 years: 34-42%
8-11 years: 35-43%
12-15 years: 38-47%
16-17 years: 40-50%
Adults: 38.3-48.6%

Females:

0-14 days: 39.6-57.2%
15 days-4 weeks: 32.0-44.5%
5 weeks-7 weeks: 27.7-35.1%
8 weeks-5 months: 29.5-37.1%
6 months-23 months: 30.9-37.9%
24 months-35 months: 31.2-37.8%
3-7 years: 34-42%
8-17 years: 35-43%
Adults: 35.5-44.9%

MEAN CORPUSCULAR VOLUME (MCV)

Males:

0-14 days: 91.3-103.1 fL
15 days-4 weeks: 89.4-99.7 fL
5 weeks-7 weeks: 84.3-94.2 fL
8 weeks-5 months: 74.1-87.5 fL
6 months-23 months: 69.5-81.7 fL
24 months-35 months: 71.3-84.0 fL
3-5 years: 77.2-89.5 fL
6-11 years: 77.8-91.1 fL
12-14 years: 79.9-93.0 fL
15-17 years: 82.5-98.0 fL
Adults: 78.2-97.9 fL

Females:

0-14 days: 92.7-106.4 fL
15 days-4 weeks: 90.1-103.0 fL
5 weeks-7 weeks: 83.4-96.4 fL
8 weeks-5 months: 74.8-88.3 fL
6 months-23 months: 71.3-82.6 fL
24 months-35 months: 72.3-85.0 fL
3-5 years: 77.2-89.5 fL
6-11 years: 77.8-91.1 fL
12-14 years: 79.9-93.0 fL
15-17 years: 82.5-98.0 fL
Adults: 78.2-97.93 fL

RED CELL DISTRIBUTION WIDTH (RDW)

Males:

0-14 days: 14.8-17.0%
15 days-4 weeks: 14.3-16.8%
5 weeks-7 weeks: 13.8-16.1%
8 weeks-5 months: 12.4-15.3%
6 months-23 months: 12.9-15.6%
24 months-35 months: 12.5-14.9%
3-5 years: 11.3-13.4%
6-17 years: 11.4-13.5%
Adults: 11.8-14.5%

Females:

0-14 days: 14.6-17.3%
15 days-4 weeks: 14.4-16.2%
5 weeks-7 weeks: 13.6-15.8%
8 weeks-5 months: 12.2-14.3%
6 months-23 months: 12.7-15.1%
24 months-35 months: 12.4-14.9%
3-5 years: 11.3-13.4%
6-17 years: 11.4-13.5%
Adults: 12.2-16.1%

WHITE BLOOD CELL COUNT (WBC)

Males:

0-14 days: 8.0-15.4 x 10(9)/L
15 days-4 weeks: 7.8-15.9 x 10(9)/L
5 weeks-7 weeks: 8.1-15.0 x 10(9)/L
8 weeks-5 months: 6.5-13.3 x 10(9)/L
6 months-23 months: 6.0-13.5 x 10(9)/L
24 months-35 months: 5.1-13.4 x 10(9)/L
3-5 years: 4.4-12.9 x 10(9)/L
6-17 years: 3.8-10.4 x 10(9)/L
Adults: 3.4-9.6 x 10(9)/L

Females:

0-14 days: 8.2-14.6 x 10(9)/L

15 days-4 weeks: $8.4-14.4 \times 10(9)/L$
5 weeks-7 weeks: $7.1-14.7 \times 10(9)/L$
8 weeks-5 months: $6.0-13.3 \times 10(9)/L$
6 months-23 months: $6.5-13.0 \times 10(9)/L$
24 months-35 months: $4.9-13.2 \times 10(9)/L$
3-5 years: $4.4-12.9 \times 10(9)/L$
6-17 years: $3.8-10.4 \times 10(9)/L$
Adults: $3.4-9.6 \times 10(9)/L$

PLATELETS

Males:

0-14 days: $218-419 \times 10(9)/L$
15 days-4 weeks: $248-586 \times 10(9)/L$
5 weeks-7 weeks: $229-562 \times 10(9)/L$
8 weeks-5 months: $244-529 \times 10(9)/L$
6 months-23 months: $206-445 \times 10(9)/L$
24 months-35 months: $202-403 \times 10(9)/L$
3-5 years: $187-445 \times 10(9)/L$
6-9 years: $187-400 \times 10(9)/L$
10-13 years: $177-381 \times 10(9)/L$
14-17 years: $139-320 \times 10(9)/L$
Adults: $135-317 \times 10(9)/L$

Females:

0-14 days: $144-449 \times 10(9)/L$
15 days-4 weeks: $279-571 \times 10(9)/L$
5 weeks-7 weeks: $331-597 \times 10(9)/L$
8 weeks-5 months: $247-580 \times 10(9)/L$
6 months-23 months: $214-459 \times 10(9)/L$
24 months-35 months: $189-394 \times 10(9)/L$
3-5 years: $187-445 \times 10(9)/L$
6-9 years: $187-400 \times 10(9)/L$
10-13 years: $177-381 \times 10(9)/L$
14-17 years: $158-362 \times 10(9)/L$
Adults: $157-371 \times 10(9)/L$

NEUTROPHILS

Males:

0-14 days: $1.60-6.06 \times 10(9)/L$
15 days-4 weeks: $1.18-5.45 \times 10(9)/L$
5 weeks-7 weeks: $0.83-4.23 \times 10(9)/L$
8 weeks-5 months: $0.97-5.45 \times 10(9)/L$
6 months-23 months: $1.19-7.21 \times 10(9)/L$
24 months-35 months: $1.54-7.92 \times 10(9)/L$
3-5 years: $1.60-7.80 \times 10(9)/L$
6-16 years: $1.40-6.10 \times 10(9)/L$
17 years: $1.80-7.20 \times 10(9)/L$
Adults: $1.56-6.45 \times 10(9)/L$

Females:

0-14 days: $1.73-6.75 \times 10(9)/L$

15 days-4 weeks: $1.23-4.80 \times 10(9)/L$
5 weeks-7 weeks: $1.00-4.68 \times 10(9)/L$
8 weeks-5 months: $1.04-7.20 \times 10(9)/L$
6 months-23 months: $1.27-7.18 \times 10(9)/L$
24 months-35 months: $1.60-8.29 \times 10(9)/L$
3-5 years: $1.60-7.80 \times 10(9)/L$
6-14 years: $1.50-6.50 \times 10(9)/L$
15-17 years: $2.00-7.40 \times 10(9)/L$
Adults: $1.56-6.45 \times 10(9)/L$

LYMPHOCYTES**Males:**

0-14 days: $2.07-7.53 \times 10(9)/L$
15 days-4 weeks: $2.11-8.38 \times 10(9)/L$
5 weeks-7 weeks: $2.47-7.95 \times 10(9)/L$
8 weeks-5 months: $2.45-8.89 \times 10(9)/L$
6 months-23 months: $1.56-7.83 \times 10(9)/L$
24 months-35 months: $1.13-5.52 \times 10(9)/L$
3-5 years: $1.60-5.30 \times 10(9)/L$
6-11 years: $1.40-3.90 \times 10(9)/L$
12-17 years: $1.00-3.20 \times 10(9)/L$
Adults: $0.95-3.07 \times 10(9)/L$

Females:

0-14 days: $1.75-8.00 \times 10(9)/L$
15 days-4 weeks: $2.42-8.20 \times 10(9)/L$
5 weeks-7 weeks: $2.29-9.14 \times 10(9)/L$
8 weeks-5 months: $2.14-8.99 \times 10(9)/L$
6 months-23 months: $1.52-8.09 \times 10(9)/L$
24 months-35 months: $1.25-5.77 \times 10(9)/L$
3-5 years: $1.60-5.30 \times 10(9)/L$
6-11 years: $1.40-3.90 \times 10(9)/L$
12-17 years: $1.00-3.20 \times 10(9)/L$
Adults: $0.95-3.07 \times 10(9)/L$

MONOCYTES**Males:**

0-14 days: $0.52-1.77 \times 10(9)/L$
15 days-4 weeks: $0.28-1.38 \times 10(9)/L$
5 weeks-7 weeks: $0.28-1.05 \times 10(9)/L$
8 weeks-5 months: $0.28-1.07 \times 10(9)/L$
6 months-23 months: $0.25-1.15 \times 10(9)/L$
24 months-35 months: $0.19-0.94 \times 10(9)/L$
3-5 years: $0.30-0.90 \times 10(9)/L$
6-17 years: $0.20-0.80 \times 10(9)/L$
Adults: $0.26-0.81 \times 10(9)/L$

Females:

0-14 days: $0.57-1.72 \times 10(9)/L$
15 days-4 weeks: $0.42-1.21 \times 10(9)/L$
5 weeks-7 weeks: $0.28-1.21 \times 10(9)/L$

8 weeks-5 months: $0.24-1.17 \times 10(9)/L$
6 months-23 months: $0.26-1.08 \times 10(9)/L$
24 months-35 months: $0.24-0.92 \times 10(9)/L$
3-5 years: $0.30-0.90 \times 10(9)/L$
6-17 years: $0.20-0.80 \times 10(9)/L$
Adults: $0.26-0.81 \times 10(9)/L$

EOSINOPHILS**Males:**

0-14 days: $0.12-0.66 \times 10(9)/L$
15 days-4 weeks: $0.08-0.80 \times 10(9)/L$
5 weeks-7 weeks: $0.05-0.57 \times 10(9)/L$
8 weeks-5 months: $0.03-0.61 \times 10(9)/L$
6 months-23 months: $0.02-0.82 \times 10(9)/L$
24 months-35 months: $0.03-0.53 \times 10(9)/L$
3-11 years: $0.00-0.50 \times 10(9)/L$
12-17 years: $0.10-0.20 \times 10(9)/L$
Adults: $0.03-0.48 \times 10(9)/L$

Females:

0-14 days: $0.09-0.64 \times 10(9)/L$
15 days-4 weeks: $0.06-0.75 \times 10(9)/L$
5 weeks-7 weeks: $0.04-0.63 \times 10(9)/L$
8 weeks-5 months: $0.02-0.74 \times 10(9)/L$
6 months-23 months: $0.02-0.58 \times 10(9)/L$
24 months-35 months: $0.03-0.46 \times 10(9)/L$
3-11 years: $0.00-0.50 \times 10(9)/L$
12-17 years: $0.10-0.20 \times 10(9)/L$
Adults: $0.03-0.48 \times 10(9)/L$

BASOPHILS**Males:**

0-14 days: $0.02-0.11 \times 10(9)/L$
15 days-7 weeks: $0.01-0.07 \times 10(9)/L$
8 weeks-35 months: $0.01-0.06 \times 10(9)/L$
3-17 years: $0.00-0.10 \times 10(9)/L$
Adults: $0.01-0.08 \times 10(9)/L$

Females:

0-14 days: $0.02-0.07 \times 10(9)/L$
15 days-4 weeks: $0.01-0.06 \times 10(9)/L$
5 weeks-7 weeks: $0.01-0.05 \times 10(9)/L$
8 weeks-5 months: $0.01-0.07 \times 10(9)/L$
6 months-35 months: $0.01-0.06 \times 10(9)/L$
3-17 years: $0.00-0.10 \times 10(9)/L$
Adults: $0.01-0.08 \times 10(9)/L$