Clinical Use
• Assess adrenocortical function
• Reflect cortisol secretion

Reference Range
17-Hydroxycorticosteroid mg/24-h
Men 3.0-10.0
Women 2.0-6.0
Children
1-2 y 0.5-2.5
3-4 y 1.0-4.0
5-6 y 1.0-4.8
7-8 y 1.0-5.6
9-10 y 1.0-7.0
11-12 y 1.5-8.0
13-16 y
Males 2.0-6.0
Females 2.8-6.8
17-20 y
Males 3.0-10.0
Females 2.0-7.0
Creatinine g/24-h
3-8 y 0.11-0.68
9-12 y 0.17-1.41
13-17 y 0.29-1.87
Adults 0.63-2.50

Interpretive Information
• Cushing’s syndrome
• Adrenal tumors
• Marked stress
  Infection
  Surgery
  Burns, etc
• Addison’s disease
• ACTH deficiency
• Starvation
• Liver disease
• Renal failure

Prescription and over-the-counter medications may affect results.

Clinical Background
Urine 17-hydroxycorticosteroids (17-OHCS) include 17-hydroxycorti-
costerone derived from compound F (hydrocortisone) and 17-hydroxy-11-
dehydrocorticosterone (derived from compound E, cortisone). The parent
hormones regulate protein and carbohydrate metabolism and are in-
volved in feedback control of ACTH secretion. Urine 17-OHCS levels
reflect adrenal cortical activity.

Method
• Modified Porter-Silber reaction
• Analytical sensitivity: 0.1 mg/L
• Creatinine concentration also reported

Specimen Requirements
20 mL refrigerated aliquot of a 24-h urine; 10 mL minimum
Collect with 10 g of boric acid (pre-
ferred) or 25 mL 6N HCl or 50% acetic
acid. Record total volume on vial and
request form.