Human Development

United States Medical Licensing Examination (USMLE) Step 1

2 to 4% of Step 2 CK · 8 sections · content outline and specifications

Human Development is about 2 to 4% of Step 2 CK. It covers normal age-related findings and care of the well patient, from the newborn to the older adult. Questions ask you to tell a normal finding from a disease, to choose the right screening test or vaccine for an age, and to pick the next step at a well visit. Often the best answer is reassurance and routine follow-up. Many items are also coded to Nutrition: feeding, vitamin supplements, iron, weight and dietary counseling. Know current US guidance from the AAP, ACIP and USPSTF.

You should be able to: After this guide, you should be able to tell a normal finding from a disease at any age, name the milestone expected at each age, choose the right screening test, vaccine or supplement for a patient's age, and pick the next step at a well visit, which is often reassurance.

Every section: the key point and the trap

1 Normal newborn findings and newborn care

Every newborn gets intramuscular vitamin K, erythromycin eye ointment and a hepatitis B vaccine dose soon after birth (AAP). An infant of a mother with hepatitis B surface antigen also gets hepatitis B immune globulin within 12 hours.

Trap: Do not call jaundice in the first 24 hours of life normal. It suggests hemolysis and needs a bilirubin level and workup the same day.

2 Growth and nutrition from infancy to adolescence

Weight doubles by 4 to 5 months and triples by 12 months. Length rises by about 50% in the first year. Plot weight, length and head size at every visit.

Trap: A normal weight does not rule out iron deficiency. Toddlers who drink a lot of milk are often of normal or high weight.

3 Developmental milestones and delay

2 months: social smile, coos, lifts head when prone. 4 months: laughs, rolls front to back, holds head steady. 6 months: sits with support, babbles, passes objects between hands.

Trap: Do not correct for prematurity after about 2 years of age. Before then, use the corrected age (age from birth minus weeks born early) to judge milestones.

4 Well-child care and screening in childhood

Visits are frequent in infancy (newborn, 3 to 5 days, 1, 2, 4, 6, 9, 12, 15, 18 and 24 months), then yearly (AAP Bright Futures).

Trap: Do not give oral fluoride drops to a child who drinks fluoridated water; it causes dental fluorosis.

5 Immunization schedules for children and adults

Infant series: hepatitis B, rotavirus, DTaP, Hib, pneumococcal conjugate and inactivated polio at 2, 4 and 6 months (with set variations); influenza every year from 6 months.

Trap: A common cold with a temperature of 38.0 C is not a reason to postpone a well-child vaccine dose. Only moderate or severe illness is.

6 The adolescent visit

Spend part of each visit alone with the adolescent and explain confidentiality and its limits (danger to self or others, abuse). Use a psychosocial history such as HEADSS.

Trap: Do not do a Pap test on a sexually active 17-year-old. Screening starts at 21 years whatever the age at first sex.

7 Screening and prevention in adults by age

All adults 18 years and older: blood pressure, depression and unhealthy alcohol use; HIV once from 15 to 65 years and hepatitis C once from 18 to 79 years (USPSTF).

Trap: Do not stop cervical screening at 65 years in a woman without adequate past negative tests. Stopping needs a history of normal results in the last 10 years.

8 Normal aging and care of the older adult

Normal aging: lower kidney function (GFR) with a normal creatinine, less muscle and more body fat, presbyopia, high-frequency hearing loss (presbycusis), less thirst and a shift to earlier, lighter sleep.

Trap: Do not give vitamin D to prevent falls in an older adult living at home with a normal level; the USPSTF recommends against it. Exercise is the answer.

Key terms

Corrected age: A preterm child's age from birth minus the number of weeks born early.

Regression: Loss of a skill a child already had, such as words or walking.

NAAT: Nucleic acid amplification test: a very sensitive test that finds a germ's genetic material.

Presbycusis: Gradual hearing loss with age, first for high-pitched sounds.

Beers criteria: A published list of medicines that are often unsafe in older adults.

Failure to thrive: Poor weight gain in a child, with weight falling across percentile lines.

Physiologic: Part of normal body function, not a disease.

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