HEALTH CARE MAINTENANCE GUIDELINES FOR ADULTS WITH DEVELOPMENTAL DISABILITIES

NOTE: Health problems that are seen more frequently in this population and require additional attention by health care providers are highlighted in the darker shade of green.

	19 – 40 YEARS	40 – 65 YEARS	65 YEARS AND OLDER	
Abuse & Neglect	• Identify and evaluate unexplained physical and/or behavioral signs and symptoms at each visit. These signs might include some of the following: unexplained bruising, falls, injuries, weight loss, depression and behavior changes.			
Alcohol & Substance Abuse	Screen yearly.			
Breast Cancer (Women) Clinical Breast Exam	 Perform yearly breast exam every two to three years.⁴ Routine screening with clinical breast exam not recommended.²² 	 For ages 40-65 screen with clinical breast exam yearly.⁴ Start screening at age 50 with yearly clinical breast exam.²² 	 Perform clinical breast exam every one to two years if life expectancy is greater than or equal to five years.²¹ 	
Mammography	Routine screening with mammography not recommended. ²²	 Order screening mammography yearly.⁴ Women ages 40-49 routine mammogram not recommended.²² 	 Order screening mammography every two years until age 74. At age 75, consider stopping routine screening if patient has significant medical problems that threaten life expectancy.²² Order screening mammography every one to two years if life expectancy is greater than or equal to five years.²¹ 	
	consider referral for genetic counseling and evaluat Comments -Family history is often difficult to obtain in this popular breast cancer screening.	history is often difficult to obtain in this population. Individual decision-making is critical. Inform women and caregivers of potential benefits and consequences of		
		problems may have difficulty performing an accurate self-ex	xam.	
	 Consider genetic testing for the BRCA-A gene for won Perform an annual neurologic examination for signs 	problems may have difficulty performing an accurate self-expense who have a strong family history and are unable to do as and symptoms of spinal cord injury for patients with Down if symptoms develop, such as: changes in behavior or act an anteroposterior view.	xam. a mammogram. ²⁰ rn syndrome. ¹	
Cervical Spine Atlanto- Axial Instability Cervical Cancer (Women)	 Consider genetic testing for the BRCA-A gene for won Perform an annual neurologic examination for signs Order Cspine x-ray with lateral flexion and extensio incontinence. If this is the first Cspine, also order at comments Comments Consider screening cervical spine films prior to participate of the prior of the participate o	problems may have difficulty performing an accurate self-expense who have a strong family history and are unable to do as and symptoms of spinal cord injury for patients with Down if symptoms develop, such as: changes in behavior or act an anteroposterior view.	xam. a mammogram. ²⁰ on syndrome. ¹ tivity, changes in hand preference or urinary	
Axial Instability Cervical Cancer	 Consider genetic testing for the BRCA-A gene for won Perform an annual neurologic examination for signs Order Cspine x-ray with lateral flexion and extension incontinence. If this is the first Cspine, also order at Comments Consider screening cervical spine films prior to participal Individualized decision-making depending on patient of the Before age 21, avoid pap smear screening regardless of sexual activity. At age 21, begin pap smear screening. Ages 21-29 screen every two years, then every three years for women with three consecutive normal paps. Perform pap smear within three years after first sexual intercourse or by age 21, whichever comes 	problems may have difficulty performing an accurate self-expense who have a strong family history and are unable to do as and symptoms of spinal cord injury for patients with Down if symptoms develop, such as: changes in behavior or act an anteroposterior view.	xam. a mammogram. ²⁰ on syndrome. ¹ tivity, changes in hand preference or urinary	
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HEALTH PROBLEM	19 – 40 YEARS	40 – 65 YEARS	65 YEARS AND OLDER	
Chlamydia	Screen annually for sexually active women through age 26. Comments -Patients may not reliably report sexual activity or sym	For patients age 40 and older, since there is no data, individualized decision-making is appropriate.		
Cholesterol & Lipid Disorders	 Order a fasting lipid panel every five years. More frequently if patient is taking atypical antipsychotic medications or has diabetes.²² 			
Colorectal Cancer	Comments -Depending on the patient's co-morbidities, anesthesic). ¹⁰	
	professional assistance with the bowel preparation.	gnitive impairment may require hospital admission the day p	prior to testing with colonoscopy and sigmolaoscopy for	
▶Dental Disease		aning every six months or as recommended by the dentist. ersons with certain syndromes, such as Cornelia de Lange, Co	erebral Palsy, Down, Prader-Willi, Turner, Rett, Williams	
	-Patients with developmental disabilities are at high risk for periodontal disease for numerous reasons, including: difficulty maintaining hygiene, lack of access to regular dental care, syndrome-specific susceptibilities and medicationsIn some patients unable to tolerate office exams and treatment, hospital dentistry under anesthesia may be indicated. Other necessary diagnostic testing should be considered while patient is sedated.			
→ Depression	• Screen annually or sooner for behaviors or emotions that may indicate depression. Comments -Patients with developmental disabilities may have difficulty recognizing and communicating symptoms such as depressed mood, anxiety, and sadness. Mental health symptoms are often expressed in physical or behavioral changes. It is critical that health care providers obtain information about the patient's usual level of functioning, skills and behavior in order to assess the potential for mental health disorders. -See Diagnostic Manual-Intellectual Disabilities for more in-depth discussion on assessment. 11			
→ Diabetes		en annually after age 45 and annually for patients on antipsy	chotic medication and those with syndromes	
	Comments -Individualized decision-making about screening is appropriate for other individuals with developmental disabilitiesSee American Diabetes Association. Consensus Statement on Antipsychotic Drugs and Obesity and Diabetes: http://care.diabetesjournals.org/content/27/2/596.full?ijkey=8499e4a1017d5491d7d7bb66d30b77013a2397c8&keytype2=tf ipsecsha			
Fall Risk	 For all ages: evaluate as part of the annual physical examination including an evaluation of the medication profile for drugs that may impact balance and/or gait. Screen more frequently if there is a change in gait/balance or for individuals at high risk, such as those who have a history of two or more falls in the previous year. ¹⁶ For patients with no previous mobility impairments who report one or more falls, consider performing the "Get-Up and Go Test": http://www.ncbi.nlm.nih.gov/pubmed/3487300. Patients having difficulty with this test should be referred to a physical/occupational therapist for a full fall evaluation. If the patient has had an increase in falls or a decline in function, a medical evaluation of the cause is warranted. 			
HIV	For ages 13-64 screen with at least one HIV test in the second seco	heir lifetime. without barrier protection, multiple partners, men who	 	

HEALTH PROBLEM	19 – 40 YEARS	40 – 65 YEAR	RS	65 YEARS AND OLDER
▶Hearing	Screen annually subjectively or objective	vely with office-based testing (Whisper Test).		
	 Refer to audiology at regular intervals. Refer to patients for hearing assessment every five years after age 50 (every three years throughout life for patients with Down syndrome). Reevaluate hearing if problems are reported or changes in behavior are noted.¹⁷ Comments Other syndromes associated with hearing impairments include Cornelia de Lange, Noonan, Usher, and Smith-Magenis.¹⁶ -Methods for testing may include the following: 			
		Method	Applicable for Developmental Age (years)	
		OtoAcoustic Emissions (OAE)	>0	
		Auditory Brainstem Responses (ABR)	>0	
		Behavioural observation audiometry	>0	
		Pure tone audiometry with visual reinforcement	>1	
		Whispered speech	>3	
		Pure tone (play) audiometry	> 3-4	
►Immunizations ►Obesity	 Measure blood pressure annually.²² Comments -For patients with spasticity/contractures, may need to do a wrist or thigh blood pressure measurement. Document type of measurement used. See Centers for Disease Control Recommended Adult Immunization Schedule: http://www.cdc.gov/mmwr/PDF/wk/mm5901-Immunization.pdf. Measure height and weight annually.²² Comments -Consider weight on home scale in more familiar setting. -Accommodations for patients unable to stand include using a Lift Team, a wheelchair scale, Hoyer Lift, and/or hospital bed which includes a scale. 			
Osteoporosis	Consider bone mineral density (BMD) screening earlier and at regular intervals for high-risk patients.			
	 Check serum vitamin D 25 OH levels at regular intervals. Although the age to begin screening is unclear, some authors suggest a institutions and age 45 for patients residing in the community. Multiple sources recommend BMD screening beginning for the general five years if normal baseline test; at age 60 every one to two years if hi Comments		general population at age 65 every three to ars if high risk. (AAFP, USPSTF, AACE). ¹⁰	
	-High risk factors in patients with developmental disabilities include: mobility impairments, long term use of antiepileptic drugs or antipsychotics, Down syndrome, Cerebral Palsy, and Prader-Willi syndrome. -High risk factors in the general population include: osteopenia on plain films, history of vertebral fractures, early menopause, chronic steroid use, low body weight, cigarette use and positive family history of osteoporosis. -See FRAX: WHO Fracture Risk Assessment Tool: www.shef.ac.uk/FRAX/ . Note that mobility is not calculated in this assessment tool.			
Prostate Cancer (Men)		 Insufficient evidence to recomm screening in men under age 75.² 	end routine • Scree	ning not recommended for men over age 75. ²⁰
	Comments -Family history is often difficult to obtain with this populationPatients at high-risk include positive family history at an early age and African American men.			
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HEALTH PROBLEM	19 – 40 YEARS	40 – 65 YEARS	65 YEARS AND OLDER
Testicular Cancer (Men)	 Routine screening not recommended. Prompt assessment and evaluation of testicular problems when young men present with signs and symptoms of testicular disease. Comments -Clinical exam is especially important in this population 	who may not be able to report symptoms and may have d	- lifficulty with the self exam technique.
▶Thyroid Disease	 Perform thyroid stimulating hormone (TSH) test every three years. 16 Thyroid function tests should be performed annually for patients with Down syndrome. 17 Comments Symptoms of thyroid disease are often not elicited due to cognitive impairment and/or communication difficulties in patients with developmental disabilities. Consider TSH testing if unexplained change in behavior or level of functioning. Increased risk for thyroid disease seen in patients with Down syndrome and the elderly. 		
Tuberculosis	Screen routinely based on likelihood of exposure. (CDC 2005, AAFP 2008). Comments -Consider PPD skin testing every one to two years for patients who live or work in aggregate settings (board and care homes, intermediate care facilities, day programs).		
▶Vision		Refer for ophthalmologic exam and glaucoma screening ophthalmologist. On long-term psychiatric medication, and those with synown, Smith-Magenis, Tuberous Sclerosis, and Velocardiofaci	dromes associated with vision deficits/ocular

COUNSELING	19 – 40 YEARS	40 – 65 YEARS	65 YEARS AND OLDER	
Lifestyle Modification/ Healthy Quality of Life	on/ Discuss:			
	Comments -Include caregivers, health advocates, and parents/family members to help reinforce teaching concepts.			
Medication Review	 Review medications at regular intervals with patients and caregivers to assure adherence with regimen and evaluate for side effects and drug interactions. Comments -High rates of polypharmacy exist. 			
▶ Safety	Review safety practices per individual circumstance, frequent seizures; and street safety for patients with	such as stranger and street safety for patients who live incurredictable behavior.	dependently; prevention of head trauma in patients with	

References

- 1. American Academy of Pediatrics Committee on Sports Medicine and Fitness. Atlantoaxial instability in Down syndrome: subject review. Pediatrics. 1995 Jul;96:151-4.
- 2. American Academy of Pediatrics; American Academy of Family Physicians; American College of Physicians-American Society of Internal Medicine. A consensus statement on health care transitions for young adults with special health care needs. *Pediatrics*. 2002 Dec;110(6):1304-6.
- 3. American College of Obstetricians and Gynecologists (ACOG) Committee on Practice Bulletins—Gynecology. ACOG Practice Bulletin no. 109: Cervical cytology screening. Obstet Gynecol. 2009 Dec;114(6):1409-20.
- 4. American Cancer Society (ACS). ACS guidelines for the early detection of cancer. American Cancer Society Web site. 2008. Available at: www.cancer.org/docroot/PED/content/ped 2 3x ACS Cancer Detection Guidelines 36.asp. Accessed: February 2, 2010.
- 5. Breast Health Access for Women with Disabilities (BHAWD). (2003). Breast health and beyond for women with disabilities: a provider's guide to the examination and screening of women with disabilities. Alta Bates Summit Medical Center, Rehabilitation Services Department; Oakland; 2003.
- 6. Centers for Disease Control and Prevention. Sexually transmitted diseases: treatment guidelines 2006. Department of Health and Human Services Centers for Disease Control and Prevention Web site. Available at: www.cdc.gov/std/treatment/. Accessed February 22, 2010.
- 7. Centers for Disease Control. Summary of HPV screening recommendations. Department of Health and Human Services Centers for Disease Control and Prevention Web site. Available at: www.cdc.gov/std/hpv/ScreeningTables.pdf. Accessed February 22, 2010.
- 8. Centers for Disease Control. Immunization recommendations. Department of Health and Human Services Centers for Disease Control and Prevention Web site. Available at: www.cdc.gov/vaccines/recs/schedules/adult-schedule.htm. Accessed February 22, 2010.
- 9. Cohen WI, ed. Health care guidelines for individuals with Down syndrome: 1999 revision. (1999) Down Syndrome Research Foundation Web site. 2010. Available at: www.dsrf.org/?section_copy_id=96§ion_id=5040. Accessed February 22, 2010.
- 10. Gonzales R, Kutner JS. Current Practice Guidelines in Primary Care 2009. McGraw Hill 2009.
- 11. Fletcher R, Loschen E, Stavrakaki C, First M, eds. Diagnostic Manual—Intellectual Disability: A textbook of diagnosis of mental disorders in persons with intellectual disability. Kingston, NY:NADD Press; 2007. This was put out by the National Association for Dual Diagnosis and the American Psychiatric Association.
- 12. Havercamp SM, Scandlin D, Roth M. Health disparities among adults with developmental disabilities, adults with other disabilities, and adults not reporting disability in North Carolina. *Public Health Rep.* 2004 Jul-Aug;119(4):418-26.
- 13. lacono T, Sutherland G. Health screening and developmental disabilities. Journal of Policy and Practice in Intellectual Disabilities. 2006 Sept;3(3):155-63.
- 14. Massachusetts Department of Mental Retardation, University of Massachusetts Medical School's Center for Developmental Disabilities Evaluation and Research. Preventive health recommendations for adults with mental retardation. The Official Web Site of the Commonwealth of Massachusetts. 2010. Available at: www.mass.gov/Eeohhs2/docs/dmr/health_screening_brochure.pdf. Accessed February 22, 2010.
- 15. National Heart, Lung, and Blood Institute. Risk Assessment Tool for Estimating Your 10-year Risk of Having a Heart Attack. Available at: hp2010.nhlbihin.net/atpiii/calculator.asp. Accessed February 22, 2010.
- 16. New York State Office of Mental Retardation & Developmental Disabilities. (2009). Preventative Health Care Screening Guidelines for People Aging with Intellectual and Other Developmental Disabilities. Available at: www.omr.state.ny.us/document/image/hp brochures preventhealthfinal.pdf. Accessed February 22, 2010.
- 17. Prasher V, Janicki M, eds. Physical Health of Adults with Intellectual Disabilities (International Association for the Scientific Study of Intellectual Disabilities). Blackwell Publishing, Ltd. Osney Mead: Oxford. 2002.
- 18. Prater CD, Zylstra R. Medical care of adults with mental retardation. Am Fam Physician. 2006 June 15;73(12): 2175-83. Review.
- 19. Saslow D, Runowicz CD, Solomon D, et al.; American Cancer Society (ACS). American Cancer Society guideline for the early detection of cervical neoplasia and cancer. CA Cancer J Clin. 2002 Nov-Dec;52(6):342-62.
- 20. Sullivan WF, Heng J, Cameron D, et. al. Consensus guidelines for primary health care of adults with developmental disabilities. *Can Fam Physician*. 2006 Nov;52(11):1410-18. Erratum in: *Can Fam Physician*. 2007 Jan:53(1):31.
- 21. The American Geriatric Society. Breast cancer screening in older women (reviewed and updated in 2005). The American Geriatric Society Web site. 2010. Available at: www.americangeriatrics.org/education/cp_index.shtml. Accessed: February 22, 2010.
- 22. The U.S. Preventative Services Task Force. Guide to clinical preventative services, 2009. U.S. Department of Health and Human Services Web site. 2009. Available at: www.ahrq.gov/clinic/pocketgd.htm. Accessed: February 22, 2010. Recommendations of the U.S. Preventative Services Task Force. Pocket guide, abridged version of the recommendations.
- 23. U.S. Public Health Service. Closing the gap: A national blueprint for improving the health of individuals with mental retardation. Report of the Surgeon General's Conference on Health Disparities and Mental Retardation. Washington, DC. February 2001. Washington, D.C. Available at: www.surgeongeneral.gov/topics/mentalretardation/. Accessed: February 22, 2010.
- 24. Wilkinson JE, Cerreto MC. Primary care for women with intellectual disabilities. J Am Board Fam Med. 2008 May-Jun;21(3)215-22.
- 25. Wilkinson JE, Culpepper L, Cerreto M. Screening tests for adults with intellectual disabilities. J Am Board Fam Med. 2007 Jul-Aug; 20(4):399-407. This article takes a more evidence- based approach to recommending screening.