# Age Specific Screening and Preventative Medicine - New Zealand General Practice

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# AGE SPECIFIC SCREENING and PREVENTATIVE MEDICINE NEW ZEALAND GENERAL PRACTICE

FEMALE		NON-SPECIFIC	CIFIC MALE	
<u>6/52</u>		Six week check Immunisation- <u>Infant</u>		
	<u>3/12</u>	Immunisation-Infant		
	<u>5/12</u>	Immunisation-Infant		
	<u>15/12</u>	Immunisation-Child		
	<u>4</u>	Immunisation- <u>Child</u> B4 School Check		
	<u>11</u>	Immunisation-Child		
12 Immunisation-HPV	<u>12-19</u>	HEEADSSSS		
	<u>15+</u>	Smoking	<u>15+</u>	Testicular Cancer
20-69 Cervical Screening	<u>20+</u>	Mental Health Alcohol & Drugs		
	<u>20+</u>	Melanoma <mark>(E)</mark>		
	<u>&lt;25</u>	Chlamydia <mark>(R)</mark>		
	<u>25+</u>	Hepatitis B <mark>(E)</mark>		
	<u>35+</u>	COPD <mark>(R)</mark>	<u>35+</u>	CVD risk <mark>(E)</mark>
45-69 Breast Screening	<u>45</u>	Immunisation-Tdap	<u>40-70</u>	Prostate cancer
<u>45+</u> CVD risk <mark>(E)</mark>	<u>45+</u>	Glaucoma		
	<u>50-74</u>	Bowel Cancer (P)		
	<u>50+</u>	Macular Degeneration		
	<u>50+</u>	Chronic Kidney Disease <mark>(E)</mark>		
60+ Osteoporosis (R)	<u>65</u>	Immunisations <u>Pneumococcal</u> <u>Td</u>		
	<u>65+</u>	Immunisation Influenza-annual		
	<u>65+</u>	Falls		_
			60+	Osteoporosis (R)
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# **REFERENCES and EXPLANATORY NOTES**

#### <u>Age</u>

#### **Regular Screening Age**

• Therefore may 'excludes' high-risk patients who may require 'Earlier' screening E.g. Positive family history

#### **Underline**

Immunisation - type of vaccine

# <mark>(E)</mark>

Ethnicity

• Screening may be 'Earlier' or 'Later' or 'Specific' to an Ethnic Group

# <mark>(R)</mark>

## **Risk Factor**

• Screening based on the presence of a risk factor for a disease

# (P)

# Pilot Screening Programme

#### Screening Opportunity – Age is an Author Recommendation

- The Author has reviewed the disease morbidity and mortality statistics and literature, and has made an assessment that an open discussion maybe warranted with some patients
  - E.g. Education on Patient Regular Self Examination Patient wanting a Full Check Up Well Man or Well Woman Check

# **Exclusions**

Screening taking place in a hospital setting, birthing centre or at home
 E.g. Newborn Hearing Screening
 Newborn Metabolic Screening

# Screening for Hemochromatosis The U.S. Preventive Services Task Force (USPSTF) recommends against routine genetic screening for hereditary hemochromatosis in the asymptomatic general population

# Screening For and Against

- Notes including references have been documented where screening is debatable E.g. Melanoma
  - E.g. Prostate Cancer
  - E.g. Testicular Cancer

# **REFERENCES and EXPLANATORY NOTES**

# **B4 School Check**

- o Age:
- Reference: www.moh.govt.nz/b4schoolcheck

#### <u>Notes</u>

- The B4 School Check is a nationwide programme offering a free health and development check for four year olds
- The B4 School Check aims to identify and address any health, behavioural, social, or developmental concerns which could affect a child's ability to get the most benefit from school, such as a hearing problem or communication difficulty

# **Bowel Cancer**

- Age: 50 74
- o Reference: <u>www.bowelscreeningwaitemata.co.nz</u>

# <u>Notes</u>

- From October 2011, men and women aged 50 to 74 who live in the Waitemata District Health Board area are being invited to take part in a FREE BowelScreening programme to check for early signs of bowel cancer
- BowelScreening is part of a four-year pilot to test whether bowel screening should be introduced throughout New Zealand. During the four-year pilot most people will be screened twice

# Breast Screening

0	Age:	45 - 69
0	Reference:	www.nsu.govt.nz

#### <u>Notes</u>

 BreastScreen Aotearoa is New Zealand's free national breast screening programme for women aged between 45 and 69

# Cardiovascular (CVD) Risk Assessment

Age: 35+ Dependant on Age, Gender, Cardiovascular Risk Factors
 Reference: www.health.govt.nz

New Zealand Primary Care Handbook 2012

#### Notes

- Asymptomatic people without known risk factors
  - o Age 45 years Men

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• Age 55 years Women

- Maori, Pacific peoples or Indo-Asian peoples
  - Age 35 years Men
  - Age 45 years Women
- <u>People with other known cardiovascular risk factors or at high risk of developing</u> <u>diabetes</u>
  - Family history risk factors
    - Diabetes in first-degree relative (parent, brother, sister)
    - Premature Coronary heart disease or ischaemic stroke in a first-degree relative (father or brother <55 years, mother or sister <65 years)</li>
  - Personal history risk factors
    - People who smoke (or have quit only in the last 12 months)
    - Gestational diabetes, polycystic ovary syndrome
    - Prior blood pressure (BP) ≥ 160/95 mm Hg, Prior TC:HDL ratio ≥7
    - Prediabetes
    - BMI ≥30 or truncal obesity (waist circumference ≥100cm in men or ≥90cm in women)
    - eGFR <60ml/min/1.73 m<sup>2</sup>
  - Age 35 years Men
  - Age 45 years Women

# **Cervical Screening**

- Age: 20 69
- Reference: <u>www.nsu.govt.nz</u>

# <u>Notes</u>

- All women who have ever been sexually active should have regular cervical smear tests from the time they turn 20 until they turn 70. These include
  - $\circ~$  All women who have been immunised against HPV
  - $\circ$  Women who are single
  - $\circ$  Lesbians
  - $\circ$  Disabled women
  - Women who have been through menopause
  - Women who are no longer having sex
- Cervical Screening may be used as an opportunity to enquire about other symptoms (below) which might help identify common conditions E.g. Endometriosis, Uterine pathology, Polycystic Ovarian Syndrome, Sexually Transmitted Infections
  - o Dysmenorrhoea
  - Heavy Menstrual Bleeding Blood test maybe required FBC, iron, etc
  - Menstrual Irregularity
  - Vaginal Discharge

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- Future plans on pregnancy maybe applicable for some women, in which case the following topics would be relevant
  - Pre-Conception Folic Acid
  - Rubella Immune status

• Family Violence screening is being done in some General Practices by trained staff

#### Chlamydia testing

 Age: <25</li>
 Reference: <u>www.bpac.org.nz</u> Best Tests March 2009

#### <u>Notes</u>

• The Ministry of Health recommends that Chlamydia testing is considered in all sexually active patients under 25 years of age, when they access healthcare whether or not they have symptoms

#### Chronic Kidney Disease

- Age: 50+
   Reference: www.bpac.org.nz
  - Best Practice July 2009

#### Notes

- Targeted testing should be considered for people with the following risk factors:
  - $\circ$  Aged over 50 years
  - Hypertension
  - Any cardiovascular disease (IHD, chronic heart failure, peripheral vascular disease and cerebral vascular disease)
  - Diabetes
  - $\circ$  Smoking
  - Known personal or family history of kidney disease, including recurrent UTIs and lower urinary tract symptoms
  - Māori, Pacific peoples, Asian people and people from the Indian subcontinent
  - Long-term treatment with nephrotoxic medication such as lithium, cyclosporin, mesalazine (NSAIDs are not nephrotoxic but use increases the risk of kidney damage)
- It is recommended to perform a kidney health check at a minimum of every five years. This should be done annually if diabetes, established cardiovascular disease or CKD is present
- Quick clinical assessment for kidney health check
  - History including:
    - Any risk factors, particularly hypertension
    - Prescribed, OTC and alternative medication
    - Symptoms of cardiovascular disease e.g. breathlessness, oedema, chest pain, claudication
    - Symptoms suggestive of underlying systemic diseases such as vasculitis, lupus or myeloma e.g. fever, weight loss, fatigue, general aches and pains
  - Examination

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Dipstick urine

		Blood pressure Weight Fluid status (JVP, sign oedema) Enlarged bladder or ki Renal bruits PR in male with lower	is of pulmonary dneys urinary tract sy	r oedema, peripheral mptoms		
COPD	<u>– Spirometry</u>					
0	Age: Reference:	35+ www.copdx.org.au				
<u>Nc</u>	<u>otes</u>					
•	Consider COF The main sym Other sympton common	PD in all smokers and entropy of COPD are browns of COPD are browns such as chest tightn	x-smokers ove eathlessness, c ess, wheezing	r the age of 35 years ough and sputum production and airway irritability are		
Falls o	Age: Reference:	65+ <u>www.bpac.org.nz</u> Best Practice March 2	010			
<u>Nc</u>	<u>otes</u>					
•	Approximately Enquire about	v one-third of people ag whether older people h	ed over 65 yea have fallen in th	rs fall each year le last year		
<u>Glauc</u>	<u>oma</u>					
0	Age: Reference:	45+ www.glaucoma.org.nz				
<u>Nc</u>	<u>otes</u>					
• • •	<ul> <li>Glaucoma affects 2% of the population over the age of 40 years</li> <li>One out of every 10 adults over the age of 70 has glaucoma</li> <li>Glaucoma NZ recommends the "45 + 5 glaucoma eye examination"</li> <li>People who have no symptoms of eye problems should have an examination for glaucoma by an optometrist or ophthalmologist by the time they are 45</li> <li>If the examination is normal we recommend it be repeated every 5 years.</li> </ul>					
<u>НЕЕА</u> 0	DSSSS asses Age:	<u>sment</u> 12 – 19				
No	<u>otes</u>					
0	Reference:	Youth Health – Enhan In caring for all young	cing the skills c New Zealande	of Primary Care Practitioners rs – A Resource Manual		
			7			
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- HEEADSSSS is a tool for engagement, a screening tool that helps gather information to form a picture of the context for the person and their presenting complaint. It is also a tool for planning what the next step should be, together with the young person. Categories covered include:
  - Home
  - Education and Employment
  - Exercising and Eating
  - o Activities
  - o **Drugs**
  - Sexuality
  - o Suicide
  - Spirituality
  - o Safety and Strengths
- Reference: <u>www.health.govt.nz</u>
- In April 2012, the Prime Minister announced a package of 22 initiatives aimed at improving the mental health and well-being of young people aged 12-19 years with, or at risk of developing, mild to moderate mental health issues

#### Hepatitis B (Chronic infection)

• Age: >25

Notes

- Reference: <u>www.hepfoundation.org.nz</u>
- Risk factors for hepatitis B:
  - Over 25 years and of Maori, Pacific Island, or Asian ethnicity
  - Born in Asia or the Pacific Islands
  - o Mother or a close family member has hepatitis B
  - Live with someone who has hepatitis B
- Reference: Gane E. Screening for chronic hepatitis B infection in New Zealand: unfinished business. NZMJ 2005;118:1211
- Almost 20% will develop active liver disease (chronic hepatitis B or CHB) and will
  progress to cirrhosis and liver failure, whilst another 5 to 40% will develop
  hepatocellular carcinoma
- In 1998, the Government decided to fund a national HBV screening programme, targeting Asian, Pacific, and Maori New Zealanders older than 15 years (thus unlikely to be protected by universal neonatal vaccination). Screening commenced in 1999 and continued for 3 years
- Observed rates in Maori (5.6%) were similar to those reported by previous studies, but significantly higher rates were found in Pacific Islanders (median 7.3%, Tongan 13%) and Asians (median 6.2%, 8.1% in South East Asian, 8.9% in Chinese), thus reflecting higher prevalence rates in those countries of birth
- The vast majority (85%) of HBsAg-positive New Zealanders remain unaware of their status
- Urgent consideration should be given to reopening the screening programme

# Immunisations – Child and Adult

- Age: various
- Reference: Immunisation Handbook 2011

#### <u>Notes</u>

• Immunisation visits may provide screening opportunities E.g. Developmental delay

#### Immunisation – Pneumovax23

- Age:
- Reference: <u>www.bpac.org.nz</u> Best Practice March 2013

65

#### <u>Notes</u>

- Pneumovax23 vaccination is recommended by the Ministry of Health, but not subsidised, for all people aged 65 years
- Healthy people aged over 65 years generally require only a single dose of Pneumovax23, but those at high risk should receive a second dose three to five years after their first dose

#### **Macular Degeneration**

o Age:

<u>Notes</u>

• Reference: <u>www.mdnz.co.nz</u>

50+

- In New Zealand Macular Degeneration is estimated to affect 1 in 7 people over 50 in some way
- Age related Macular Degeneration is the most common cause of blindness
- Reference: Bressler NM. Early Detection and Treatment of Neovascular Age-related Macular Degeneration – Role of Primary Care Physicians in Neovascular Age-related Macular Degeneration. J Am Board Fam Med. 2002; 15(2)
- Primary care physicians play an important role in screening for Age-related Macular Degeneration (AMD)
- An eye chart is useful to detect impairment of visual acuity. Patients with AMD can occasionally have good visual acuity, however, and AMD can be missed if only visual acuity is tested
- Early diagnosis of neovascular AMD can be possible by using an Amsler grid or similar pattern of straight lines. A distortion of straight lines is a common early symptom of neovascular AMD. Patients are asked to cover one eye and, holding the grid at a comfortable reading distance (using any habitual reading glasses), focus on the center dot. They should then cover the other eye and repeat the procedure
- Primary care physicians can perform direct ophthalmoscopy (if proficient)

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Detection of any large drusen (yellow deposits under the retina, that are made up of lipids) should alert the physician to the early development of AMD

• Early detection of neovascular AMD would allow the patient to be evaluated promptly by an ophthalmologist

### <u>Melanoma</u>

• Age: 20+

<u>Notes</u>

- Reference: <u>www.health.govt.nz</u>
   Clinical practice guidelines for the management of melanoma in Australia and New Zealand 2008
- In the absence of any substantial evidence as to its effectiveness in reducing mortality population-based screening cannot be recommended
- Clinical assessment of future risk of melanoma take into account:
  - Person's age and sex
  - History of previous melanoma or non-melanoma skin cancer
  - Family history of melanoma
  - Number of naevi (common and atypical)
  - Skin and hair pigmentation
  - Response to sun exposure
  - Evidence of actinic skin damage
- Individuals at high risk of melanoma and their partner or carer be educated to recognise and document lesions suspicious of melanoma, and to be regularly checked by a clinician with six-monthly full body examination supported by total body photography and dermoscopy as required
- Reference: <u>www.sunsmart.org.nz</u>
- Ministry of Health figures for 2009 show in that year there were:
  - 2,212 melanoma registrations (1197 for males and 1015 for females)
  - 326 deaths (213 for males and 113 for females) close to the annual road toll.
- In 2009, among people aged 25 to 44 years, melanoma was the leading cancer among males, while among females aged 25 to 44 years it was the second most common cancer.
- Melanoma was also the second most common cancer among females under 25 years.

# Mental Health including Alcohol and Drug Problems

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 Age: 20+ selected by Author as HEEADSSSS assessment takes place in Adolescent age range 12-19
 Reference: New Zealand Guidelines Group. Identification of Common Mental Disorders and Management of Depression in Primary care. An Evidence-Based Best Practice Guideline. Wellington: New Zealand Guidelines Group; 2008

<u>Notes</u>

Verbal two to three question screening tools for common mental disorders • Questions for depression • During the past month, have you been bothered by feeling down, depressed or hopeless? • During the past month, have you been bothered by little interest or pleasure in doing things? If yes to either question, ask Help question below **Question for anxiety** • During the past month have you been worrying a lot about everyday problems? If yes, ask Help question below Questions for alcohol and drug problems • Have you used drugs or drunk more than you meant to in the last year? • Have you felt that you wanted to cut down on your drinking or drug use in the past year? These two questions have been shown to pick up about 80% of current drug and alcohol problems If yes to either question, ask Help question below

#### The Help question

• Is this something that you would like help with?

#### **Osteoporosis**

- Age: 45+
- Reference: <u>www.bones.org.nz</u>

#### <u>Notes</u>

- Only measure bone density when the result will impact on decision making
- Indications for Bone Densitometry
  - Any individual prescribed glucocorticoids or other medications associated with osteoporosis, e.g. anti-convulsants
  - o Women with a history of premature menopause
  - Postmenopausal women or older men with a history of minimal trauma fracture
- Women over 60 years and men over 70 years with risk factors such as:
  - Glucocorticoid therapy
  - Parental history of a hip fracture
  - Low body weight (< 58 kg) or BMI (< 20 kg/m<sup>2</sup>)
  - History of smoking or heavy alcohol intake
  - Premature menopause in women or hypogonadism in males
  - Rheumatoid arthritis
  - Malabsorbtion, chronic liver or renal disease
- Any woman over 65 years or man over 75 years considering specific measures to prevent osteoporosis

#### Prostate cancer

• Age: 40 - 70

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#### <u>Notes</u>

#### Reference: Prostate Cancer Taskforce. 2012. Diagnosis and Management of Prostate Cancer in New Zealand Men: Recommendations from the Prostate Cancer Taskforce. Wellington: Ministry of Health

#### Prostate cancer in primary care

- Primary health care should provide high-quality, culturally appropriate information on prostate cancer and PSA testing to men aged 50 to 70 years. All men who are concerned about prostate cancer or are requesting a PSA test must be presented with high-quality, culturally appropriate information.
- Systems must be introduced to general practices to facilitate the informed consent process.
- Screening for prostate cancer must be by both PSA and DRE testing. PSA testing alone is acceptable only where DRE is considered a barrier to testing.
- All men presenting with lower urinary tract symptoms, and men with systemic features of malignancy, must have an appropriate examination and assessment, which includes checking for prostate cancer. This check will include a serum PSA and creatinine, other appropriate blood tests, urinalysis and a clinical examination, including digital rectal examination.
- In the presence of a normal DRE, PSA values of <4.0 ng/mL do not generally merit specialist referral. A significant PSA rise in a man whose PSA has previously been low may warrant referral.
- General practitioners should refer patients to a urologist according to the following criteria:
  - o Men aged 50–70 years when the PSA is elevated to ≥4.0 ng/mL
  - o Men aged 71–75 years when the PSA is elevated to ≥10.0 ng/mL
  - Men aged ≥76 years when the PSA is elevated to ≥20 ng/mL
  - Men with a palpable abnormality in the prostate on DRE
  - A significant PSA rise in a man whose PSA has previously been low may warrant referral.
- Reference: <u>www.usanz.org.au</u> USANZ Media Release - 23 September 2009
- The age at which men are recommended to first have a test to help identify prostate cancer has been reduced from 50 to 40 years of age.
- This test should be done after the patient has been advised by the doctor of the benefits and potential consequences of testing for prostate cancer, including the risk of the detection of cancers, which may not require immediate treatment.
- The recommendation from the Urological Society of Australia and New Zealand (USANZ), which is the peak body for urological surgeons in both countries, is based on evidence that the earlier diagnosis of prostate cancer will reduce the risk of death from the disease
- o Reference: <u>www.uspreventiveservicestaskforce.org</u>
- The U.S. Preventive Services Task Force USPSTF recommends against PSAbased screening for prostate cancer.

#### Six Week Check

- Age: 6 weeks
- Reference: Well Child Tamariki Ora Health Book

### **Smoking**

- o Age:
- Reference

<u>www.rnzcgp.org.nz</u> Cornerstone – Content of Medical Records 2009

#### Notes

- Risk factors are identified
  - o Current Smoking Status

15+

- Smoking history of patients over age 15
- Where appropriate, offer of smoking cessation

# Testicular Cancer

• Age: 15+

### <u>Notes</u>

- Reference <u>www.testicular.org.nz</u>
- Testicular cancer is the most common cancer affecting men between the ages of 15 and 35, but the disease also occurs in other age groups, so all men should be aware of its symptoms
- According to the New Zealand Ministry of Health statistics 47 cases of testicular cancer were diagnosed in the NZ in 2007 and 9 men die from testicular cancer in 2007
- Most testicular cancers are found by men themselves, by accident or while doing a testicular self-examination
- The testicles are smooth, oval-shaped, and rather firm. Men who examine themselves regularly (once a month) become familiar with the way their testicles normally feel
- Any changes in the way they feel from month-to-month should be checked by a doctor, preferably a Urologist
- Reference: <u>www.bestpractice.bmj.com</u>
- When a General Practitioner suspects testicular cancer; serum tumour markers (BHCG, AFP, LDH) and an ultrasound are appropriate first tests to order, before the patient is seen by a Urologist
- Reference: <u>www.uspreventiveservicestaskforce.org</u>
- The U.S. Preventive Services Task Force (USPSTF) recommends against screening for testicular cancer in adolescent or adult males