- Nagel's rule = 1st day of LMP + 7 days - 3 months

- Fe supplementation if anemic or other risk factors

CBC, ABO type, Rh type, Antibodies

arrange U/S for gest. age for 12 - 16 weeks (if required)

Bloodwork: VDRL, HbsAg, offer HIV testing

ensure daily folic acid (0.4 - 1.0 mg or 4 mg if previous NTD)

Rubella titre, Varicella IgG (if no hx of chickenpox)

Accurate completion of Antenatal I form

- Urine R+M and C+S

Prenatal education classes

Domestic violence

Follow-Up Visits

Inquire about

Smoking, illicit drugs, alcohol

Infant Nutrition

A. Developmental Screen
- Caregiver(s) completes Nipissing District Developmental Screen (NDDS

- nutrition (no sleeping with bottle; limit juices; milk up to 20 oz/day) development questions
Social: manageable behaviour, seeks comfort if distressed, easy to soothe

Communication: points to 3 body parts, 20-50 words, responds to own

Fine Motor: scribbles, turns pages in a book

Adaptive: may brush with help, removes hat on own, uses spoon and fork,

-see what child does with pen and paper

-observe interaction with parents -observe spontaneous gross & fine motor -ask "Who's that?", "What's this?"

- safety gate

-observe play with toy/doll

Gross Motor: runs, throws a ball, kicks a ball, walks up steps, walks

dental care, consider soother only for sleep, ensure being seen by dentist

sess risk of lead in toys and pipes/welding in home plumbing

Medical team reviews responses & explores any "no

name, points to pictures

backwards > 2steps

drinks from cup

C. Physical Exam

eyes & vision hearing

- car seat discussion

ON Govt. Services

Great Kids Resources

Child Health Info

G. Refer as needed

E. Immunization

ensure in care of ontometrist

- growth (head circ., weight, height, plot on graphs)

general phys. examination

- bath safety (burns and drowning)

- choking risk of small toys and certain foods

review immunizations to date administer 18 month immunizations
- Pentacel® (DTaP/IPV/Hib) and MMR

good/great things the parents are doing

provide community resource information
Ontario Poison Centre 1-800-268-9017

age appropriate activities and toys (see NDDS)

Family Medicine

Clinical Cards

## Schulich

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DEPARTMENT OF FAMILY MEDICIN

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The authors and reviewers have made every attempt to ensure the rine authors and reviewers have induce every attempt to ensure the ormation in the Family Medicine Clinical Cards is correct - it is possible that errors may exist. Accordingly, the source references or other authorities should be consulted to aid in determining the assessment and management plan of patients. The Cards are not meant to replace customized patient assessment nor clinical judgment. They are meant to highlight key considerations in particular clinical scenarios, largely informed by relevant guidelines in effect at the time of publication.

## Third Edition

London, Canada, 2008

## 18 Month Enhanced Visit Thornton TH Child Injury Prevention

Top Causes of DEATH Due to Unintentional Injury

keep children in the back seat (middle if possible) always check manufacturer's specifications on car seats

Drowning (15%) owning (15%)
- completely enclose POOLS (not just yards) with at least 4foot/1.2m fence & a self-closing gate (by-laws may require additional tall perimeter fencing)

wear life jackets on boats and when playing near water do not use baby bath seats or leave children unattended in baths

supervise closely (adult within one arm's reach of a child in or near water)

avoid nuts, carrots, hard produce, popcorn and large hotdog pieces keep coins, batteries, small toys, magnets & toy parts away from kids under 4

remove comforters, pillows, bumpers and stuffed animals from crib do not have adults sleep in the same bed as babies

test smoke detector alarms monthly and replace batteries yearly

- keep lighters and matches out of sight and reach - arrange for plumber to reduce tap water temperature to 49°C (120°F)

Top Causes of HOSPITALIZATION Due to Unintentional Injury

do not use baby walkers with wheels

use proven safety products
 use safety straps in baby high chairs

isoning (7%)
- keep all potential poisons in original containers and out of reach

install carbon monoxide detector on every level of the home

ensure helmets are fitted properly and always worn

ensure home playground equipment has a deep soft surface underneath nce: Child & Youth Unintentional Injury: 10 Years in Review 1994 - 2003. Safe Kids Canad

forward-facing car seat until *at least* 40lbs/18kg booster seat until *at least* 80lbs/36kg AND 57inches/145cm

teach swimming and survival training

Threats to Breathing (11%)

cut blind and curtain cords short and tie them out of reach ensure cribs and mattresses meet current safety standards

Fire & Burns (10%) - install smoke detector alarms on every level of the home & near sleeping areas

keep hot liquids away from children ensure appliance cords and pot handles are out of reach

prevent access to hot appliances and fireplaces

keep a hand on baby during diaper changes keep car seats, bouncy chairs and bumbo chairs on the floor

- keep all medication in original child-resistant packaging and out of reach choose blister packing of medications if available

keep the poison information phone number near the phone Cycling (7%)

keep children under 10 years old off the road

Playground Injuries (7%)

- remove drawstrings, scarves and skipping ropes when children on equipment

- remove bicycle helmets when on equipment

- closely supervise children by watching, listening and staying close

intubation, mechanically assisted ventilation and ICU stay.

- Deterioration: worsening respiratory status, respiratory failure

home O<sub>2</sub> - 2 4 exacerbations/year chronic oral steroids - antibiotics in previous 3 month

FEA1 < 50% predicted</li>

or non-responsiveness to bronchodilators may requ

Complex: simple criteria and one of the following:

cepnatosporin, extended spectrum macrotides

Antibiotics based on type of acute disease:

SABA + anticholinergic (aerochamber + MDI, or nebulizer)

SEVERE with > 1 exacerbation/year: high dose ICS/LABA combo

home O2 if PaO2  $\le$  55 mmHg, or O2 saturation  $\le$  89% consistently

pneumococcal vaccine - consider repeating every 5 - 10 years

Severe - 30%<FEV1 - dyspnea with dressing, unable to leave house,

ale - 50%<FEV1<80% - dyspnea walking slowly on level, or frequent stopping (Grade 3-4)

Mild - FEV1~80% - dyspnea walking on level or up a slight hill (Grade 1-2)

LABA with low dose inhaled corticosteroid (ICS)/LABA combo.

SABA; if sx persist LAAC+LABA+SABA prn; if sx persist, substitute

MILD: SABD (short-acting bronchodilator); if symptoms persist try LAAC (long-acting anticholinergic) + SABA (short-acting Beta-agonist)

SEVERE with <= 1 exacerbations/year: LAAC/LABA +

signs otchronic respiratory failure or right heart failure (Grade 5)

→ amoxicillin, doxycycline, TMP\SMX, 2nd/3rd generation

N or oral steroids if moderate to severe: 7-14 days (prednisone ≥5-50mg)

→ Clavulin® or fluoroquinolone

confinue methylxanthine if already taking

"Consider theophylline if this fails."

lung reduction surgery or transplant if FEV1 < 20%

OR LABA (long acting Beta-agonist) + SABD

36 weeks: Increase appointments to every week

Medications in pregancy: www.motherisk.org

nce: Kirkham C, Harris S, and Grzybowski S. Evidence-Based Prenatal Care: Par al Care and Counseling Issues. *Am Fam Phys* 2005, 71(7): 1307-16, 1555-60; *Ani ological Health Assessment*, Department of Family & Community Medicine, Unive

Conduct

bleeding, leaking

· ALPHA TOOL (risk screen): www.oma.org/Forms/ALPHA\_Form.pdf

child abuse: previous involvement with CAS; witnessed/received child abuse

couple dysfunction: does not describe supportive involved relationship

postpartum depression: recent stressors; describes poor/depressed mood

woman abuse: feels scared by what partner says or does

blood pressure check urinalysis - FHR (after 16-20 weeks)

Prenatal Care

- Nutrition & wt. gain

- Sexual intercourse

cramping, contractions relationship with partner remember to periodically assess violence risk

Before 16 weeks

Pap test - Endocervical swabs for Chlamydia and Gonorrhea

- U/S for structural abnormalities

- Glucose challenge test (50g glucose load)

Rh globulin injection if Rh-ve

Vaginal and rectal swabs for GBS (group B streptococcus)

Information on pregnancy: www.sogc.org

erectile dysfunction - PDE5 inhibitor if no contraindications (eg. NTG)

dyslipidemia - statin or fibrate ECASA 80 - 325mg daily (unless contraindicated) albuminuria - ACEI or ARB if creat.clearance > 60; ARB if clearance < 60;

\*inculin + insulin sensitizer not approved in Canada
Complications & Co-Morbidities
HTM (ie. BP > 130/80) - ACEi (monitor serum creatinine), then try/add ARB, bAction of the complex of

if HBA1C 7 - 8.9, biguanide (especially if overweight), sensitizer, secretagogue,

on 3 non-consecutive days

every 1 - 2 years

Ungoing Frequency

regularly: at least 150 minutes per weel

check serum creatinine & potassium after 2 weeks then periodically

painful neuropathy - TCA or anticonvulsant

a-glucosidase inhibitor, or insulin

Medication Management

erectile dysfunction

blocker, thiazide-like diuretic, LACCB in that order.

if HBA1C ≥ 9, 2 of above classes, or straight to insulin

Glucose Control / Insulin Resistance - start at dx if HBA1C ≥ 9.0, or await 3 months of lifestyle changes - if HBA1C > 7, congratulate and monitor from the Arc of Springald or a properties of the PACC | 200 properties or a properties or a

лсе: Торе, Sheldon and CHEP Executive Recommendations for the Management of ension 2007, Canadian Hypertension Education Program, 2008. www.hypertension.ca

Hypertension (Renal, Hyperaldosteronism, Thyroid, Pheochromocytoma) chronic pain), Medications (i.e. NSAIDs, OCPs etc), Secondary Adherence, Co-Morbidities (i.e. obesity, tobacco, alcohol, sleep apnea, **REASONS FOR POOR RESPONSE** 

ensure is on ACE-inhibitor if has established CVS disease use statin if established CVS disease or ≥ 3 CV risk factors consider aspirin for secondary prevention of MI/CVA

combination pill may improve adherence to treatment plan do not mix β-blocker with nondihydropyridine CCB Second Line: add-in additional drug from first-line list

If-recent myocardial infarction: B-blocker and ACE-inhibitor angiotensin receptor blocker calcium channel blocker

ACE-inhibitor (particularly if DM) β-blocker (only if <60 years old)

GLOBAL CARDIOVASCULAR RISK CARE

thiazide diuretic First Line (one of):

DRUG THERAPY

- smoking cessation and smoke-free environments alcohol reduction (max. 9 drinks/week for women, 14 for men)

jogging, non-competitive swimming). 4 - 7 days each week weight reduction if overweight 30-60 minutes of moderate intensity exercise (e.g. walking, cycling, diet low in salt, saturated fats, high in fruit and vegetables

Leatment curiqueu - nang()λ secondary; consult paediatrian urgently/emergently

qispețes OR cyronic kiquey disease: <130/80 general: <140 systolic and <90 diastolic children - measure with correct size cuff and consult BP tables

three home ambulatory readings ≥135/85 regular patients -- dx made with 3 readings ≥ 140/90 dx made on second visit if BP ≥140/90 chronic organ damage, chronic kidney disease, DM, or BP>180/110,

dx made on initial visit if BP ≤ 140/90 hypertensive urgency/emergency (acute end-organ diseas, eg. cva, MI) assess blood pressure at all appropriate visits

Osteoporosis

COPD

consider IV  $\beta_2$ -agonist, inhalational anaesthetics, intubation

if deteriorating, rule out pneumothorax and upper airway obstruction - systemic steroids if initial SaO $_2$  <96% (children), <94%(adults)

salbutamol by aerochamber (or nebulizer); consider back-to-back

add oral steroids (after high-dose ICS, LABA, LTRAs tried) add oral theophyline (less effective than LTRAs and LABAs)

Second-line options for patients with insufficient control: First-line: PRN fast-acting  $\beta_2$ -agonist & inhaled corticosteroids (ICS)

- allergy testing & avoidance of identified allergens

Smoking cessation a avoidance 1. environmental control:

\* not counting 1 dose/day for exercise sx LEΛ<sup>1</sup> or PeakFlow >90% best - < 4 doses  $\beta_2$ -agonist per week\* · no school/work absences - normal physical activity mild/infrequent exacerbations

- < 1 nighttime sx per week - < 4 daytime sx per week 1. assess control: good control if following criteria met

- airway responsiveness to methacholine in pulmonary function lab

adults and children > 5: any of the following confirms diagnosis

improves with asthma meds (if no response, look for other cause) - curonic cougn

wheezing/dyspnea after 1 year old > 2 episodes of wheezing

preschool age: following criteria support diagnosis

Type 2 Diabetes

\*\* advise extreme caution when warming formula - severe face, neck and mouth burns can occur; microwaving increases this risk 6 months -- add iron-fortified cereal (use until at least 18

- vitamin D 400 IU / day while exclusively breastfeeding

- exclusive breastfeeding until up to 6 months

- start with rice cereal - every 3 - 5 days, introduce another *single-grain* cereal (eg. oatmeal)

· use mixed-grain cereals after all single grains introduced - by 8 months, add plain yogurt or fruit to keep baby interested in cereal

- (if breastfeeding is discontinued, switch to iron-fortified formula)

8 months -- add meats and alternatives

- purée meats initially, offering new one every 3 - 5 days

- hard-cooked egg *yolk* is okay

- no more than 24 ounces (720ml) per day (20 ounces by age 2 years)

- don't give non-pasteurized foods

- don't re-use formula/breastmilk that the infant didn't finish

- offer solid foods after nursing/formula feeding until 9 months

 $^{**}$  no research has yet proven a benefit with combining these drugs parathyroid hormone - 18 months use only, for severe osteoporosis

bisphosphonates - alendronate and risedronate reduces all fractures lιαςτηικες, νειτερίαι Jractures)"" Αdναπced Tx (severe osteopenia, osteoporosis, fragility

EXELCISE - GELODIC, resistance and weignt-bearing all reduce spine #'s Basic Therapy (all patients - primary or secondary prevention)

(BMD 4.5 SD or more below YAM) (BMD between 1 and 2.5 SD below YAM) (BMD not worse than 1 SD below YAM) fractures seen on xrays (AP&lat) of thoracic and lumbar spines neignt toss of ≥ 6cm by nistory

hx of clinical hyperthyroidism ехсеггіле аісороі excessive caffeine гшокег low dietary calcium rheumatoid arthritis :JoulW

1. hyperparathyroidism ≥ 3 months glucocorticoids fragility # > 40 years old = pjoq) vertebral compression # age ≥ 65 years wajor: Bone Mineral Density Scan if 1 Major or 2 Minor Criteria present

- FEV1 < 80% of the predicted normal value, or

Family Medicine Clinical Card

Assess Severity

Family Medicine Clinical Card Family Medicine Clinical Card

D. Safety Issues (see Injury Prevention Card for more details)

- homogenized (full-fat) milk until at least 24 months

- don't put infant/child to bed with bottle (increases dental caries)

- don't give nuts, egg white or shellfish in first year of life

- sterilize bottles, etc. until 4 months (for 2 min, in boiling water)

- if food is refused, offer it again in 1 - 2 weeks - switch to cup or sippy cup by 12 months

Emergency Adjunctive Care for Painful Vertebral Fracture calcitonin - decreases vertebral fractures

sejective estrogen receptor modulators: decrease vertebral #'s only

Calcium (1000mg/day) and Vitamin D (800IU/day)

(osceoporosis with ≥ i fragility fracture) zevere Usteoporosis Osteoporosis Osteopenia

uo 7 ₹ 10 sso1 1ugian barnamuoo

weight 10% less than at age 25 cyconic yeparın therapy chronic anticonvulsants menopause prior to 45 osteopenia on x-ray

Identification of Vertebral Fractures

At Risk - no symptoms, current or previous smoker, chronic

- FEV1/FVC <0.70

Reviewers Drs. Cathy Faulds, Tom Freeman, Tim Heerema,

www.familymedicineuwo.ca

consider ipratroprium bromide

Oz 11 hypoxic Emergency Management

add leukotriene-receptor antagonist OR long-acting  $\beta_2$ -agonist SOI To esob essenori

2. observe & assess inhaled drug technique

severe episode of wheezing/dyspnea

Family Medicine Clinical Card

6 months -- add puréed vegetables - start with green or bland foods - every 3 - 5 days, introduce another vegetable

> 7 months -- add puréed fruit - give unsweetened fruit only - every 3 - 5 days, introduce another fruit

- legumes (kidney beans, chickpeas and lentils) are a good option 12 months -- add cow's milk

- don't give fruit drinks or honey; juice is not recommended

public health units are great resources for all sorts of information on infant nutrition and food safety: www.healthunit.com

calcitonin nasal spray 200 IU daily (alternating nostrils) for analgesia

www.children.gov.on.ca

www.cfc-efc.ca

www.caringforkids.cps.ca, www.cfpc.ca

walking increases hip BMD and reduces risk of falls

WHO Diagnostic Categories (YAM = young adult mean)

unands/y8noc

pulmonary rehabilitation

exercise & education

influenza vaccine (annually)

- smokers >40yo with dyspnea, cough or frequent RTIs **Asthma** 

\*

Physical Exam

1.11 ≤ TT201d2

Screening & Diagnosis

ensure adherence λes TOOL CAYE suzance adherence dietician & educator ςaί וווחצווול בבצמרוחוו regularly ssessa of sgnini annually səÁ игле тісгоальшіп every 1 - 3 yrs fasting lipids every 3 months; goal ≤ 6.0 (or 7.0) λes 16 (6.0) of 0.4 DA : goals: AC 4.0 to (6.0) of 0.0 or 0.0 or 0.0); PC 5.0 to (8.0 or 0.0); PC 5.0 to (8.0 or 0.0) Lab Tests λG2 лепкора<del>с</del>ћу ускееп each visit λGS prood pressure λG2 every 1 - 2 years Adopsonur

> xQ JA Surveillance After T2DM Diagnosed pre-diabetes is diagnosed if FG is 6.1 - 6.9, or OGTT is 7.8 - 11.0

\*\*diagnosis must be confirmed with 2nd test unless screen < 40y if any risk factors (pre-diabetes, features of DM or met. syndrome, risk group, PCOS, GDM or LGA infant, chronic antipsychotics, DM in 1° relative) screen all adults  $\ge 40$  years with FPG, consider 75g ZhrOGTT (esp. if FPG  $\ge 5.7)$ 

random glucose ≥ 11.1 with symptoms (polyuria, polydipsia, weight loss)

bαξισυς ις ωσταρο*ι*ιςα(ιλ αστοωbσυ*ε*ατοα

Hypertension

propensity to fall malabsorption syndrome fam. Hx. osteoporotic #

Family Medicine Clinical Card

dust exposure reduction

(nze wask aerochamber in children < 6 years old)

- > 12 - 15% improvement in FEV  $_{\rm I}$  post-bronchodilator - > 20% variability in peak flow (PEF)