

# It's not easy being green.... Sustainability and renal care in BC

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#### Objectives of the plenary sessions

- Describe the provincial government initiative "Carbon Neutral Operation"
- 2. Identify the impact of the carbon neutral operation on healthcare in BC
- 3. Recognize the myths and realities of sustainability



#### Objectives of the plenary sessions

- 4. Apply the concepts of sustainability to renal care
- 5. Champion green initiatives in your renal program
- 6. Identify next steps for enhancing green initiatives across the BC renal community



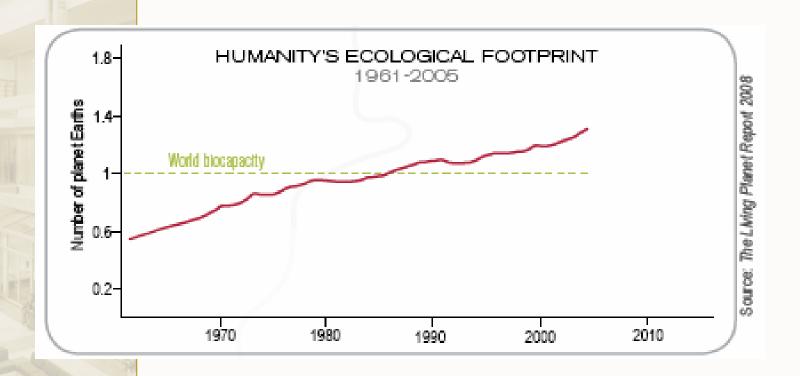
The idea is....



The presenters will raise the questions – you must find the answers in yourselves.

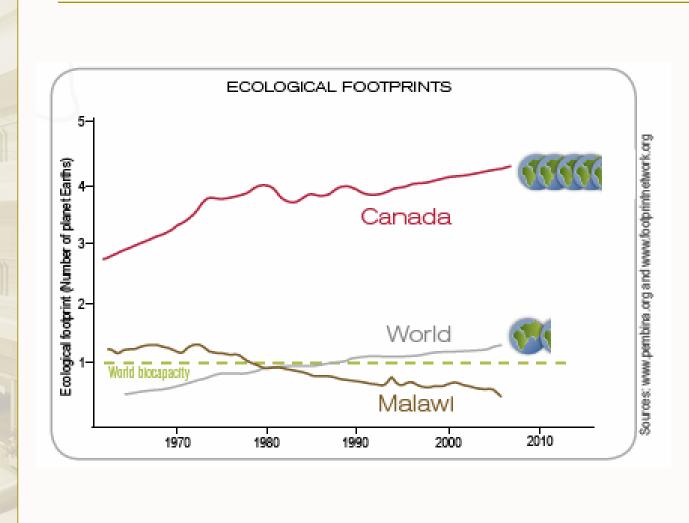


#### The problem





#### Canada's contribution to the problem



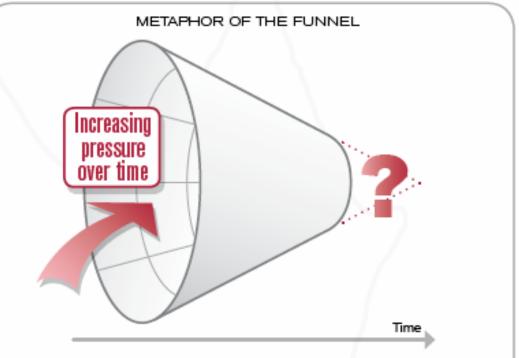


#### The funnel metaphor

(from "Sustainability Primer Canada" the Natural Step Canada,

www.thenaturalstep.org/

Canada)



Pressure on society increases over time due to our growing demand for resources and ecosystem services, the declining capacity of the earth to provide those, stricter governmental laws and consumer pressure, and the social tensions resulting from abuses of power and inequality.



#### Sustainability

Fundamental Human Needs - Manfred Max-Neef, 1987 (1983 winner of Right Livelihood Award)



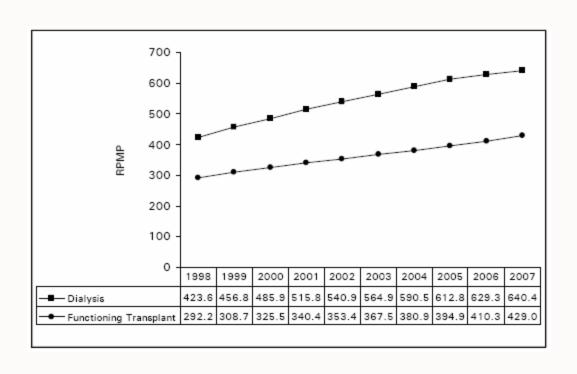
Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

(Brundtland Commission "Our Common Future...", UN 1987

## SUSTAINABILITY AND THE RENAL PROGRAM



#### Renal replacement growth in Canada

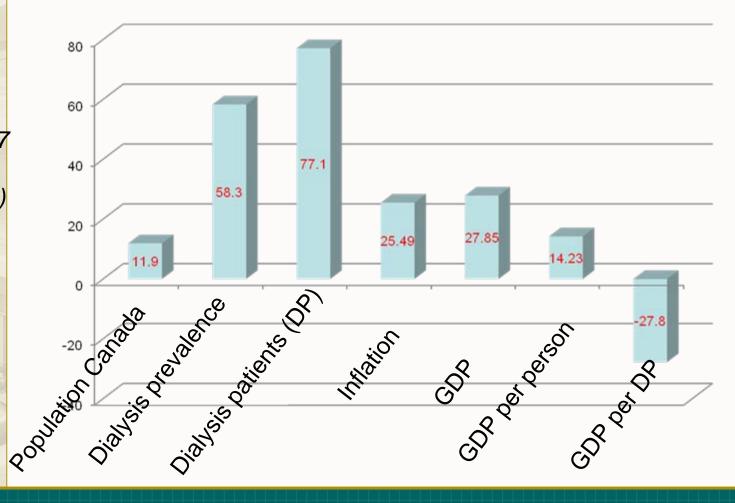


(CORR Report 2009)



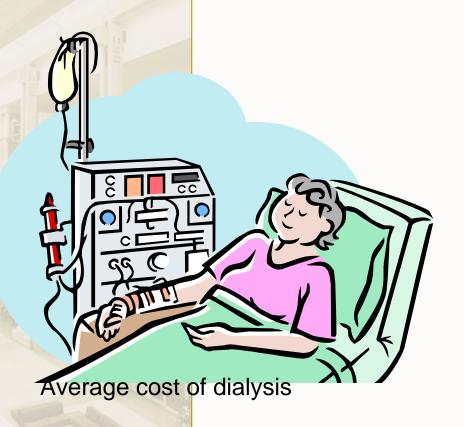
### % Change 1999 -2009

(date from CORR 2009 report, with extrapolation 2007 to 2009, and Statistics Canada)





#### Economic burden of dialysis





Average total tax payment of 2.54 Canadian families

OR 22,700 dialysis patients consume the tax revenue from 57,700 families (data adapted from McFarlane A et al, 2002 and Canadian Consumer Tax Index)



## IS ECONOMICS A FAIR WAY TO JUDGE RESOURCE USE?

Maybe ......but



#### Dialysis and water consumption

7000 litre truck



38 hour supply

for average

Canadian

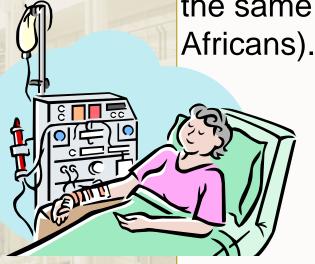
Canada is second worst of OECD countries (and probably the world) in per capita water consumption. Only the US is worse. Dialysis adds about 70 – 100 litres per day on average of water use and increasing with trend to greater dialysis dose; but approximately 30% of domestic water use is toilet flushing.....

(Natural Resources Canada)



#### Dialysis and power consumption

Canada is 4<sup>th</sup> worst out 218 countries/territories in per capita electricity consumption (1 Canadian uses the same amount of electricity as about 500



X 3 shifts/day





(data adapted from CIA World Factbooks and Fresenius)



#### Dialysis and solid waste



0.88 kg/day



Cache Creek Landfill, BC



1.01 kg/day (adapted from Upadhyay et al, 2007 and Environment Canada Data)



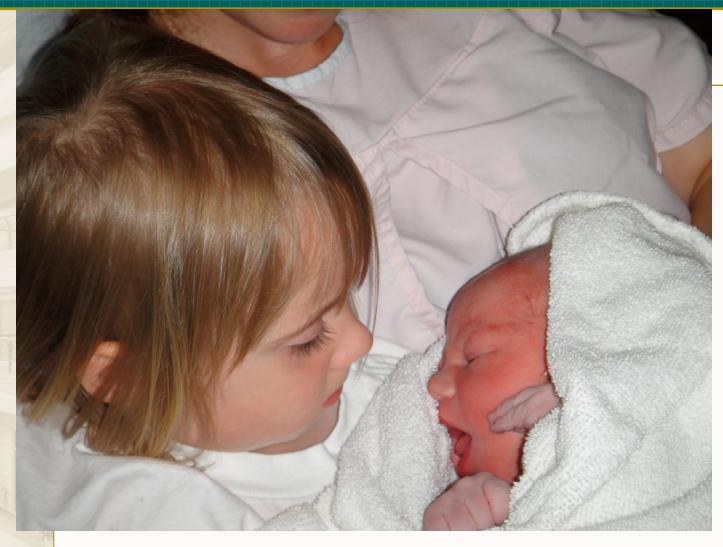
#### **Summary**



(Deedeehamptom.com)

- Canadians have an unsustainable lifestyle
- •Renal programs currently tend to revolve around dialysis, which due to its chronicity, likely has the heaviest ecologic and economic footprint of any therapy
- •This is a small part of the unsustainability of Canadian lifestyles.....but
- •Is there any honour in being the straw that broke the camel's back?





"When I'm dying, I want to be able to look at my grandchildren and say I did the best I could," David Suzuki, 2009 Winner, Right Livelihood Award