Possible Endgames Beyond Tobacco for NZ – A Public Health Perspective

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Why endgames & total elimination?

- Can provide motivation, inspiration for societal action
- Can be very cost-effective (eg, now no need for smallpox vaccination or treatment costs)
- But risks diverting focus from building up routine systems (eg, polio campaigns vs stronger primary care systems).







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Successful examples – infectious diseases

- Smallpox global eradication (1980)
- Rinderpest global eradication (2010)
- Polio free in 5 WHO regions, 3 countries to go
- Guinea worm disease 180 countries certified free, 5 to go
- Malaria eliminated in 28 countries
- Lymphatic filariasis eliminated in 21 countries
- Measles eliminated in Americas region of WHO (2002)
- Rubella nil since 2009 in the Americas
- River blindness Colombia in 2013







Other examples of endgames

- Elimination of CFC production in developed countries (Montreal Protocol)
- Stockholm Convention on Persistent Organic Pollutants (POPS) – many to be eliminated
- Landmines 87 countries destroyed stockpiles
- Biological weapons all(?) programmes ended
- Chemical weapons 4/9 states at 100% elimination
- Nuclear weapons 1/10 states disarmed (South Africa)







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NZ successes

Infectious diseases & vectors eliminated

- Polio, hydatids, brucellosis,
- Southern saltmarsh mosquito (\$70m)



Other eliminated hazards

- Exotic mammalian pest species on offshore islands
- Leaded petrol, 1996 albeit a slow process^(Wilson & Horrocks 2008)
- DDT (1989) & ratified *Stockholm Convention on POPs* (2004)
- Banned certain asbestos imports (1984)
- Banned visits by nuclear-armed/powered naval vessels



Burden of Disease Epidemiology, Equity and Cost Effectiveness Programme





Citizen participation in the nuclear-armed vessels endgame for NZ



Possible new NZ endgames – infectious diseases

- Hib disease (nearly there)
- Measles, mumps, rubella (as per the Americas)
- Campylobacter contamination of fresh poultry?
- Rotavirus infection might be feasible?
- Vectors: Feral goats, pigs & deer (would be controversial) (See abstract book PH Congress)
- Genital warts? (need cheaper vaccine^(Pearson et al 2014))?







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Possible new NZ endgames – injury

- "Vision Zero" eliminating road traffic fatalities
 - Sweden for 2020
 - Norway
 - San Francisco
 - New York City
 - But is it cost-effective expensive road design & safer cars?

• Eliminate scalding from hot water cylinders (likely to be cost-saving)







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Brisbane – state-of-the-art cycle-ways (but expensive)





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More cycle-ways (Brisbane)











Possible new NZ endgames – Other

- Eliminating **coal/gas-generated** electricity in NZ
- Unflued gas heaters (eg, as per Canada, & some US & Australian states)
- **Direct-to-consumer-advertising** of prescription pharmaceuticals (NZ a global outlier)
- Gambling: Poker machines (banned in 5 US states eg, Hawaii, Connecticut); Casinos (eg, Turkey); Online gambling (eg, Netherlands)







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Conclusions

- NZ a world leader in some eradication efforts (hydatids, brucellosis, SSM, pests on islands, nuclear ships)
- Smokefree 2025 is a bold vision, but lacking the operational planning (vs hydatids, pests on NZ islands)
- Major potential for additional endgames in NZ but need:
 - Health sector advocacy and agreement on priorities
 - Government leadership (and planning beyond 3 years)







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