

Canada's Covid 19 Response

It is Time to Pivot

Who we are and why we care...

- We are professionals who care about our communities – a retired emergency management expert, a retired professional engineer, a pediatric infectious disease and ICU physician, and a scientist executive in the medical industry
- We came together because we independently arrived at the same conclusion about Covid 19: we strongly and deeply feel we need to pivot towards a long-term, sustainable emergency management plan

Emergency Management Process

- In Canada, we have an Emergency Management Process that we normally use in all emergencies, particularly a major emergency like a pandemic.
- We have pre-written Pandemic Response plans, **based on hard learned lessons from previous pandemics.**
- The aim of these plans is to allow our leaders to rapidly minimize the impact of the new pandemic on our society.

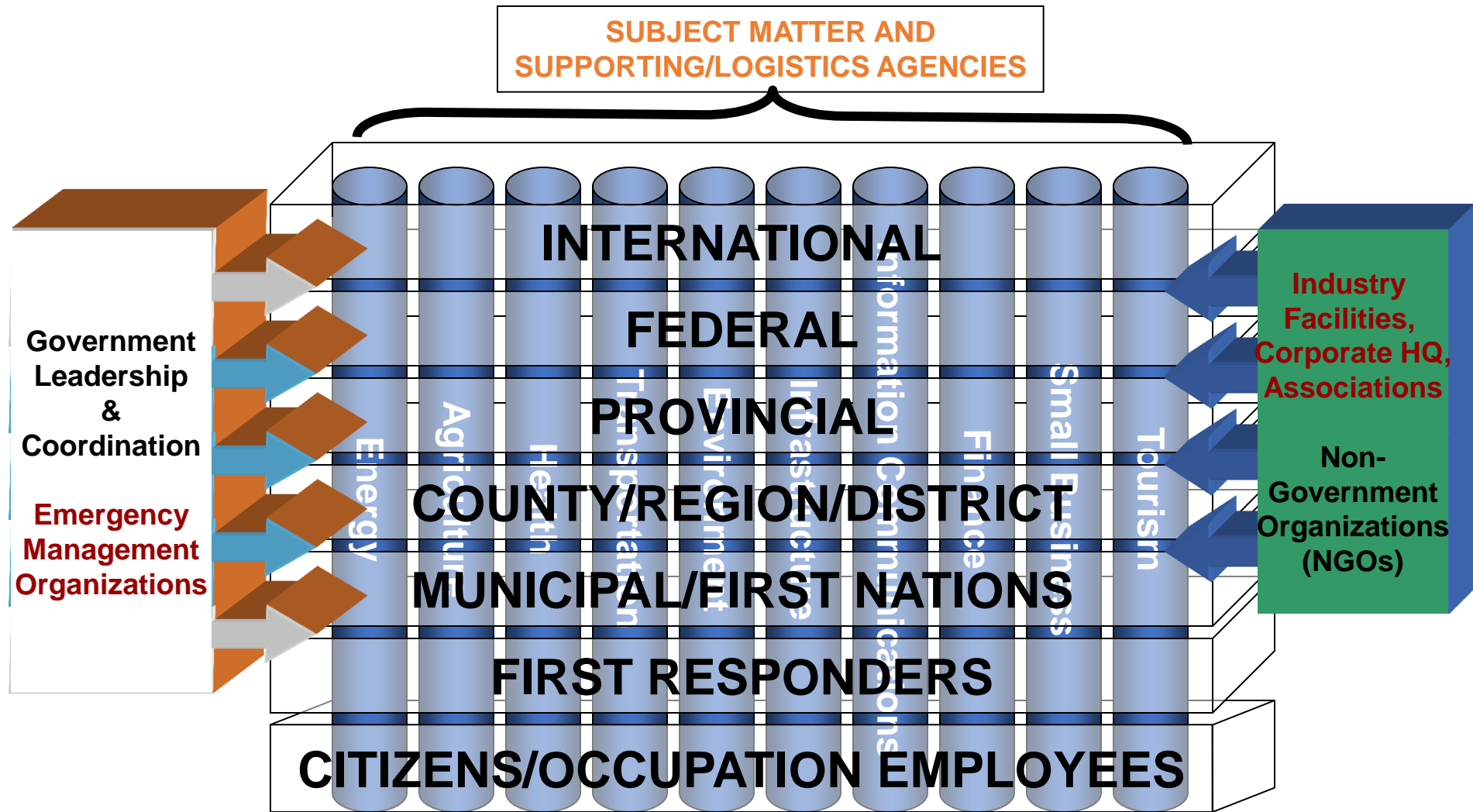
Pandemic Emergency Management

Pandemics are a public emergency and not merely a public health emergency. There is a big difference.

The four pandemic goals are clearly defined:

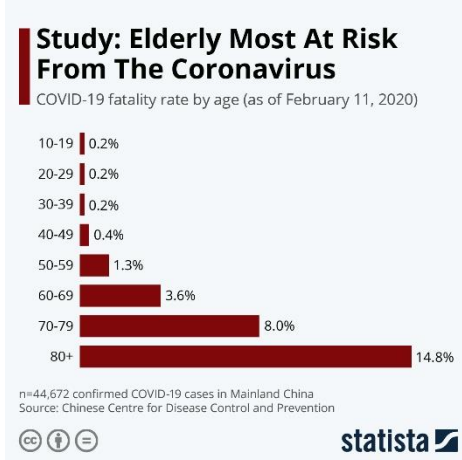
1. **Controlling the spread** of disease and reducing illness (morbidity) and death (mortality) by providing access to appropriate prevention measures, care, and treatment.
2. **Mitigating societal disruption** in **Ontario** through ensuring the continuity and recovery of critical services.
3. **Minimizing adverse economic impact**.
4. **Supporting an efficient and effective use of resources** during response and recovery

Partners in Emergency Management



The Emergency Management Process Factors – 1. Enemy – Covid 19

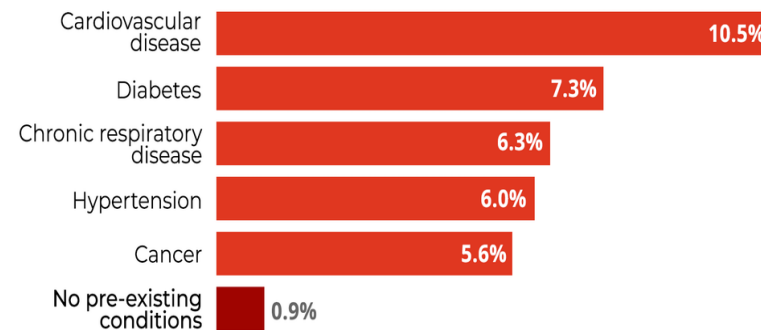
In February and March we knew that over 95% of the deaths in China and Europe were in seniors, over the age of 60, with multiple co-morbidities.



<https://www.statista.com/chart/20860/coronavirus-fatality-rate-by-age/>

Pre-existing medical conditions and COVID-19

COVID-19 death rate by pre-existing medical condition



Source: Author provided

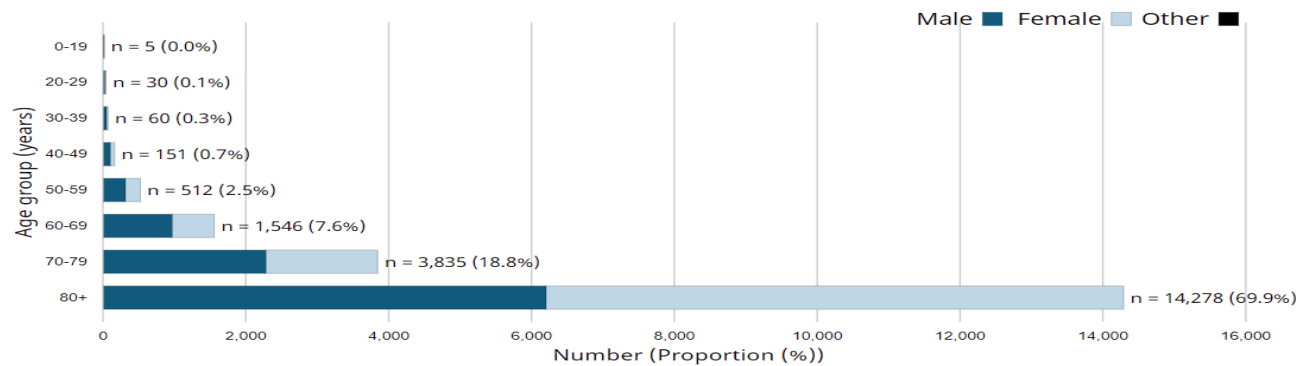
<https://theconversation.com/why-are-older-people-more-at-risk-of-coronavirus-133770>

Emergency Management Process Develop Options

We should have immediately developed options for the protection of concentrations of our seniors over 60 with co-morbidities. Our Long-Term Care homes should have been placed into Quarantine, for both the **residents and the staff**.

As of February 8, 2021, in Canada, over 96.4% of our over 20,767 deaths have been in seniors, over the age of 60, with multiple co-morbidities. See Figure 5 in link below, updated weekly by Health Canada. That is 20,020 of our seniors.

Figure 5. Age and gender ³ distribution of COVID-19 cases in Canada as of February 5, 2021, 7 pm EST (n=20,417 ¹)



<https://health-infobase.canada.ca/covid-19/epidemiological-summary-covid-19-cases.html>

Results of Lack of an Emergency Management Process

- Over 15,360 of these deaths could have been avoided, as over 74% of the deaths have occurred in long term care homes. Quarantine those most at risk!
- ***In June 2020, the Canadian Institute for Health Information reported that Canada had a higher proportion of COVID-19 deaths within LTC settings than other OECD countries included in its comparison. At that time, deaths in Canadian LTCs from COVID-19 were at 81% of the total, while OECD countries reported LTC COVID-19 deaths of 10-66% (average of 38%) of their totals.***
- <https://hillnotes.ca/2020/10/30/long-term-care-homes-in-canada-the-impact-of-covid-19/>

Unfortunately, lockdowns, never recommended in all hard lessons learned from previous pandemics, created much collateral damage, documented within peer-reviewed scientific journals at collateralglobal.org while having almost no impact on the spread of Covid-19
Bendavid et al: <https://onlinelibrary.wiley.com/doi/10.1111/eci.13484>



Collateral Damage	Description (both Ontario and all-Canada statistics included)
School closures	<ul style="list-style-type: none"> -Effects into adulthood on intelligence, teen pregnancy, illicit drug use, graduation rates, employment rates and earnings, arrest rates, hypertension, diabetes, depression -Also causes food insecurity [missing school meals], loss of a place of safety, less physically active, lost social interactions, lost support services for developmental difficulties, economic effects on families
Disrupted healthcare	<ul style="list-style-type: none"> ->25% reduction in ER visits for heart attack and stroke ->40% reduction in cancer diagnoses; >200K reduction in CT/MRI in Ontario -90% reduction in non-cancer surgeries in March/April: surgery backlog March 15 - June 13 was 148K in Ontario, needing a clearance time of 84 weeks -wait times increased in Canada: need >\$1.3B additional funding to return to pre-pandemic wait times for 6 procedures (bypass, cataracts, hip/knee replacements, MRI/CT scans) within 1y -20-50% of excess deaths are not due to COVID-19
Intimate partner violence	<ul style="list-style-type: none"> -20-50% increased police reports and support line calls -increase in child abuse
Mental health, deaths of despair	<ul style="list-style-type: none"> -Mental Health effects of 3 months [from suicide, depression, alcohol use disorder, childhood trauma due to domestic violence, changes in marital status, social isolation]: 7.79M YLL in Canada ->25-50% increase in opioid overdose deaths in Ontario March-May 2020
Economic Recession	<ul style="list-style-type: none"> -Shortened lifespan for the population due to future reduced spending on social determinants of health
Loneliness	<ul style="list-style-type: none"> -Among top risk factors for reduced lifespan, early death, and chronic non-communicable diseases
Unemployment	<ul style="list-style-type: none"> ->180K businesses might close across Canada -Among top risk factors for reduced lifespan, early death, and chronic non-communicable diseases

Projected Canadian Collateral Damage in Wellbeing Years (WELLBY)

- WELLBY scale measures the value of anything that makes life enjoyable and captures what is important to people

Factor in Canada	Benefit per month	Cost per month
TOTAL	0.141M WELLBY	1.41M WELLBY
BALANCE		10X [minimum] 40X [somewhat more realistic]

- A cost-benefit analysis shows the cost of lockdown would be at least 10X the benefit and perhaps as high as 40X*

* Joffe, A. (2021). COVID-19: Rethinking the Lockdown Groupthink. *Frontiers in Public Health*.

We propose a Pandemic Pivot

- Twelve months of global empirical data from the first & second waves tells us we need to adjust our response to Covid 19
- The response will be led by the Provincial Emergency Management Organization (“EMO”)
- Each Province will move to immediately quarantine their LTC homes until such a time that all residents and staff can be vaccinated against the current strain.
- Further, the Federal Government and each Province will release a full Covid 19 Plan, aiming to protect the most vulnerable members of our population while ending lockdowns (i.e., those age 60 and older with multiple comorbidities).
- It is time we pivot to rebuilding our Country with a clear Plan for a better way ahead.

1. A Written Published Plan in a Pandemic

- The purpose in writing these plans is to ensure the Government advise the public of the scope of the new hazard, and publicly issue a complete written plan to address it.
- The public can see the entire plan, see the phases of the plan, and all steps that will be taken.
- The public then understands their role in the plan.
- The response to the pandemic would then be coherent.
- Due diligence is met, if Public Emergency is declared
- **To date this has not happened Federally or Provincially**

2. Enact Pandemic Plan – Goal 1

Vigorously enact the Pandemic Plan to protect our most vulnerable (those over age 70 and those aged 60-69 with multiple co-morbidities).

3. Protect Critical Infrastructure – Goal 2

- Ensure all critical infrastructure (including but not limited to hospitals) is ready for people who get sick and who need to take sick days
- Stop quarantining healthy people
- Build and segregate an appropriate number of ICU and hospital beds to handle any surge, without interrupting other healthcare

4. Create a Public Communications Plan

- Remove the fear campaign from the media and promote positive messaging.
- This needs a PLAN and will not be easy.
- Governments' daily facts must be given with context and denominators.
 - Comparisons to other life risks
 - Who actually is at most risk
 - Our total Health capacity vs Covid needs

5. Create Province Wide Confidence

- End all talk of future lock downs and explain why
- Citizens will have confidence that their Government has a sustainable, long-term plan which will ensure minimum damage to Canada both in terms of loss of life and other possible dangerous impacts
- Confidence vs Fear – Unintended consequences of fear

6. Schools & Daycares Remain Open

- Guarantee to keep schools and day cares open, with relaxed social distancing.
- Communicate to public: Teachers and students are not at risk from Covid 19
- Critical Importance of development of our youth both socially and intellectually

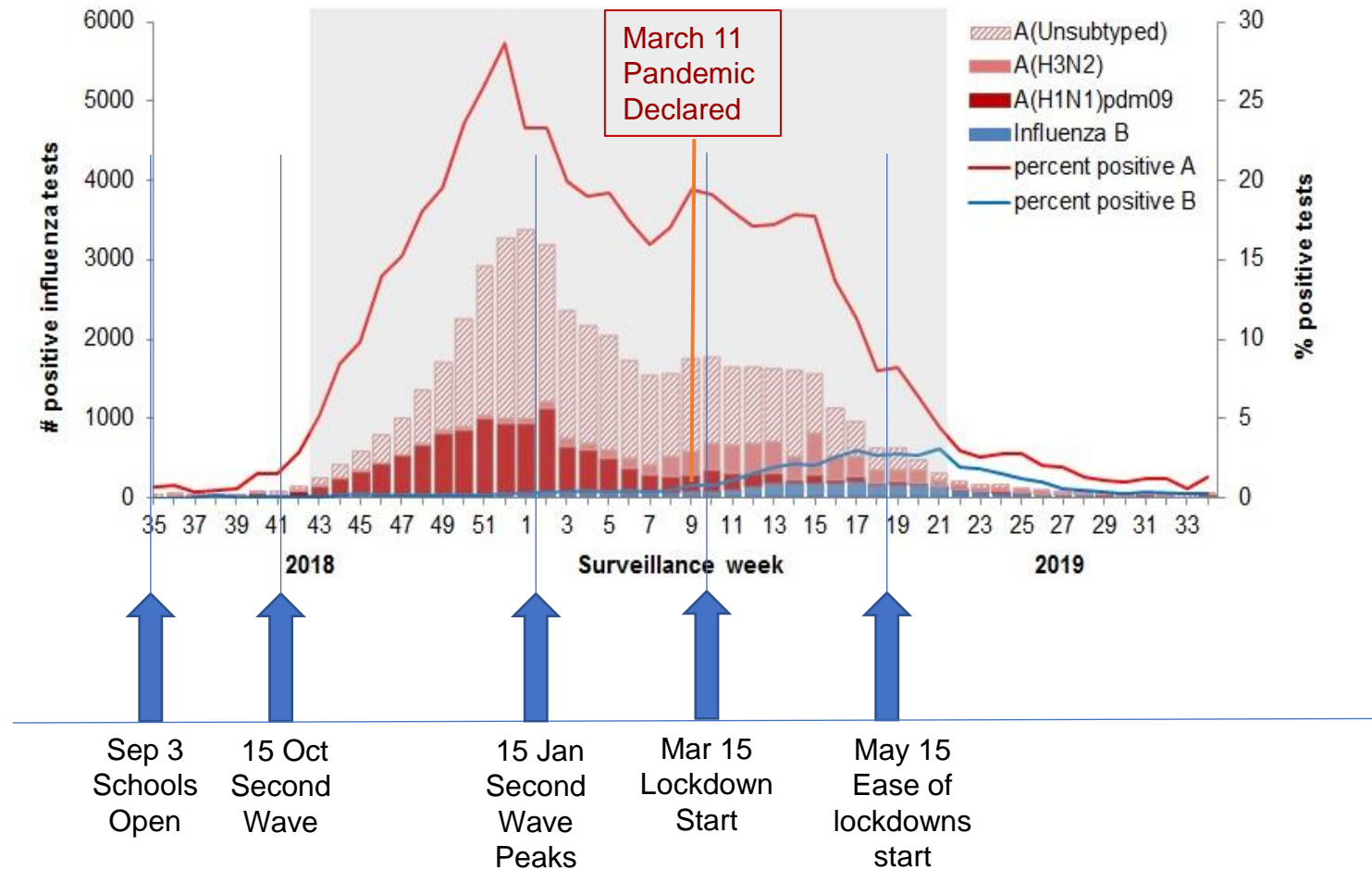
7. Get Our Country Back to Work – Goal 3

- Everyone under 65 years without pre-existing compromised immune systems, who can and want to work, can return to work.
- Communicate to public: 760 Covid deaths in those under 60 in Canada. 1,200 folk under 60 die each year in traffic accidents.
- Nearly all under 65 years old who are healthy and catch Covid recover at home

8. Expedite Vaccination Program

- Continue to vaccinate for the **current** strain of Covid 19
- Show public the plan anticipates future strains
- Ensure everyone knows vaccines are not the silver bullet

Canadian Annual Viral Infection Curve



Confidence in Government – How to Achieve It

1. Produce a written Provincial Covid 19 Pandemic Plan including but not limited to:
 1. Situate the Disease and Province in a National concept
 2. Define the Mission – To ensure minimum impact of Covid 19 on Canadians
 3. Clearly defined Governance
 4. Clearly defined Phases
 5. Clearly defined Objective and tasks by Organizations
 6. Outline Critical Support
 7. Define Communications for
 1. Support of Citizens
 2. Support of the Public sector
 3. Support of the Private sector
2. Define How you will Protect those most at risk
 1. A separate Plan for Long Term Care (LTC) homes
 2. A Plan for care of those with multiple co-morbidities not in LTC Homes
 3. How the Public can help and interact
3. Define how you will ensure operation of Critical infrastructure
 1. Place Covid hospitalizations/ICU usage in context with total capacity and plans for surge capacity
 2. Assurance of electricity, water, food and essential supplies
 3. Show that you know what is most important and how the public can help

4. Define how you will ensure the continued care for those with other life-threatening illnesses
5. Define a Plan for Mental Health issues related to the Pandemic
6. Define a Plan for the assurance of in class learning for our youth with appropriate safety measures and mental health aides
7. Place this virus in Context
 1. To other diseases (Pneumonia for Example)
 2. To other causes of death annually
8. Testing of Canadians for Covid 19
 1. Rapid
 2. In depth
 3. Cross population to determine actual Infection Fatality Rate
9. Produce risk analysis for population for FP advice to population (similar to the Cancer risk analysis provided to new Cancer patients age vs operation vs chemo vs radiation vs drug therapy)
 1. by age
 2. by co-morbidity
 3. by other health conditions (including obesity)
10. Define exactly how the Public can send ideas and feedback to the Government
11. Show the public you have a Plan and are READY

Intended Medical Officer of Health Tasks Feb/Mar 2020

Produce a written plan for:

1. Care of those most at risk (those 60 and older with multiple co-morbidities)
2. Assurance of Medical Capacity including
 1. Infrastructure
 2. Staff
 3. Equipment
 4. Supplies
3. Assurance of continuing care for other high-risk diseases
4. Monitoring of Covid 19
 1. Shifts
 2. Patterns
 3. Zoonotic behaviour
 4. Research of Treatments for Covid and implementation as found

Produce a written plan for (Continued):

6. Testing of Canadians for Covid 19
 1. Rapid
 2. In depth
 3. Cross population to determine actual Infection Fatality Rate
7. Produce risk analysis for population for FP advice to population (similar to the Cancer risk analysis provided to new Cancer patients age vs operation vs chemo vs radiation vs drug therapy)
 1. by age
 2. by co-morbidity
 3. by other health conditions (including obesity)
8. Providing "Confidence" based Advice to
 1. Government
 2. Private sector
 3. Not for Profit Organizations
 4. General Public

Ten Emergency Management Activities

