

Economic collapse, societal breakdown seems unlikely, but given interdependence, fragile “just in time” economy, and irresponsibility it could happen very quickly

Nassim Taleb:

“Our connected world appears to be more efficient. . . But when there is a disturbance, the setback is much harder to handle. Not only are we building riskier systems, but also the risks involved in failure are a lot larger. . . . We are incapable scientifically of measuring the risk of rare events. We tend to underestimate both the probabilities and the damage.” (quoted in *Fortune Magazine*, April 11, 2011)

- Unlike old, simple agricultural economies; we are dependent on daily shipments (“just in time delivery” JIT) of food and materials, highly interdependent, very vulnerable to disruptions
 - even hospitals maintain only small inventories
- HEMP attack destroys electronics, computers, Internet
 - Leaving businesses, emergency services inoperable
- Viral attack will be worse: few will report for work; those that do (medical/police) will catch virus
 - Almost all economic activity will cease
 - Production, transportation will cease
- For few days people will survive on food/water in home; then many without will start going out to steal
- Relatively minor disasters like Katrina illustrated how some people quickly turn to violence

Relative Vulnerability to Disruptions		
	<u>1800s</u>	<u>2010s</u>
% population farming	>80%	<2%
Food travel distance	few miles	1,000s
Food on hand	months	days
Water supply	well	municipal
Electronic dependence	none	heavy
Production sourcing	local	int'l
Inventory levels	large	tiny (JIT)
resilience of people	Pioneers	Katrina
Overall vulnerability	low	high

Deriving Primary Survival Requirements from All Threats

<u>Trigger Event</u>	<u>Cascading, Collapse Effects</u>	<u>Specific Threats to Deal With</u>	<u>Survival Requirements</u>
	ALL → Panic		
Pandemic	→ Marauding, Loss of Law and Order	→ Criminal attacks, violence, killings	→ Security
--Natural	→ Marauding, Loss of Law and Order		
--Accidental Lab Release	→ Marauding, Loss of Law and Order	→ Deadly, Contagious Virus	→ Avoid Virus
--Bioengineered bio attack	→ Marauding, Loss of Law and Order		
	→ Food Transportation Disruption	→ No Food Shipments, Empty Stores	→ Food
Electromagnetic Pulse	→ Parts, Shipment Disruptions	→ No Electricity	→ Water
--Solar flares source	→ Damage to Water System Controls, Electronics		
--High Alt nuclear detonation	→ Worker absenteeism, Water System Disruptions	→ No Water	→ Electricity
Cyberattack on Electric Grid	→ Economy Shut Down		
Nuclear War	→ Nuclear Plant Radioactive Release	→ Fires	→ Fire Protection
		→ Blast Wave	→ Blast Protection
Nuclear Plant Accident, Sabotage	→ Nuclear Plant Radioactive Release	→ Radiation	→ Radiation Shielding
Meteor Strike	→ Massive Crop Failures	→ Destruction of Housing	→ Heat, Shelter
Super volcano	→ Massive Crop Failures		
Massive Earthquake			→ Get to Survival Site
		ALL → Psychological Stress	→ Mental Health
Terrorist Wildfire, Arson attacks			
		→ Worthless currency	→ Other items:
Nanotechnology disaster			→ Fuel
			→ Drugs
Financial System Breakdown			→ Antibiotics
Dozens of known additional trigger disasters			→ Medical Care
Additional disasters not now contemplated			→ Communications, News

11 Survival Requirements cover almost all effects of all trigger disasters and cascading effects, Collapse impacts

1 Security
2 Avoid Virus
3 Food
4 Water
5 Electricity
6 Fire Protection
7 Blast Protection
8 Radiation Shielding
9 Heat, Shelter
10 Get to Survival Site
11 Mental Health

- Good news: Rather than trying to work through ramifications of every trigger event and cascading effect, just 11 primary survival requirements to deal with
- Additional things like drugs, short wave radios for communication, are just additional stockpile items
- Decision on preparedness strategy and measures should be focused on dealing with these 11 survival requirements – not which trigger disaster most concerns you

Fortitude Ranch Survival Community provides all 11 survival requirements

- Mount Weather is the federal government survival facility
- Survival Condo offers best protection, but at price limited to ultra high net worth families

Assessment of Survival/Preparedness Options based on key Survival Requirements									
Scale:	10 Excellent 7 Adequate 5 Minimal 3 Very Poor 1 Horrible	Location, Preparedness:	Big City	Suburban House	Backyard Shelter	Rural House	Fortitude Ranch	Mount Weather	Survival Condo
			1 Security	2	4	5	6	9	9
2 Avoid Virus	2	4	6	7	10	9	10		
3 Food	1	3	5	7	9	10	10		
4 Water	2	3	?	8	10	10	10		
5 Electricity	2	2	4	4	6	8	8		
6 Fire Protection	2	1	9	2	8	10	10		
7 Blast Protection	2	2	10	2	6	10	10		
8 Radiation Shielding	4	3	10	4	8	10	10		
9 Heat, Shelter	5	5	8	9	8	9	10		
10 Get to Survival Site	9	10	10	8	9	9	8		
11 Mental Health	1	3	4	6	8	9	10		
Afford ability	5	5	3	4	8	N/A	1		

These are general, average ratings, largely subjective, based on many variables

Lots of uncertainty and variance based on the specific threat situation

Costs include not just facility, but equipment, supplies, security, electricity generation, requirements