



Legislations Supporting the Role of Pharmacists in Natural Disasters

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OBJECTIVE

- To review legislations supporting the role of pharmacists and pharmacies in natural disaster management.



Turkey, Van earthquake, 2011

OUTLINE

- Introduction
- Background
- 1) Pharmacists prescribing/dispensing:
 - a) *Emergency supplies & prescription extensions*
 - b) *Therapeutic substitution*
 - c) *Initiating prescriptions*
- 2) Administering drugs by injection:
 - a) *Vaccinations*
 - b) *Other drugs by injection*
- 3) Monitoring over-the-counter drug sales
- 4) Protocols for narcotic drug control and disposal
- 5) Human resources:
 - a) *Pharmacist licensure/registration mobility*
 - b) *Pharmacy licensure/registration mobility*
 - c) *Patient relocation recognition*
 - d) *Delegation to pharmacy technicians*
- Conclusion

*New Zealand,
Christchurch
earthquake, 2011*

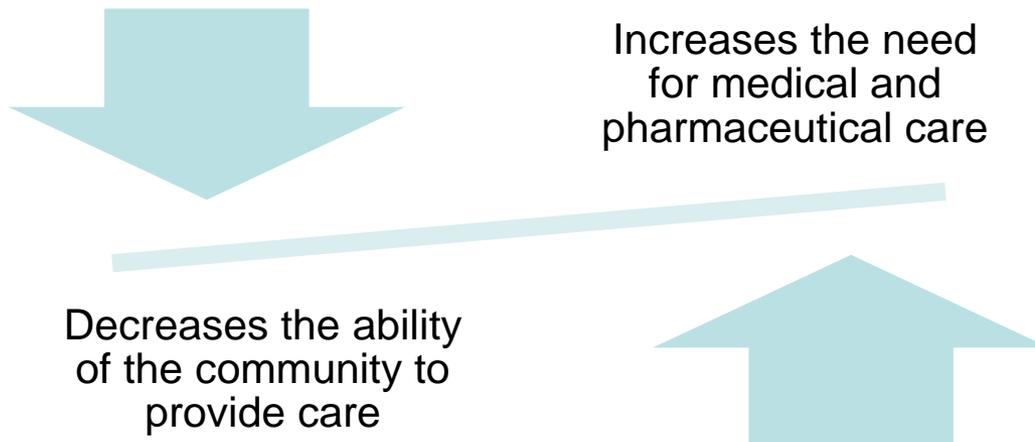


Thailand, Indian Ocean earthquake and tsunami, 2004



INTRODUCTION

- Floods, earthquakes, tsunamis, hurricanes, volcanos, etc. lead to
 - *High cost of damage to infrastructure*
 - *Injury and death*
 - ⇒ Serious disruption of the functioning of a community



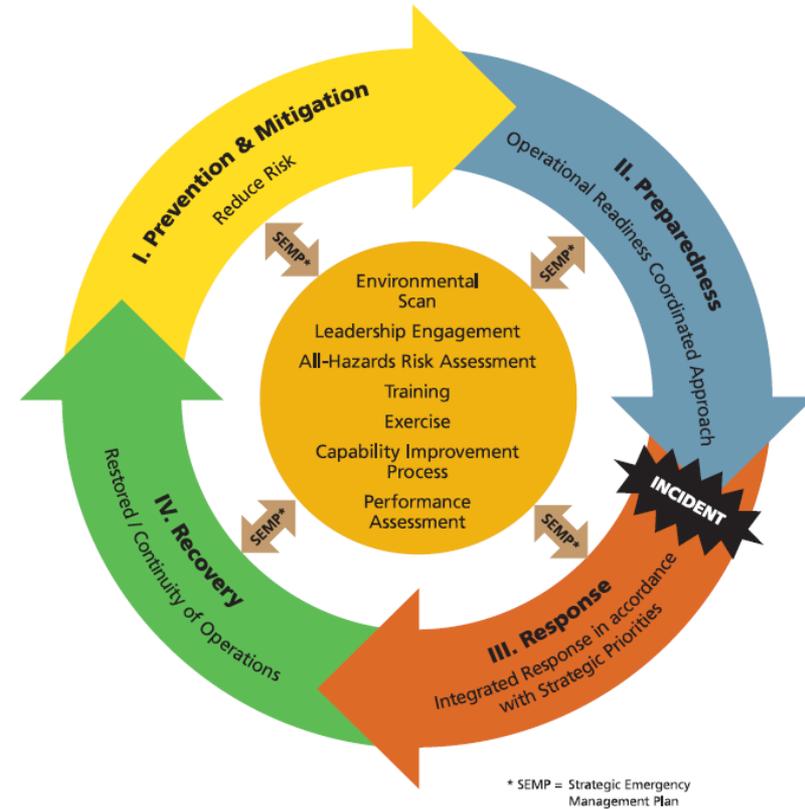
- What could we do?
 - *Be prepared for a natural disaster!*



Pakistan, Kashmir earthquake, 2005

BACKGROUND

- FIP recommendations
 - *High importance of the pharmacy profession:*
 - Filling and refilling prescriptions
 - Organizing medication donations
 - Procuring medications
 - Ensuring security of medications
 - Managing pharmaceutical stocks
 - Building emergency kits



Emergency management continuum
 (Canada Emergency Management Planning Guide 2010-2011)

Haïti, earthquake, 2010



1) PHARMACISTS PRESCRIBING & DISPENSING

- a) *Emergency/interim supplies & prescription refills/extensions*
 - i. Based on an existing prescription
 - ii. Based on a prescription label or receipt
 - iii. Based on pharmacist's professional judgement

Canada, Ontario flood, 2013



Emergency/Interim Supplies

CANADA:

- *British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Québec, Nova Scotia: emergency refills of existing prescriptions.*
- *Newfoundland, New Brunswick: minimum amount needed until next appointment (NFL: pharmacist to notify prescriber within 72 hours).*

<http://blueprintforpharmacy.ca/docs/kt-tools/canada-environmental-scan-of-pharmacy-services---cpha-october-2013---final.pdf>
<http://www.pharmacists.ca/cpha-ca/assets/File/pharmacy-in-canada/ExpandedScopeChart.pdf>

USA:

- *Louisiana: 30 days (limited to 72 hours before Hurricane Katrina).*
- *Texas: 30 days; excludes controlled substances.*
- *Maryland: 72 hours, but pharmacist must call a 24/7 telephone number to obtain authorization.*

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2646478/pdf/phr124000217.pdf>
<http://www.statutes.legis.state.tx.us/Docs/HS/htm/HS.481.htm>
http://www.hopkinsmedicine.org/johns_hopkins_healthcare/downloads/PPEmergency_Supply.pdf

Great Britain, Birmingham tornado, 2005



Emergency/Interim Supplies (continued)

AUSTRALIA:

- Dispense under the “3-day emergency supply” rule.

<http://www.pbs.gov.au/info/news/2014/04/cyclone-ita-advice-for-pharmacists/>

GREAT BRITAIN:

- Pharmacist must interview the patient (preferably face-to-face).
- Patient must have previously had the drug which was prescribed by a registered prescriber in the UK, or an European Economic Area (EEA) or Swiss doctor or dentist.
- Excludes controlled drugs; except for phenobarbitone, phenobarbitone sodium for epilepsy, benzodiazepines, and steroids, which are limited to a 5-day supply.
- Other drugs limited to 30-day supply.

<http://www.rpharms.com/non-member/emergency-supply-qrg.pdf>
<http://www.release.org.uk/law/schedules>

Queensland, Tropical Cyclone Ita, 2014



Prescription Refills/Extensions:

AUSTRALIA:

- *Dispense an early repeat of a “4/20 day” drug → record on the prescription “immediate supply required” and sign.*

<http://www.pbs.gov.au/info/general/faq#Whatisthe420dayrule/>

CANADA:

- *British Columbia: only for stable chronic medications, any length within the prescription expiry date. Psychiatric drug renewal only in multidisciplinary team.*
- *Alberta, Manitoba, New Brunswick, Québec (max 1 year), Saskatchewan (max 100 days), Newfoundland (max 90 days), Nova Scotia (max 90 days), Northwest Territories (max 30 days), Prince Edward Island (amount of 1 refill of original prescription).*
- *Ontario: excludes narcotics and controlled substances. Cannot exceed the lesser of 6 months supply or last fill. Must notify prescriber.*
- *Nova Scotia: excludes previously transferred prescriptions.*

<http://blueprintforpharmacy.ca/docs/kt-tools/canada-environmental-scan-of-pharmacy-services---cpha-october-2013---final.pdf>
<http://www.pharmacists.ca/cpha-ca/assets/File/pharmacy-in-canada/ExpandedScopeChart.pdf>

France, Var floods, 2010



1) PHARMACISTS PRESCRIBING & DISPENSING

- a) *Emergency/interim supplies & prescription refills/extensions*
 - i. Based on an existing prescription
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 - iii. Based on pharmacist's professional judgement

United States, Hurricane Katrina, 2005



USA:

- *Illinois’ “Hurricane Katrina Emergency Dispensing Guidelines”*
 - Only for patients relocating from Louisiana, Mississippi, and Alabama.
 - Narcotics, benzodiazepines, controlled substances: up to 30-day supply.
 - Narcotics with potential for severe dependence: up to 7-day supply.

- *Minnesota’s “Hurricane Katrina Emergency Dispensing Policy”*
 - Only for patients relocating from Louisiana, Mississippi, Alabama, and Florida.
 - Duration evaluated on a case-by-case basis to best meet the patient’s need.

Japan, earthquake/tsunami, 2011



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United States, Hurricane Katrina, 2005



USA:

- *Illinois’ “Hurricane Katrina Emergency Dispensing Guidelines”*
 - Dispense a reasonable amount based on professional judgment on a case-by-case basis.
 - Narcotics, benzodiazepines, controlled substances: up to 30-day supply.
 - Narcotics with potential for severe dependence: up to 7-day supply.

- *Minnesota’s “Hurricane Katrina Emergency Dispensing Policy”*
 - Both non-controlled and controlled prescription drugs for a limited and reasonable duration based on professional judgment.

Pakistan, earthquake, 2005



1) PHARMACISTS PRESCRIBING & DISPENSING

b) Therapeutic substitution (drug shortage management)

Canada, Alberta floods, 2013



CANADA

- *All must fax physician after substitution is made:*
- *British Columbia: substitute within 6 classes (H2 blockers, NSAIDs, nitrates, ACE inhibitors, dihydropyridine calcium channel blockers, PPIs).*
- *Saskatchewan: only with prescribers with whom they have a collaborative practice agreement.*
- *Québec: Bill 41 allows substitution from within the same therapeutic class, but the pharmacist must ensure he cannot obtain the medication from 2 pharmacies in the region and from 2 wholesalers. Pharmacist must inform the patient and physician of the substitution, and document the supply and counselling provided to patient.*
- *Alberta, New Brunswick, (Nova Scotia maximum 1 year duration): may substitute for drugs of similar therapeutic effect.*

Japan, earthquake and tsunami, 2011



1) PHARMACISTS PRESCRIBING & DISPENSING

- c) Initiating prescriptions for specific conditions*
 - i. Independently
 - ii. In a collaborative setting
 - iii. Through indirect physician directives & credentialing

Canada, Hurricane Juan,
Nova Scotia, 2003



Minor Ailments Prescribing

CANADA:

- *Saskatchewan: mild acne, allergic rhinitis, atopic dermatitis, cold sores, diaper dermatitis, dysmenorrhea, gastroesophageal reflux disease, headache, hemorrhoids, insect bites, musculoskeletal strains and sprains, oral aphthous ulcers, oral thrush, superficial bacterial skin infections, tinea corporis, tinea cruris, and tinea pedis.*
- *Québec: labial herpes, allergic rhinitis, urinary infection, allergic conjunctivitis, atopic dermatitis (eczema), dysmenorrhea, diaper rash, hemorrhoids, aphthous ulcers, oral thrush, vaginal yeast infection, minor acne (topical treatments).*
- *Nova Scotia: dyspepsia, gastroesophageal reflux disease, nausea, non-infectious diarrhea, hemorrhoids, allergic rhinitis, cough, nasal congestion, sore throat, mild headache, minor muscle or joint pain, minor sleep disorders, dysmenorrhea, dry eyes, oral ulcers, oral thrush, fungal infections of skin, vaginal candidiasis, threadworms & pinworms, cold sores, contact allergic dermatitis, mild acne, mild-moderate eczema, mild urticaria, impetigo, dandruff, calluses & corns, warts (excluding face & genitalia), smoking cessation.*

Scotland, Glasgow floods, 2002



Minor Ailments Prescribing (continued)

SCOTLAND:

- *Minor Ailment Service (MAS) includes 22 minor ailments: acne, athlete's foot, back ache, cold sores, constipation, cough, diarrhea, ear ache, eczema & allergies, hemorrhoids (piles), hay fever, headache, head lice, indigestion, mouth ulcers, nasal congestion, pain, period pain, thrush, sore throat, threadworms, warts & verrucae.*

United Kingdom, Storm Kyrill, 2007

Antibiotics Prescribing



UNITED KINGDOM:

- *Pharmacist independent prescribers: any medicine for any medical condition within their competence, including some controlled medicines (except diamorphine, cocaine, and dipipanone for the treatment of addiction).*
- *Pharmacist supplementary prescribers: work with the independent prescriber to fulfill a clinical management plan.*

Canada, Hurricane Igor, Newfoundland, 2010



1) PHARMACISTS PRESCRIBING & DISPENSING

- c) *Initiating prescriptions for specific conditions*
 - i. Independently
 - ii. In a collaborative setting
 - iii. Through indirect physician directives & credentialing

*United States Military,
Haïti earthquake relief,
2010*



Joe Raedle, Getty Images

USA:

- Collaborative Practice Agreements (CPA)
 - *CPAs define certain patient care functions that a pharmacist can autonomously provide under specified situations and conditions, including:*
 - a) Collaborative drug therapy management (CDTM)
 - b) Pharmaceutical care
 - c) Medication therapy management (MTM)

<http://www.aphafoundation.org/collaborative-practice-agreements>

http://www.cdc.gov/dhdsp/pubs/docs/Translational_Tools_Pharmacists.pdf

<http://www.sciencedirect.com/science/article/pii/S1551741105001312#>

http://www.cdc.gov/dhdsp/pubs/docs/Pharmacist_State_Law.PDF

1) PHARMACISTS PRESCRIBING & DISPENSING

- c) Initiating prescriptions for specific conditions*
 - i. Independently
 - ii. In a collaborative setting
 - iii. Through indirect physician directives & credentialing

Canada, Saguenay Québec flood, 1996

Indirect Physician Directives



CANADA:

- Medical Directives (Ontario)
- Collective Prescriptions (Québec)
 - *A written order to perform a controlled act for patients who meet the criteria set out in the medical directive.*
 - *A medical directive can order a procedure under specific conditions without a direct patient assessment by the authorizer.*
 - *e.g. Authorizing a pharmacist to order INR testing for a patient receiving warfarin therapy.*

<http://www.ocpinfo.com/regulations-standards/policies-guidelines/medical-directives/>

*United States Military,
Pakistan earthquake,
2013*



Indirect Physician Directives (continued)

NEW ZEALAND:

- Standing Order
 - *A written instruction issued by a medical practitioner or dentist.*

<http://www.health.govt.nz/system/files/documents/publications/standing-order-guidelines-june-2012.pdf>
<http://www.legislation.govt.nz/regulation/public/2002/0373/10.0/DLM170131.html>

USA

- Standing Orders
 - *Authorise pharmacists (and nurses) to administer vaccinations according to an institution- or physician-approved protocol without a physician's exam.*

<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr4901a2.htm>

*U.S. Marines, Philippines
Typhoon Haiyan, 2013*



Credentialing

USA:

Council on Credentialing in Pharmacy (CCP)

- ***Credential:** Documented evidence of professional qualifications.*
- *Includes professional education, licensure, formal post-licensure training, experience, and certification.*

<http://www.pharmacycredentialing.org/>

<http://www.accp.com/docs/positions/misc/Credentialing%20Framework%20for%20Pharmacists%20-%20Guiding%20Principles.pdf>

[http://www.aacp.org/resources/education/Pages/CouncilonCredentialinginPharmacy\(CCP\).aspx](http://www.aacp.org/resources/education/Pages/CouncilonCredentialinginPharmacy(CCP).aspx)

Japan, earthquake, 2011



2) ADMINISTERING DRUGS BY INJECTION

a) Vaccinations

United Kingdom, floods, 2007



UNITED KINGDOM:

- *Administer certain vaccines (including influenza vaccine) through a Patient Group Direction (PGD).*

IRELAND:

- *National immunisation programme (Immunisation Guidelines).*

AUSTRALIA:

- *The Pharmaceutical Society of Australia supports vaccination as a public health program.*

PORTUGAL:

- *Change in legislation in 2007 developed a training programme on immunisation delivery for pharmacists to provide a vaccination service through pharmacies.*

*Haïti earthquake, United States
USAID disaster relief, 2010*



CANADA:

- *Pharmacists allowed to administer influenza vaccine in: British Columbia, Alberta, Manitoba, Ontario, Québec, New Brunswick, Nova Scotia.*

<http://www.pharmacists.ca/cpha-ca/assets/File/education-practice-resources/Flu2013-InfluenzaGuideEN.pdf>
[http://mpha.in1touch.org/uploaded/web/New%20Pharmaceutical%20Act/Immunization%20Info%20for%20Pharmacists%20Feb%202014%20FINAL%20\(2\).pdf](http://mpha.in1touch.org/uploaded/web/New%20Pharmaceutical%20Act/Immunization%20Info%20for%20Pharmacists%20Feb%202014%20FINAL%20(2).pdf)

USA:

- *National Pharmacy Response Teams: Pharmacists immunizing.*
- *New York State (to those 18+): influenza, pneumococcal, meningococcal, acute herpes zoster, tetanus toxoid-containing vaccines (including those also containing diphtheria and pertussis vaccines).*
- *North Carolina (to those 18+): influenza, pneumococcal, and zoster vaccines.*
- *Ohio, as of 2014 (to those 18+): measles, mumps, and rubella (MMR) vaccine; Zostavax (herpes zoster vaccine) **without** a prescription. Must have the required credentials and work under a physician-established protocol.*

<https://www.phe.gov/Preparedness/responders/ndms/teams/Pages/nprt.aspx>
<http://www.op.nysed.gov/prof/pharm/part63.htm#immunization>
<http://www.ncbop.org/LawsRules/rules.2500.pdf>
http://www.ohiopharmacists.org/aws/OPA/pt/sd/news_article/1604/ PARENT/layout_interior_details/true

China, Sichuan earthquake, 2008



2) ADMINISTERING DRUGS BY INJECTION

b) Other drugs by injection

Canadian Red Cross, Haïti earthquake relief, 2010



CANADA:

- *British Columbia: intramuscular (IM), subcutaneous (SC), or intradermal (ID) injections for immunizing or for treating anaphylaxis. Only patients > 5 years.*
- *Alberta: IM or SC vaccinations or parenteral nutrition. Only patients > 5 years and non-pregnant.*
- *Manitoba: only patients > 5 years and non-family members.*
- *Ontario: pharmacists may administer drugs by injection for demonstration purposes, and influenza vaccine by injection or inhalation for patients > 5 years.*
- *Québec: for demonstration purposes only, excluding intravenous (IV) injections.*
- *New Brunswick: pharmacists need advanced drug administration requirements and may administer drugs IM, SC, ID, or IV for flu shots, shingles vaccines, travel vaccines and birth control.*
- *Nova Scotia: pharmacists may provide vaccinations and injections after a training program.*

<http://blueprintforpharmacy.ca/docs/kt-tools/canada-environmental-scan-of-pharmacy-services---cpha-october-2013---final.pdf>

<http://www.pharmacists.ca/cpha-ca/assets/File/pharmacy-in-canada/ExpandedScopeChart.pdf>

<http://www.opq.org/fr-CA/pharmaciens/application-de-la-loi-41/nouvelles-activites/>

<http://nbpharma.ca/>

Turkey, Izmit earthquake, 1999



3) AGENCIES TO MONITOR OVER-THE-COUNTER DRUG SALES: OUTBREAK CONTROL

Japan, earthquake/tsunami, 2011



CANADA: Walkerton, Ontario Outbreak:

- *Over-the-counter (OTC) anti-nauseant and anti-diarrheal sales could detect gastrointestinal illness outbreaks related to water contamination.*
- *Local weekly pharmacy OTC sales were comparable to outbreak epidemic curves.*

http://www.attorneygeneral.jus.gov.on.ca/english/about/pubs/walkerton/part1/WI_Summary.pdf
<http://www.ncbi.nlm.nih.gov/pubmed/15622795>

JAPAN:

- *Correlation between common cold OTC sales and concurrent influenza activity.*

USA: New York

<http://www.ncbi.nlm.nih.gov/pubmed/16177693>

- *Cough and influenza medication sales correlate strongly with annual influenza epidemics.*
- *OTC medication sales can be considered a syndromic surveillance system.*

<http://www.cdc.gov/mmwr/preview/mmwrhtml/su5301a47.htm>
<http://www.ncbi.nlm.nih.gov/pubmed/16177692>

Philippines, Typhoon Haiyan, 2013



4) PROTOCOLS FOR NARCOTIC DRUG CONTROL AND DISPOSAL

Central Europe, floods, 2010



GERMANY:

- *World Health Organization (WHO) has compiled guidelines for a simplified procedure for exporting narcotic drugs in emergencies.*
- *Germany has reacted to these guidelines by amending Section 15 sub-section 3 of the “Ordinance concerning the Foreign Trade in Narcotics” accordingly.*
- *Such simplified procedures only take effect if the competent authority of the recipient country cannot be reached or is no longer functioning due to the events.*
- *This procedure, as opposed to the normal export process, places the controls exclusively within the responsibility of the exporting country.*
- *Therefore, the authority of the exporting country must place high demands regarding the reliability of the potential suppliers of such aid shipments.*

Australia, Queensland floods, 2010-2011



AUSTRALIA:

- *Missing prescriptions/paperwork: pharmacist can submit a Statutory Declaration to the Department of Human Services (DHS), including a statement about loss of paperwork as a result of natural disaster/emergency, and an undertaking such that if the paperwork is found it will be forwarded to the DHS and that an insurance claim has not been made.*

China, Taiwan earthquake, 2006



5) HUMAN RESOURCES

a) Pharmacist licensure/registration mobility

*Canada, Alberta Pine Lake tornado,
2000*



USA and CANADA:

- *When activated as Federal employees, their licensure and certification are recognized in all States/Provinces.*

<https://www.phe.gov/Preparedness/responders/ndms/teams/Pages/nprt.aspx>

New Zealand, Christchurch earthquake, 2011



5) HUMAN RESOURCES

- b) Pharmacy licensure/registration mobility*
 - i. Temporary pharmacy facilities
 - ii. Telepharmacies

United States, Missouri tornado, 2011



AUSTRALIA:

- *Emergency temporary relocation of a pharmacy due to damage: Pharmacist to email the Department of Human Services (DHS), with name of affected pharmacy, PBS approval number, addresses of current and temporary premises, and expected timeframe for return to the approved premises.*

<http://www.pbs.gov.au/info/news/2014/04/cyclone-ita-advice-for-pharmacists/>

Turkey, Van earthquake, 2011



5) HUMAN RESOURCES

- b) *Pharmacy licensure/registration mobility*
 - i. Temporary pharmacy facilities
 - ii. Telepharmacies

Canadian Military, Haïti, 2010



NEED FOR TELEPHARMACIES:

- *Pharmacies and pharmacists inaccessible due to damage and relocation – technology aids communication with pharmacists located in other areas.*
- *There should also be 24-hour telephone lines for medication-related questions to be answered by a pharmacist.*

http://www.northwesttelepharmacy.ca/about_us.shtml

China, earthquake, 2006



5) HUMAN RESOURCES

c) Patient relocation recognition

United States, Hurricane Sandy, 2012



USA:

- *Illinois Emergency Dispensing Guidelines recognize only patients relocating from Louisiana, Mississippi, and Alabama as a result of natural disaster.*
- *Minnesota Emergency Dispensing Policy recognizes only patients relocating from Louisiana, Mississippi, Alabama, and Florida as a result of natural disaster.*

*United States, California
earthquake, 2011*



5) HUMAN RESOURCES

d) Delegation of responsibilities to regulated pharmacy technicians

Canada, Goderich Ontario tornado, 2011



NEED FOR DELEGATION TO TECHNICIANS:

- *Technicians are responsible for dispensing processes and free up pharmacists' time for clinical patient care roles (e.g. prescribing, vaccinating, counselling).*

CANADA:

- *“Tech-check-tech” program: regulated technicians perform final verification of prescriptions – having at least 2 technicians (rather than a pharmacist) check order-entry accuracy.*
- *Receive and transcribe verbal prescriptions from physicians.*
- *Licensure mobility across all provinces.*

http://napra.ca/Content_Files/Files/Model_Standards_of_Prac_for_Cdn_PharmTechs_Nov11.pdf

<http://www.medscape.com/viewarticle/750654>

http://blueprintforpharmacy.ca/docs/kt-tools/pharmacists'-expanded-scope_summary-chart---cpha---october-2013.pdf

Pakistan, earthquake, 2005



Haiti, earthquake, 2010



Japan, earthquake, 2004



Australia, Queensland flood, 2010-2011



China, Yunnan earthquake, 2006



Turkey, Van earthquake, 2011

Pakistan, Kashmir earthquake, 2005



CONCLUSION

Legislations exist to support the role of pharmacists in natural disasters, including:

- *Dispensing emergency supplies, making therapeutic substitutions, and initiating prescriptions.*
- *Administering vaccinations and other drugs by injection.*
- *Monitoring over-the-counter drug sales to prevent outbreaks.*
- *Having protocols on narcotic drug control and disposal.*
- *Managing human resources to allow licensure and registration mobility for pharmacists and pharmacies, recognizing relocated patients, and delegating to pharmacy technicians.*

International Red Cross and Red Crescent



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