****

**Emergency Preparedness for Persons with Disabilities – Businesses and Employers**

Access Oceanside Association gratefully acknowledged funding for this project from the Parksville Qualicum Foundation

**Background**

Disasters – natural (e.g., hurricane, earthquake, etc.) or human involved (e.g., terrorist attack) (McClure et al., 2011) – can happen anywhere at any time. You may have advance warning, or not. Some geographic locations more at risk for certain types of natural disasters (Baker & Cormier, 2013). For example, in BC we may experience earthquakes. Other natural disasters can strike anywhere. For example, storms, flooding, and power outages can happen regardless of location.

Persons with Disability

Persons with disabilities tend to be more vulnerable, along with older adults and medically dependent individuals (Levac et al., 2012), to disproportionally adverse consequences of emergencies (Fox et al., 2007). This is because they may be unable to take protective action (Murray, 2011); it is too dangerous to evacuate, they are more affected by unfamiliar surroundings and change of routine, and/or their support systems fall apart (Rothman & Brown, 2007). Other factors include that their needed assistive devices may be left behind (Rooney & White, 2007) and a lack of access to medical records (Jan & Lurie, 2012). Most shockingly, persons with disabilities may be left behind/abandoned (Rushford, 2015).

Among persons with disabilities, the most vulnerable include children (Murray, 2011); those with the lowest functional level and/or the most severe disability (Tomio et al., 2012); those who live in social isolation (Al-rousan et al., 2015), and those with cognitive impairment (Rothman & Brown, 2007).

Persons with disability are often less prepared (Levac et al., 2012; Tomio et al., 2012) due to a combination of factors., including lack of time or money to purchase supplies, lack of information, disbelief in risk (Levac et al., 2012), or trust in authorities and expectation of rescue (Hogaboom et al., 2013). Some may be unable, due to disability, to engage in preparedness activities (Tomio, et al., 2012). Even worse, some may feel prepared but are not adequately prepared (Hogaboom et al., 2013).

Persons with disability may say they can evacuate but have no actual plan (McClure et al., 2011). In fact, persons with disabilities are less likely to have evacuation plans (Spence et al., 2007). The one area in with persons with disabilities may be more prepared than persons without disabilities is in terms of medical preparation, such as stockpiling medications (Tomio et al., 2012).

Persons with disabilities and informal caregivers are less likely to evacuate, even under mandatory evacuation orders, because they are unable physically, there is a lack of accessible transportation (Brodie et al., 2006; Rooney & White, 2007; Smith & Notaro, 2009), and elevators shut down and there is no alternative way out (Rooney & White, 2007). Persons with disabilities who have not evacuated state that they did not learn about the evacuation order, did not know how or to where to evacuate, or they chose to stay (Brodie et al., 2006). People with disabilities chose to stay because they were unable to leave due to disability or were the carer of a person with disability who was unable to leave (Brodie et al., 2006).

**Recommendations for Businesses and Employers**

*If planning does not embrace the value that everyone should survive, they will not* (Federal Report, 2006, p. 1350).

* Establish an accessibility committee, with membership from persons with disabilities and others, to plan for emergencies (Rooney & White, 2007).
* Have evacuation plans for employees or clients with disabilities (Loy et al., 2006).
* Ensure you have visual as well as audible alarms (Loy et al., 2006).
* Depending on structure/location, purchase emergency evacuation equipment (Loy et al., 2006; Rooney & White, 2007).
* Have visual as well as auditory alerting devices/alarms (Loy et al., 2006).
* Ensure Braille signage re evacuation routes for employees with visual impairments (Loy et al., 2006).
* Have alpha-numeric pagers to communicate with employees with speech impairments (Loy et al., 2006).
* Include employees with disabilities in all drills (Rooney & White, 2007). If someone is too anxious (e.g., mental health disability), provide alternative education (Loy et al., 2006).

**Additional Resources**

* Job Accommodation Network <https://askjan.org/>

Workplace Emergency Planning for Employees with Disabilities (BC)

<http://www.disabilityalliancebc.org/docs/ephandbook_lores.pdf?LanguageID=EN-US%20Workplace%20Emergency%20Planning%20for%20Workers>

Workplace Emergency Preparedness Inclusive of People with Disabilities

<http://www.disabilityalliancebc.org/docs/wsbc%20completed%20research%20report%20june%202008.pdf?LanguageID=EN-US>

Disability specific guides for persons with Mobility, Cognitive, or Sensory disabilities (US)

<https://www.disability.gov/resources-help-family-prepare-emergencies-disasters/>

**References**

Al-rousan, T. M., Rubenstein, L. M., & Wallace, R. B. (2015). Preparedness for natural disasters among older US adults: A nationwide survey. *American Journal of Public Health, 105*(S4), S621-S626. doi:10.2105/AJPH.2013.301559r

Baker, L. R., & Cormier, L. A. (2013). Disaster preparedness and families of children with special needs: A geographic comparison. *Journal of Community Health, 38*(1), 106-112. doi:10.1007/s10900-012-9587-3

Brodie, M., Weltzien, E., Altman, D., Blendon, R. J., & Benson, J. M. (2006). Experiences of hurricane Katrina evacuees in Houston shelters: Implications for future planning. *American Journal of Public Health, 96*(8), 1402-1408. doi:10.2105/AJPH.2005.084475

Federal report documents extensive discrimination against Katrina evacuees with psychiatric disabilities. (2006). *Psychiatric Services, 57*(9), 1350-1351.

Fox, M. H., White, G. W., Rooney, C., & Rowland, J. L. (2007). Disaster preparedness and response for persons with mobility impairments: Results from the University of Kansas Nobody Left Behind study. *Journal of Disability Policy Studies, 17*(4), 196-205. doi:10.1177/10442073070170040201

Hogaboom, N. S., Oyster, M. L., Riggins, M. S., & Boninger, M. L. (2013). Evacuation preparedness in full-time wheelchair users with spinal cord injury. *The Journal of Spinal Cord Medicine, 36*(4), 290-295. doi:10.1179/2045772312Y.0000000050

Jan, S., & Lurie, N. (2012). Disaster resilience and people with functional needs. *New England Journal of Medicine*, *367*(24), 2272-2273.

Levac, J., Toal-Sullivan, D., & O’Sullivan, T. L. (2012). Household emergency preparedness: A literature review. *Journal of Community Health*, *37*(3), 725-733.

Loy, B., Hirsh, A., & Batiste, L. C. (2006). Including employees with disabilities in emergency evacuation plans: 9/11's effect on the demand for information. *Work, 27*(4), 407.

McClure, L. A., Boninger, M. L., Oyster, M. L., Roach, M. J., Nagy, J., & Nemunaitis, G. (2011). Emergency evacuation readiness of full-time wheelchair users with spinal cord injury. *Archives of Physical Medicine and Rehabilitation, 92*(3), 491-498. doi:10.1016/j.apmr.2010.08.030

Murray, J. S. (2011). Disaster preparedness for children with special healthcare needs and disabilities. *Journal for Specialists in Pediatric Nursing, 16*(3), 226-232. doi:10.1111/j.1744-6155.2011.00293.x

Rooney, C., & White, G. W. (2007). Consumer perspective: Narrative analysis of a disaster preparedness and emergency response survey from persons with mobility impairments. *Journal of Disability Policy Studies, 17*(4), 206-215. doi:10.1177/10442073070170040301

Rothman, M., & Brown, L. (2007). The vulnerable geriatric casualty: Medical needs of frail older adults during disasters. *Generations*, *31*(4), 16-20.

Rushford, N. (2015). Lost in the mix: A case for inclusive and participatory approaches to disaster and development. In N. Rushford & K. Thomas (Eds.,) *Disaster and development: An occupational therapy perspective* (pp.41-49). Edinburgh: Elsevier.

Smith, D. L., & Notaro, S. J. (2009). Personal emergency preparedness for people with disabilities from the 2006-2007 behavioral risk factor surveillance system. *Disability and Health Journal, 2*(2), 86-94. doi:10.1016/j.dhjo.2009.01.001

Spence, P. R., Lachlan, K., Burke, J. M., & Seeger, M. W. (2007). Media use and information needs of the disabled during a natural disaster. *Journal of health care for the poor and underserved*, *18*(2), 394-404.

Tomio, J., Sato, H., & Mizumura, H. (2012). Disparity in disaster preparedness among rheumatoid arthritis patients with various general health, functional, and disability conditions. Environmental Health Prevention Medicine, *17*(4), 322–331. doi:10.1007/s12199-011-0257-3