

DISABILITY & DISASTER

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About the speaker, Adela Kono:

- First of all, I am a Filipino, born and raised and lives in Cebu City, Philippines.
- I had polio when I was 2 ½ years old, and so I use a leg brace, a pair of crutches and mostly a wheelchair.
- I graduated from the University of the Philippines, majored in Business Management.
- I work for our family corporation that deals in real estate.
- In 1989 I was sent to Japan for the Group Leadership Training Course for Persons with Disabilities under Japan International Cooperation Agency (JICA) and specialized in Accessibility.
- I am married to a non-disabled Japanese and lived in Tokyo for almost 6 years.
- Living in Japan and visiting often after we moved to Cebu made me very familiar with barrier-free environments, which is my advocacy since 1987.

Life of Persons with Disabilities (PWDs) in Cebu & the Philippines

ACCESSIBILITY

- Mostly inaccessible places & public transportation
- Sidewalks are uneven & narrow with barriers
- Steep ramps
- Most don't have private cars
- Some taxi drivers not willing to give PWDs a ride
- No disabled-friendly toilets
- No Braille / tactile / Tenji blocks for the blind

EMPLOYMENT

- Difficulty finding employment due to low educational achievement
- Difficulty in commuting
- Little or no accessibility in the workplace
- Low wages

EDUCATION

- Difficulty with transportation
- No ramps
- No PWD-friendly toilets
- No money for school

TOURISM

- Not accessible in most places
- False / inaccurate information on hotel accessibility
- 39 year-old Accessibility Law needs amendments to promote Barrier-Free Tourism
- Little money for vacations

Persons with disabilities in the Philippines suffer from the lack of accessibility



A person with disability struggles to climb the stairs of the Light Rail Transit Line 2's Recto station while security personnel carry his wheelchair last week. Image courtesy of Kevin Bola.

STAR / File



alamy
1,300 × 956

Image ID: 2BR5EA3
www.alamy.com

 Alamy

Dangerous uneven city sidewalk in Manila, Philippines.

[Visit](#)



640 × 500

alamy - 2/NK770

 Alamy

Dangerous uneven city sidewalk in Manila, Philippines.

[Visit](#)

Citation:
Kono, Adela Avila (2022).
Disability & Disaster
[Powerpoint slides].

Many barriers on sidewalks



Citation: Kono, Adela Avila (2022). Disability & Disaster [Powerpoint slides].

More barriers



Citation: Kono, Adela Avila (2022). Disability & Disaster [Powerpoint slides].

Women with disabilities have a difficult life



Door cannot close for privacy



Wheelchair cannot enter due to obstruction and door cannot close



Left & right bars are too far apart



Grab bar in the wrong place

Wheelchair Issues

- Wheelchairs are expensive for many
- Spare parts usually unavailable
- Wheelchairs sold are hospital-type and heavy
- Wheelchairs for children are rarely available
- Broken wheelchairs not quickly fixed
- Wheelchairs are given to PWDs without consideration for a good and comfortable fit
- Bad road conditions add to faster deterioration of wheelchairs



Citation: Kono, Adela Avila (2022). Disability & Disaster [Powerpoint slides].

Free and valid for 5 years


 REPUBLIC OF THE PHILIPPINES
 CITY OF CEBU
 Department of Social Welfare and Development
 OFFICE OF THE CITY SOCIAL WELFARE OFFICER
 KONG, ADILA AVILA
 NAME
 ORTHOPEDIC
 TYPE OF DISABILITY

 SIGNATURE

 072217020-243
 ID NO.
 ISSUED AT THE OFFICE OF THE CITY SOCIAL WELFARE OFFICER

- Citation: Kono, Adela Avila (2022). Disability & Disaster [Powerpoint slides].

Few initiatives for accessible transportation



**3 units of Wheelmobile (Manila)
Partnered with UBER**

[Wheelchair Accessible Vehicles ...wheninmanila.com](http://wheninmanila.com)



OffCrowd

**Mobilizing PWDs with the First PWD-
friendly Tricycle - OffCrowd**



Marikina City Trike Project/Rappler.com

Citation: Kono, Adela Avila (2022). Disability & Disaster [Powerpoint slides].

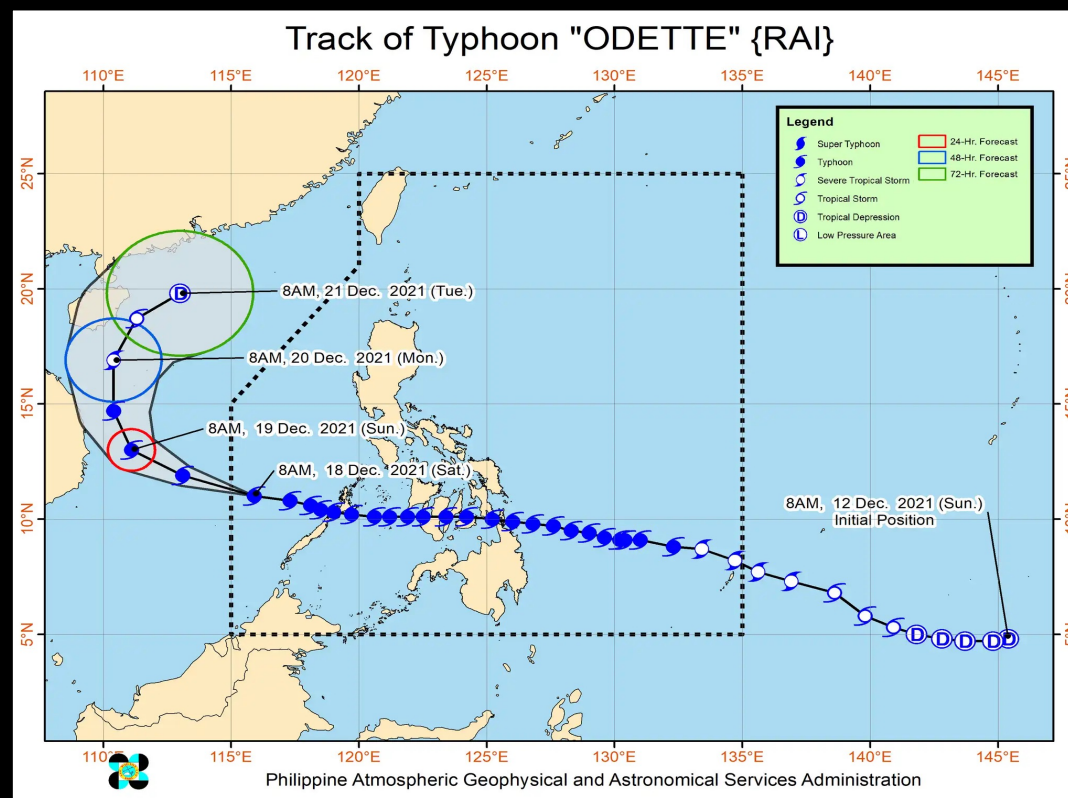
SM (Super Malls) MyBus



Citation: Kono, Adela Avila (2022). Disability & Disaster [Powerpoint slides].

DISASTER

Central Visayas, Philippines Cat 5 Typhoon Rai / Odette December 16, 2021



Citation: Kono, Adela Avila
(2022). Disability & Disaster
[Powerpoint slides].

<https://www.rappler.com/nation/weather/typhoon-odette-exits-philippine-area-responsibility-december-18-2021/>

Disaster by Typhoon Odette

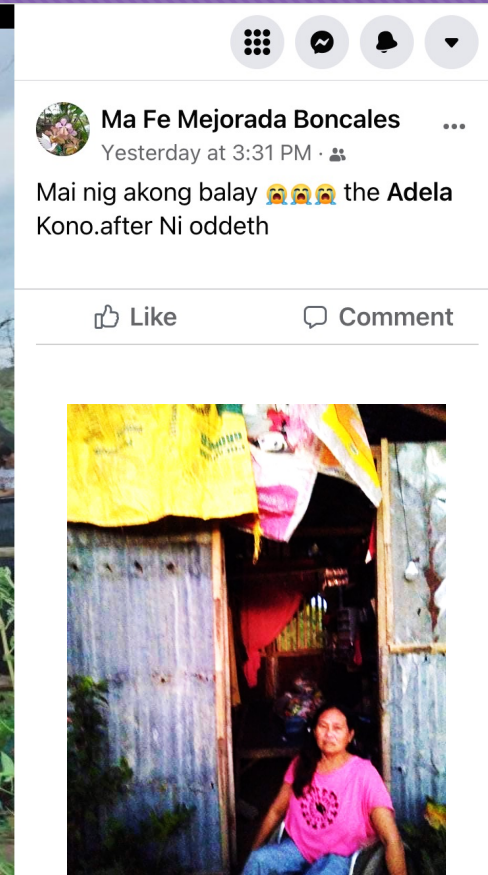
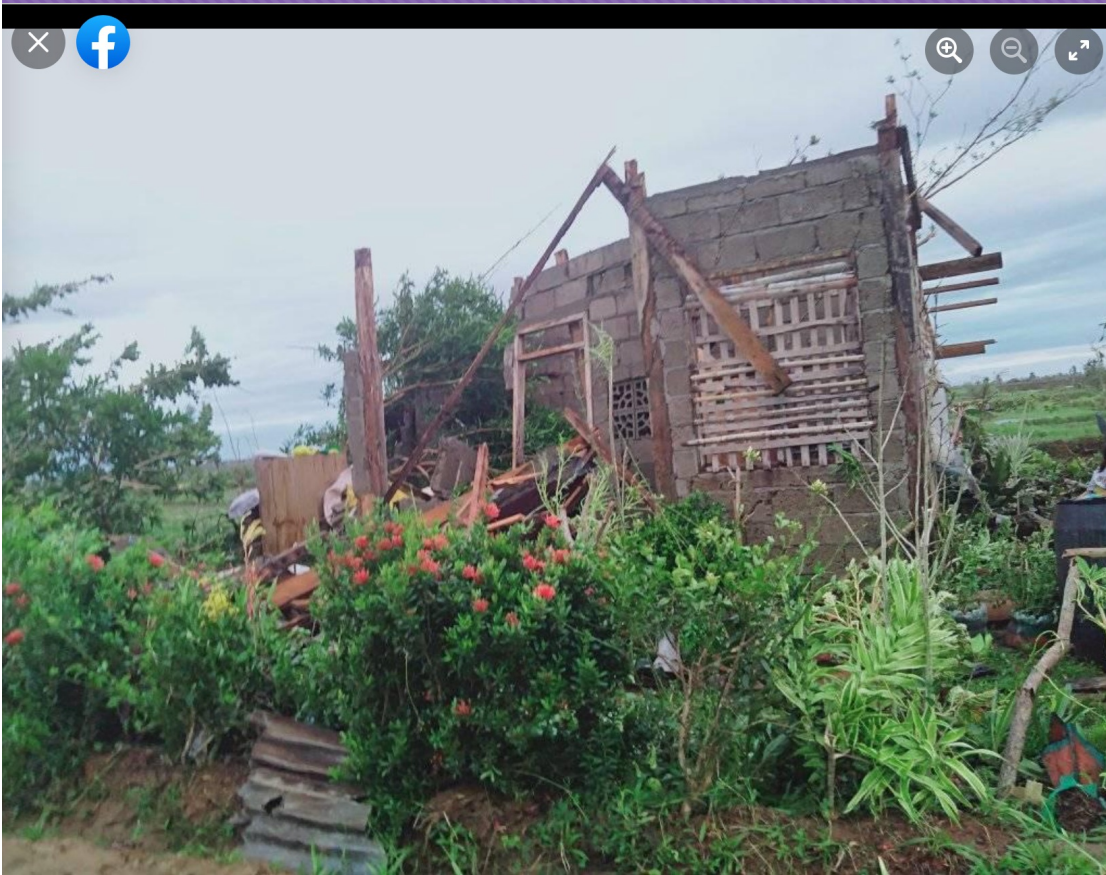
Our residential area in Cebu had power disruption from December 16, 2021 until January 12, 2022



Citation: Kono, Adela Avila (2022). Disability & Disaster [Powerpoint slides].

Disaster by Typhoon Odette

My friend's house in Bohol, next island southeast of Cebu



Citation: Kono, Adela Avila (2022). Disability & Disaster [Powerpoint slides].

Disaster by Typhoon Odette



<https://mycebuphotoblog.com/2022/06/08/in-photos-typhoon-odette-hits-cebu-city/>



<https://news.abs-cbn.com/news/12/17/21/1-dead-thousands-flee-in-ph-due-to-typhoon-odette>

Citation: Kono, Adela Avila (2022). Disability & Disaster [Powerpoint slides].

Disaster by Typhoon Odette

Many electric companies from other regions came to help restore power



Sunstar-Fallen-electricity-posts-in-Talisay-City



Inquirer.net

Citation: Kono, Adela Avila (2022). Disability & Disaster [Powerpoint slides].

Disaster by Typhoon Odette

4 ships ran aground



AFTERMATH. The passenger vessel MV Kho Ferry 1 and the tugboat MT Super MJ run aground at the coast of the South Road Properties in Cebu City, after Typhoon Odette struck Cebu province on Thursday evening (Dec. 16, 2021). Local government units in Cebu are now assessing the vast expanse of the damage left by "Odette." (PNA photo by John Rey Saavedra)

Ship beached at the shore of Dusit Thani Beach Resort in Mactan, Cebu



Citation: Kono, Adela Avila (2022). Disability & Disaster [Powerpoint slides].

Disaster by Typhoon Odette

Malls became shelters

LOOK: Evacuees in Cebu City are safe and sound following the onslaught of Typhoon Odette. Robinsons Cybergate - 75, Robinsons Fuente - 8, SM City Cebu Trade Hall - 1,100, SM Seaside - 33. Councilor Joel Garganera thanked the Malls. **#OdettePH** | Courtesy of: [@cebudailynews](#)



2:07 AM · Dec 17, 2021



Impact of the disaster made life more difficult for PWDs

- Power and water supply was cut off
- Charging of cellphones (& laptops) was difficult affecting communication
- Mobility was difficult & risky due to debris and wires
- Risk of fire from burning candles
- Cooking was difficult due to lack of clean water
- Food supply chains became limited
- Homes destroyed / roofs gone / repairs slow
- Unavailability of workers to do repair work as they had to repair their homes first
- Prolonged state of difficulties up to 4 months due to slow power restoration

Disability-inclusive Disaster Risk Reduction Measures

MINIMUM STANDARDS FOR BARRIER-FREE SHELTERS FOR THE MOBILITY IMPAIRED

Disability-inclusive Disaster Risk Reduction

Before any disaster strikes, it is important for the government and aid agencies to designate or build accessible and barrier-free shelters or evacuation centers so that in the event of a disaster, the most vulnerable—the elderly and the mobility impaired, particularly those using canes, crutches and wheelchairs, and including heavily pregnant women—may find in these places a minimum level of accessibility that would give them a good measure of independence, mobility, safety, convenience and dignity for several days and months before they can move on to more permanent dwellings.

This presentation contains guidelines on how these basic minimum standards for such facilities must be built following Universal Design principles not only for their benefit, but for everyone.

IMPORTANT:

Design specs and measurements must be followed closely to ensure functionality, usability, safety & convenience.

Concerns of Persons With Disabilities during a Disaster

People with a mobility disability are concerned about how they will escape from a dangerous environment, situation, or structure during an emergency or disaster. Many people with mobility disabilities cannot stand independently and are able to walk only a short distance to an evacuation center during an emergency situation. Many people who use crutches, canes, braces, etc. and people with limited movement frequently cannot move quickly.

- People who use wheelchairs are often concerned about being left behind, not being able to access shelter facilities or not being assisted. Many people who use wheelchairs cannot independently get in and out of their wheelchairs.
- They may worry that their wheelchair or wheeled mobility aid will be left behind or damaged.
- Most people, during an emergency, are more concerned with their life safety than they are with injuries, but they worry about being dropped during an evacuation.



Source: DiDRR Guideline Document FINAL 2014 05 22.pdf

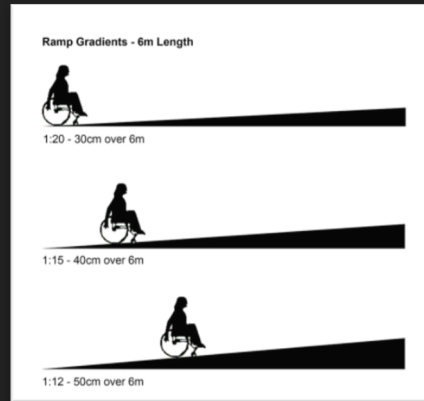
Needs of the Mobility Impaired / Wheelchair Users during a Disaster

Activities	What's needed	Overcoming Barriers
Washing up	Water, soap, small towel/tissues	<ul style="list-style-type: none"> • Wide doors & no steps to lavatory • Knee space (access to lavatory) • Reachable faucets
Toileting	<ul style="list-style-type: none"> • Clean water • Toiletry (toilet paper, soap, etc.) • Privacy 	<ul style="list-style-type: none"> • Wheelchair turning space of 150 cm • Door opening out • Accessible toilet with grab bars in the right places. • Reachable toilet paper
Changing of clothes	Privacy, laundry soap, clean water	Knee space (access to lavatory)
Eating meals	Food, clean water	Regular table with knee space
Brushing teeth	Toothbrush, toothpaste, cup, clean water	Knee space (access to lavatory)
Bathing	Clean water, soap, towel	<ul style="list-style-type: none"> • Accessible shower area • Plastic bathing chair • Reachable faucet • Reachable place for bathing articles • Grab bar support
Bedding	Blanket, pillow	Stable bedding for transfers from wheelchair
Charging of devices	Chargers	Reachable outlets
Disposal of adult diapers & underpads	Big trash bins	Proper place for trash bins inside and outside the building.

Ramps to Shelters

DESIGN SPECIFICATIONS

1. Must be installed from the road until the shelter entrance
2. Slope of 1:12 - 1:15
3. Non-skid surface even when wet
4. Hand rails on both sides
5. Clear width: 1.2 m
6. Curbs: 10 cm
7. Signage (International Symbol of Access) to indicate accessibility



www.udel.edu/udaily/2012/aug/disaster-research-japan-083111.html



Source: ADA Checklist for Emergency Centers

Citation: Kono, Adela Avila (2022). Disability & Disaster [Powerpoint slides].

Accessible Shelters / Emergency Centers

DESIGN SPECIFICATIONS

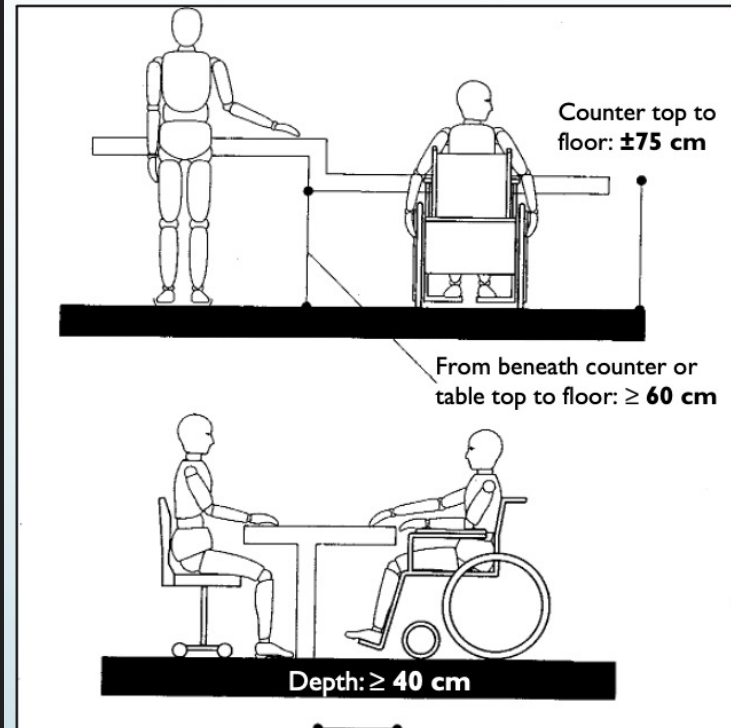
Tables with knee space



Source: ADA Checklist for Emergency Centers

Citation: Kono, Adela Avila (2022). Disability & Disaster [Powerpoint slides].

Table/Counter Height Specs



Source: Building an Inclusive Development Community

Bedding Provisions

PWDs and their assistants have great difficulty with bedding on the floor. Thus the following must be provided:

1. Stable cot or bamboo bed: Must not tilt over and must be placed near the entrance/exit of evacuation center.
2. Blanket: Not just for warmth but important for privacy as when changing clothes or adult diapers.



Source:
<https://decoratorist.com/bamboo-themed-furniture-ideas>



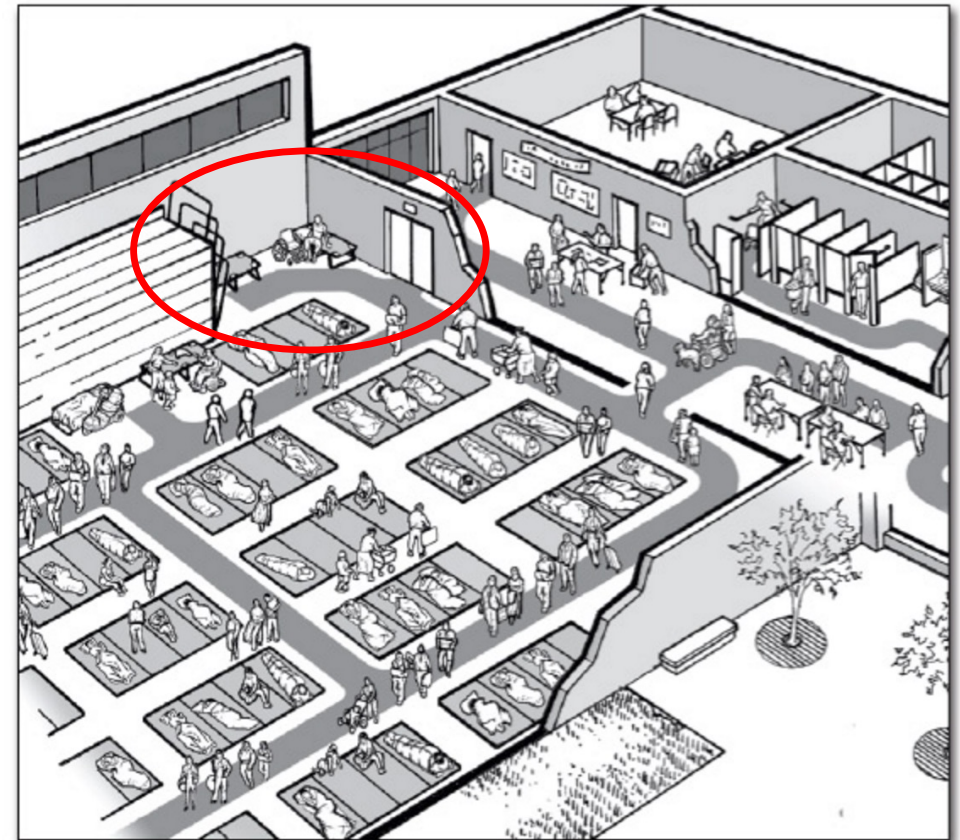
Source:
www.safetystore.com/bariatric-patient-care-medical-cot

Pathways inside the Shelter

- Beds for PWDs must be placed near the entrance/exit of the evacuation center. (An option would be near the comfort room provided it is well ventilated and if it is convenient for the user.)
- There must be clear and accessible routes or pathways between cots or modular tents to toilet & washroom & other activity areas.



Source: Rappler.com



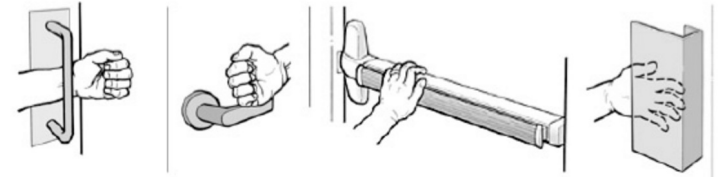
Interior of one section of a shelter's sleeping area. The shaded pathway indicates the accessible route, which provides access to accessible beds, cots, and other activity areas in the space plus the toilet rooms and other activity areas in the shelter.

Source: ADA Checklist for Emergency Centers

Wide interior doors (esp. toilets) that open **OUTWARD**

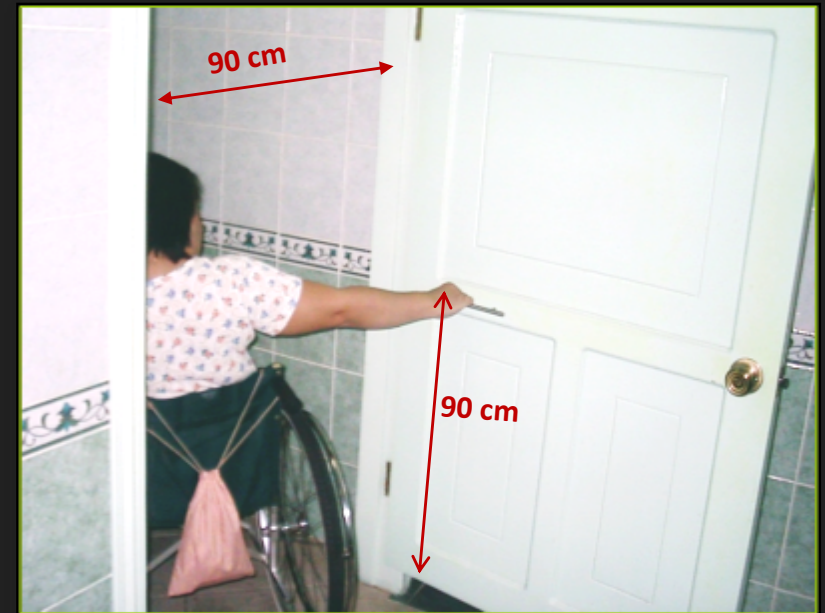
1. If no sliding doors, doors **must open outward** so as not to block closure once wheelchair is inside.
2. Door width: **90 cm clear**
3. Preferably no door closers. Instead install a small cabinet handle or thin bar that acts as a **door-pulling handle** to be placed on the hinge side at a height of **90 cm from the floor**.

DESIGN SPECIFICATIONS



Examples of handles and door hardware that can be used without tight grasping, pinching, or twisting.

Source: ADA Checklist for Emergency Centers



Low/split-level lavatories for children, little people & wheelchair-users

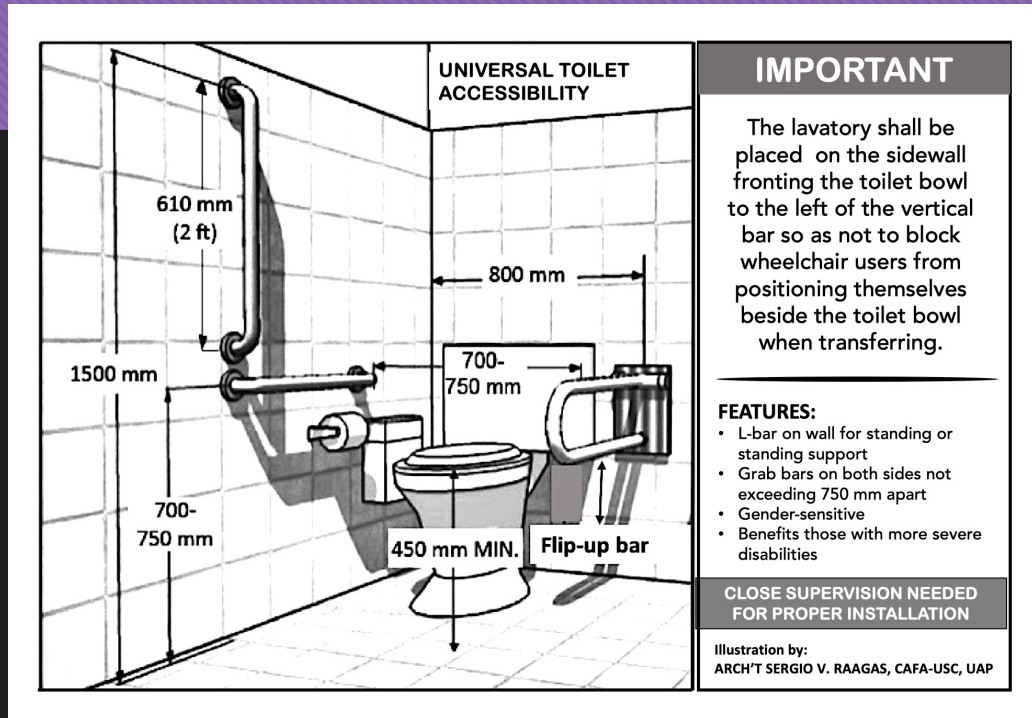


DESIGN SPECIFICATIONS

- Max height: 80 cm from floor
- For children or wheelchair users: 70-75 cm from floor
- Knee space with no obstructions
- Must have reachable lever faucets that do not require hand-twisting
- Tilted or lowered mirrors

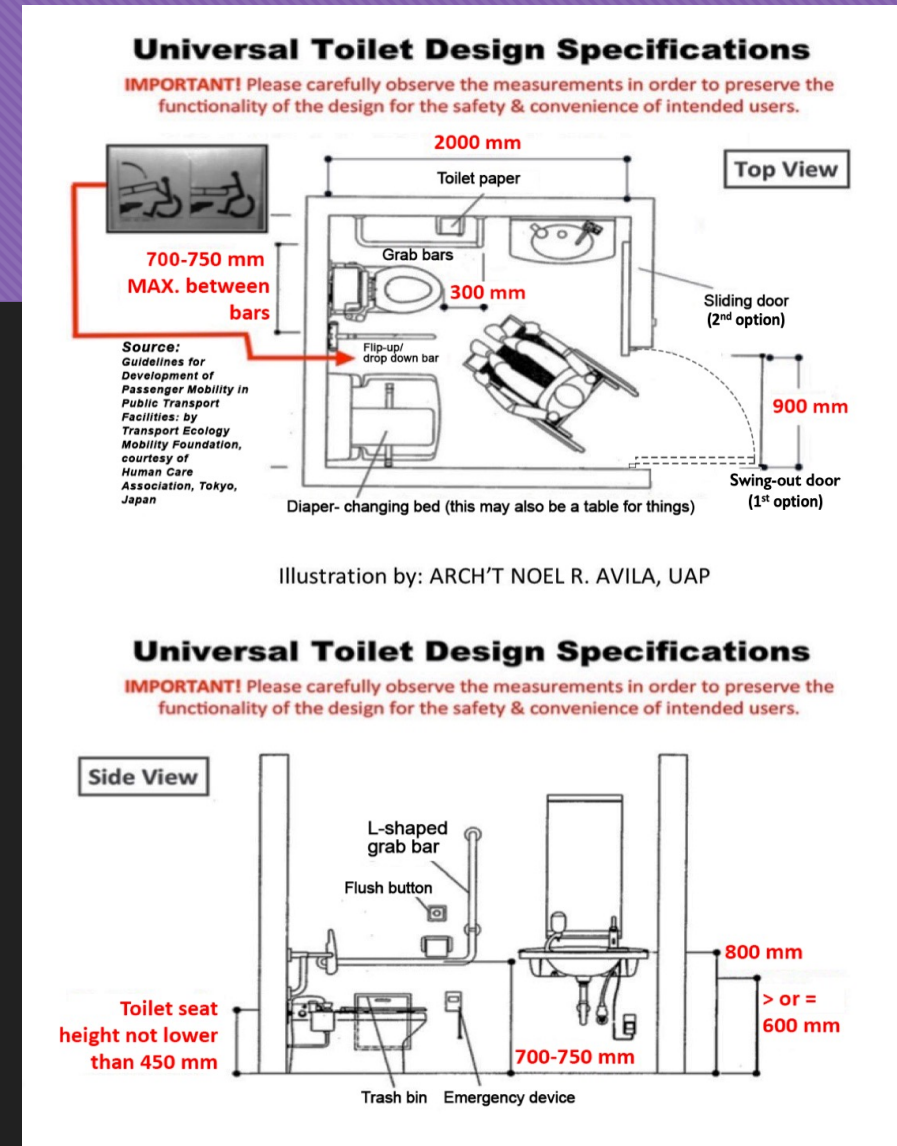


Accessible Unisex Toilet & Washroom in Universal Design (for all)



IMPORTANT:
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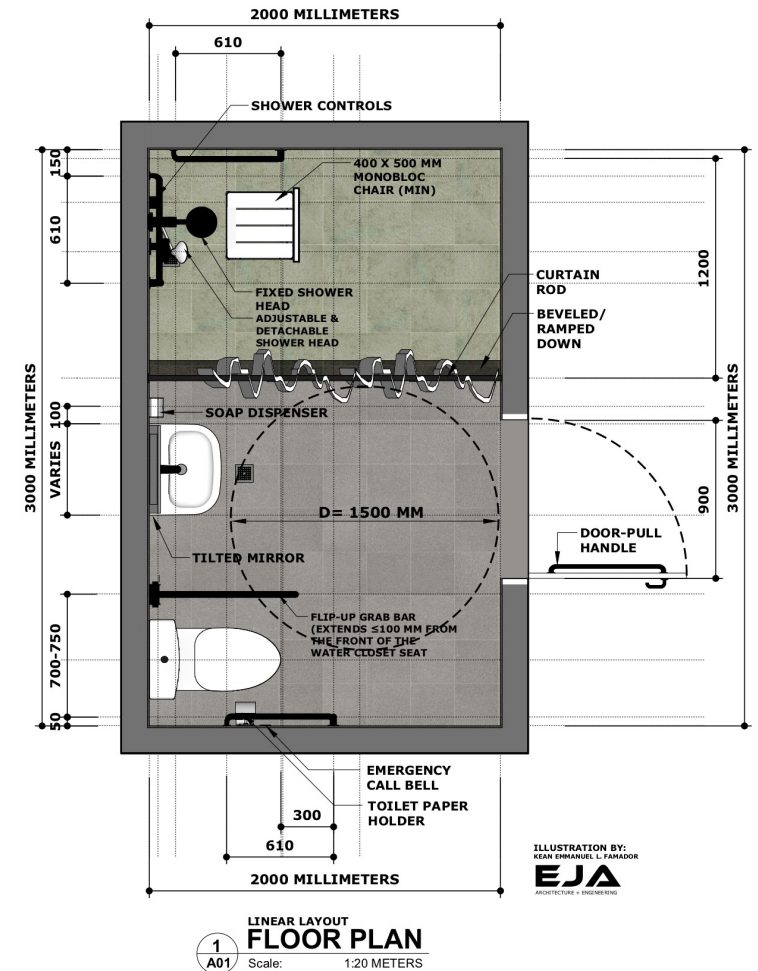


Roll-in Showers



DESIGN SPECIFICATIONS

1. Non-skid flooring when wet
2. Bathroom floor should be 12.7 mm lower than the rest of the floor to hold back water and the threshold shall be beveled or sloped.
3. Must have a vertical grab bar either to the left or right wall facing the shower fixtures
4. Turning space: 1500 mm - 2000 mm
5. Reachable/adjustable showers
6. Have a reachable place for holding shampoo, soap, etc. at 1m max from the floor
7. Provide a shower curtain
8. Provide a sturdy plastic chair



Special areas in an evacuation center

- Refuge area
- Privacy Room
- Child-friendly space
 - Breast-feeding station
 - Play / activity area
- Multi-faith Prayer Room
- Psychosocial space to:
 - relax
 - exchange information
 - exercise
 - engage in social encounters
 - where sound levels are below that of nature
 - Control & maintain personal comfort



<https://www.officialgazette.gov.ph/2013/11/22/couple-conducts-storytelling-for-kids-in-evacuation-centers/>

Emergency Preparedness in Hotels or Buildings



- Stay in rooms on the 1st to 4th floor for easier rescue of PWDs & elderly
- Read about your hotel's or building's emergency protocol
- Check fire extinguisher
- Know your emergency exits
- Know your hotel's or building's refuge area
- Note the direction of higher ground
- Note where is the evacuation area
- Note emergency numbers
- Report unusual heavy cracks, leaks and sounds to the building administrator and move out
- Avoid checking in at hotels near big rivers prone to flooding
- And more...

I hope the Philippine government will be sensitive enough to build accessible shelters, take our needs into consideration, and use these recommendations.



Thank you and keep safe!