This Q & A article is from BDSRA’s “Ask An Expert” Facebook Chat in the BDSRA Closed Facebook group for parents and caregivers.

*\*Please note: the information contained in this material is intended to provide basic information to Batten families and caregivers. It is not intended to be, nor is it, medical advice for individual children. Parents and caregivers should consult the patient’s physician prior to changing medication, medical treatment or daily activities.*

**“Universal Design”**

Featured Expert:

**Rosemarie Rossetti, Ph.D.**

October 2017

Hello everyone! Thank you for joining us tonight. Rosemarie Rossetti is joining us tonight to answer your questions on Universal Design, home remodels, and accessible vehicles.

1. To start off, Rosemarie could you tell us a little about yourself?
   1. It is a pleasure to be with you tonight! I am here to answer your questions about making your homes more accessible. I have used a wheelchair for 19 years and live in a very accessible national demonstration home.
2. What features does your demonstration home have?
   1. No step entries, 36" wide doors, curbless shower, multiple heights of counters. A full listing of the universal design features is available to you free on my website. Get the free chapter of my Universal Design Toolkit at [www.udll.com](https://l.facebook.com/l.php?u=http%3A%2F%2Fwww.udll.com%2F&h=ATMRQ-QaCMls9iZLgjvVrRGZpMPZby3Imvur5eOlvddj-j5Y8-NmZyGjX33rIET7oLGZ8CVGN7Pf_vMm1oOqATJvBrLCTeFWCJ7OmgjhcmRLisLGG48wkDJxHJua_L1UFpBi07-KQw). The website also includes a virtual tour of the house which has a lot of really incredible design elements
3. As families are thinking about remodeling their homes what are some things they should consider before they start?
   1. Select areas where you are currently having problems in your home and target the remodeling for those rooms. Put a design team together early and get the estimate to match your budget.
4. Rosemarie, I know it may be a small thing, but could you talk about channel drains and why they are safer?
   1. These linear drains are installed along the walls or at the shower entrance so water drains quickly. When in a wheelchair it is safer to transfer from a wheelchair to a shower bench if all four wheels are in contact with the floor. Here is a photo of a channel drain



1. This is instead of the floor sloping down in different directions?
   1. The floor is sloped towards the linear drain. This is much safer than having a center drain where there are compound angles. The tile installer also has an easier time installing tile on a shower floor with a channel drain.
2. While we are talking about bathroom design, what are some things families should consider when updating their bathrooms?
   1. Definitely, install a curbless shower and a handheld shower nozzle with a hose at least 6' long. Having knee space under a vanity is a benefit for those who use wheelchairs. My vanity countertop height is 34".
3. What about stair lifts? We're moving from a ranch to a 2-story home and need to consider that in the future.
   1. Stair lifts are a great option. Check with your supplier to see how wide the stairs need to be. Also, be aware of how the staircase is designed. Too many times there are turns in the staircase that can be a problem. If a person uses a wheelchair and the stairlift, you will need to have a wheelchair available on the first and on the second floor.
4. Are there stair lifts that bring the whole wheelchair up and down? Otherwise you would have to transfer an immobile child on both ends of the staircase.
   1. Yes, these are called platform lifts. They generally take more room on the staircase.
5. For many families transferring their children from the bed to the bathroom or from their chair to the bath is very difficult, what modifications do you suggest for this?
   1. Ceiling mounted tracking seems to be a great solution. There are also portable hoist units on the market.
6. To install the ceiling mounted tracking, is that a major construction project?
   1. Yes. Professional installers will need to evaluate your home to determine what reinforcement is needed in the ceiling rafters. Engineers will determine how much weight will be the limit for the system. Doors and doorways will likely need to be altered between rooms. Tracks are installed in the ceiling.
7. Do you have any advice about vehicle modifications?
   1. For wheelchair accessibility I like having a minivan with the ramp coming out of the passenger's side. I also prefer having the kneeling option so the van lowers when the ramp is extended. This reduces the slope on the ramp making it easier for me to roll in.
8. Other than minivans what sort of vehicle options are available?
   1. BraunAbility came out with a modified Ford Explorer.  Here is a link to the Explorer, they have come out with some neat new features
9. Are there any downsides to rear entry? I have heard some people say that it is easier to find parking when you don't have to have an open space to the side of the car.
   1. You are giving up seating space in a van with rear entry. I take two parking spaces if I can't find a van accessible space OR I park at the end of the aisle so I can extend my ramp. Side entry ramps seem much more popular.
10. Another option we talked about on the tour of Rosemarie's house was installing handrails in the hallways or around rooms. This might be helpful for kids who are still walking but a little unsteady on their feet.
11. How do you find resources to help pay for these modifications?
    1. I wrote a chapter on finding funding in my Universal Design Toolkit. Check this one out: Medicaid: Home and Community Based Service Waivers <https://www.payingforseniorcare.com/home-modifications/medicaid-waivers.html>
12. Rosemarie also has a wonderful page of resources on her website at [http://www.udll.com/resources/](https://l.facebook.com/l.php?u=http%3A%2F%2Fwww.udll.com%2Fresources%2F&h=ATN4aY3adErgbtjOAOavViL5Nm1Dz06ea0t6oQDGHw11V3rCavP7OPNF6_QgsM2GORxkJxpZyG33_URNKzHzMKRqnb8pWGRFUqjDA0f7GD1BxyZ7atUUQGITeNmekX6Y08bvLeoWNg) these cover accessible products, financial assistance, construction ideas, and many more.