



REHABILITATION AFTER A BRAIN INJURY

HELLO!

I'm Sean French



Fund Development Director at ARBI
and I'm here to talk to you about brain injury.

You can find me at: sean@arbi.ca

OVERVIEW

- What is an Acquired Brain Injury (ABI)?
- Leading causes of brain injury
- Changes after brain injury
- Rehabilitation journey
- Association for the Rehabilitation of the Brain Injured (ARBI)
- Success stories
- How you can help

 **5,000 ALBERTANS**

Sustain a brain injury every year

 **165,000 CANADIANS**

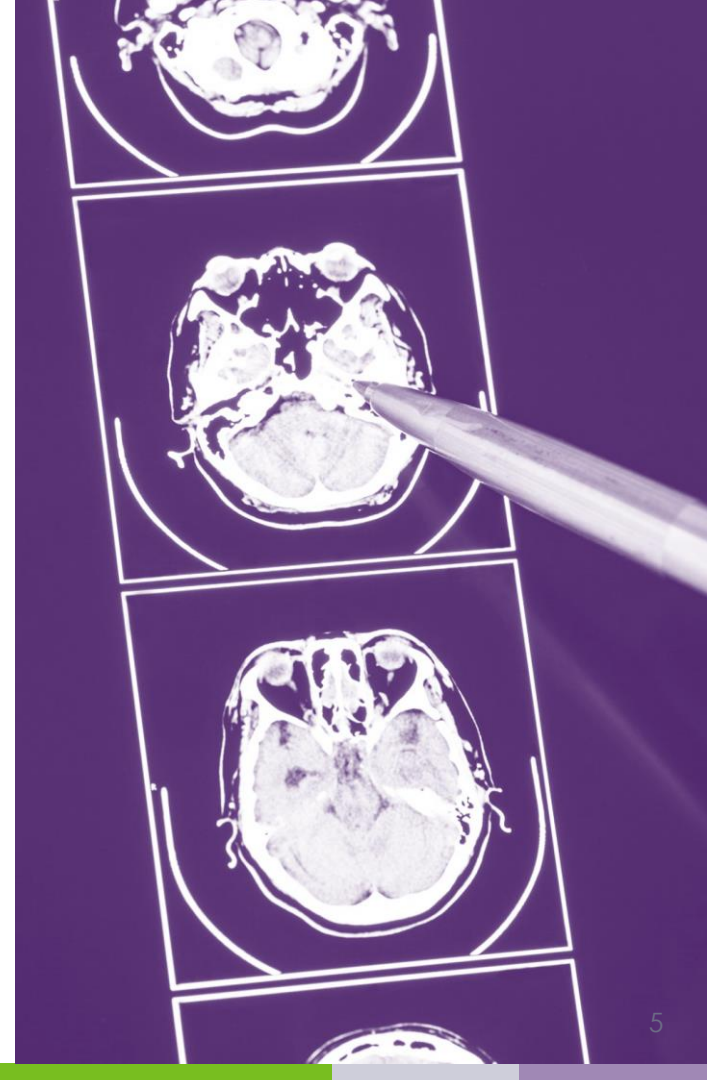
Sustain a brain injury every year = 1 person injured every 3 minutes

 **1,300,000 CANADIANS**

Are living with an acquired brain injury

WHAT IS AN ACQUIRED BRAIN INJURY (**ABI**)?

- Refers to any type of brain damage that occurs after birth
- Results in cognitive, physical, emotional, or behavioural impairments that lead to permanent or temporary changes in functioning
- There are two types of acquired brain injury: **traumatic** and **non-traumatic**



TRAUMATIC BRAIN INJURY (**TBI**)

Examples of a TBI include:

- Falls
- Assaults
- Motor vehicle accidents
- Sports injuries
- Struck by object

NON-TRAUMATIC BRAIN INJURY (**NTBI**)

Examples of a NTBI include:

- Stroke
- Aneurysm
- Brain tumor
- Infections (i.e., meningitis)
- Lack of oxygen supply to the brain (i.e., heart attack)

BRAIN INJURIES DON'T DISCRIMINATE

- Acquired brain injury is the leading cause of death and disability for **Canadians under 35**
- The highest incidence of traumatic brain injury are **men aged 16–24**
- Every year **over 6,000 Canadians** become permanently disabled after a traumatic brain injury
- **86%** of those employed for pay at the time of injury do not return to work
- **80%** of people who suffer a stroke have restrictions on their daily activities



LEADING CAUSES OF BRAIN INJURY

- Motor vehicle collisions
- Medical conditions or diseases (e.g., stroke, aneurysms, tumors)
- Falls
- Bicycle incidents
- Workplace injuries
- Sports, assaults, other traumatic causes
- Asphyxia, poisoning, other toxins (e.g., carbon monoxide)

LEADING CAUSES OF BRAIN INJURY

(ENERGY INDUSTRY/TRADES)

- Slip and/or fall accidents
- Motor vehicle accidents
- Explosions/pressure
- Construction
- Defective work equipment



My family member or friend just suffered a severe brain injury.

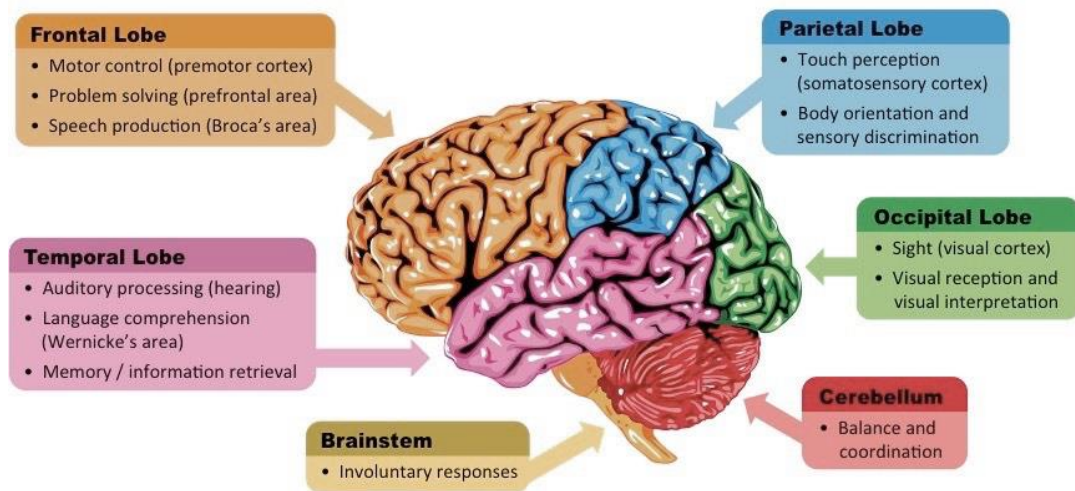
What can I expect?

** Question 2*

CHANGES AFTER BRAIN INJURY

Common disabilities resulting from a severe brain injury include:

- Walking, moving, sitting up
- Speaking
- Cognitive problems
- Sensory processing
- Communication
- Behavioural changes
- Mental health issues
- Reduced independence with daily tasks



THE GOOD NEWS...

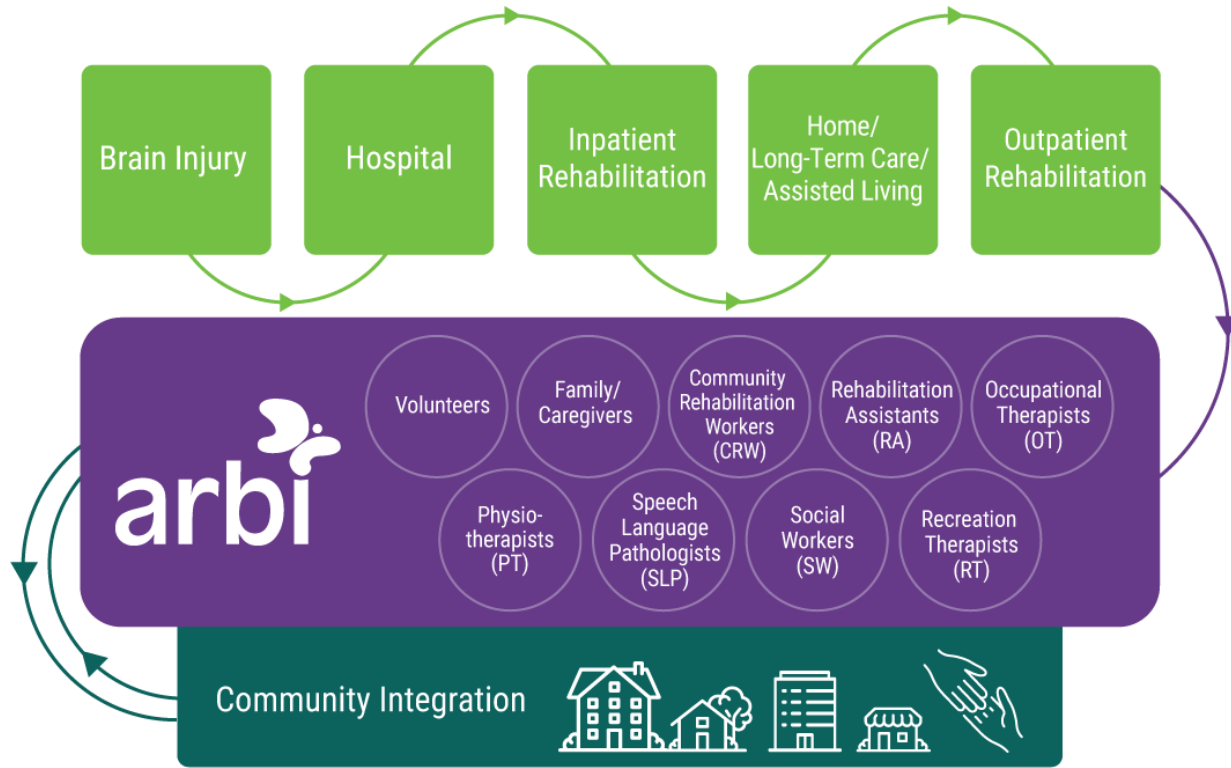


Neuroplasticity

Neuro = The Brain

Plasticity = Can Change

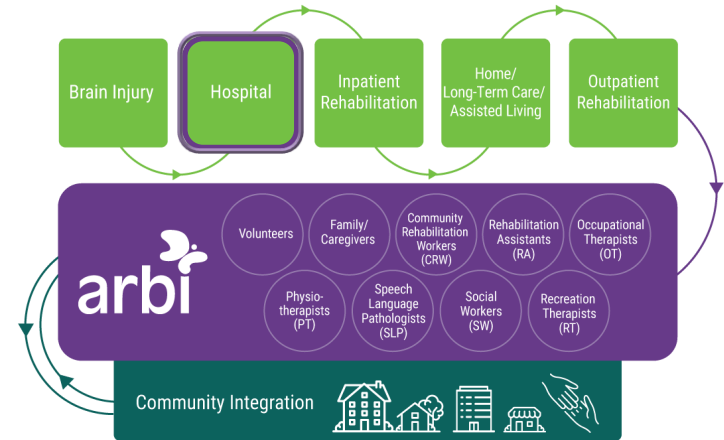
refers to the brain's ability to change and adapt as a result of experiences



THE JOURNEY TO RECOVERY

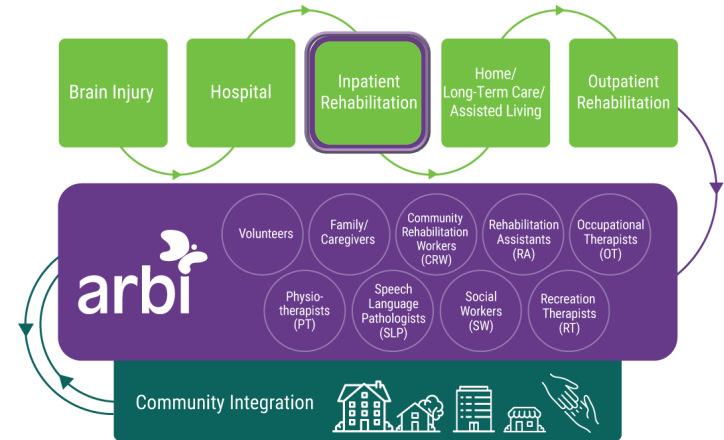
HOSPITAL

- Medical management of brain injury
 - Diagnostic tests
 - Assessment
 - Surgery
 - Medication
- Inpatient rehabilitation
- Discharge planning
 - Inpatient rehabilitation, outpatient rehabilitation, long-term care, assisted living or return home



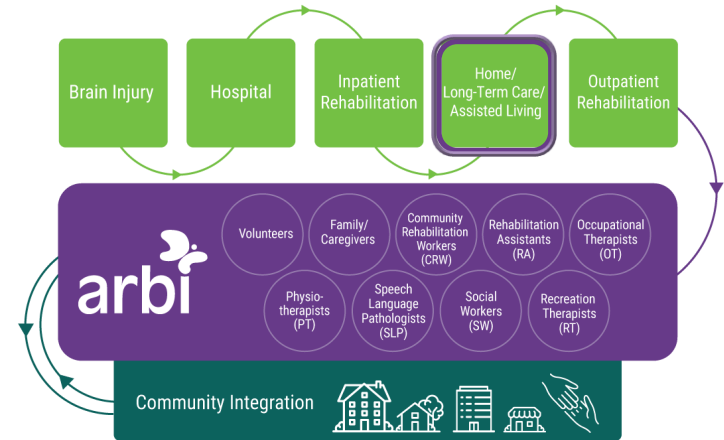
INPATIENT REHABILITATION

- Patient stays at rehabilitation facility
 - Length of stay ~3–6 months
- Program may include any or all:
 - Physical therapy
 - Occupational therapy
 - Recreational therapy
 - Psychiatric and/or psychological care
 - Speech therapy
 - Social support
- Discharge planning
 - Long-term care, assisted living or return home, outpatient rehabilitation,



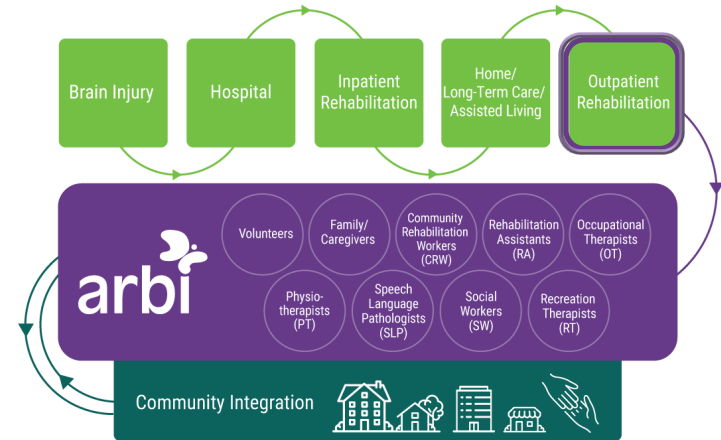
HOME / ASSISTED LIVING / LONG-TERM CARE

- Depending on the person's needs they may be discharged back home with or without in-home support (home care)
- Assisted living residences support people with less complex needs
- Long-term care homes support clients who require a higher level of health care
- People in these facilities generally have fewer options in receiving outpatient rehabilitation



OUTPATIENT REHABILITATION

- Multidisciplinary approach to help people regain lost functions
 - Can include daily activities such as eating, dressing, walking or speech
- Focuses on improving physical, cognitive and behavioral functioning so clients can live as independently as possible
- May include sensory and social functioning
- Therapy is based on what the client identifies as important to them
- Which leads us to ARBI...





Our Mission

- ARBI is a community-based non-profit organization that strives to improve the lives of individuals with a moderate to severe brain injury, including stroke. We unite professionals, volunteers and caregivers throughout Alberta to provide personalized rehabilitation and community integration.

Our Vision

- Creating a community where quality rehabilitation is accessible to all individuals with a moderate or severe brain injury, including stroke, enabling them to live their best life possible.

ASSOCIATION FOR THE REHABILITATION OF THE BRAIN INJURED (ARBI)

- Community-based charity operating in Calgary, since 1978
- Comprehensive rehabilitation, community integration, and caregiver support for survivors of acquired brain injury and stroke
- Offers 'one-stop', client-centered and highly successful rehabilitation programs delivered by a dedicated, multidisciplinary team of professionals and volunteers
- Through a blend of science and compassion, we unite professionals, volunteers and caregivers with one goal in mind—***making life better*** for our clients and their families

OUR TEAM

- ARBI has a team of medical professionals with extensive experience in neurorehabilitation, including:
 - Occupational Therapists
 - Physiotherapists
 - Speech-Language Pathologists
 - Community Rehabilitation Workers
 - Recreation Therapists
 - Rehabilitation Assistants
 - Social Worker
 - Clinical Psychologist



"The multidisciplinary staff at ARBI is committed to integrating the most current brain research with informed clinical practice in a setting that is respectful, caring, and fully dedicated to the well-being of all their clients and families."

– Donald H. Saklofske, PhD, Professor and Associate Dean Research, University of Calgary



OUR CLIENTS

- Diagnosed with a moderate to severe acquired brain injury, including stroke (16+)
- Majority of our clients have either suffered a stroke or been involved in a motor vehicle accident
- ARBI works closely with Alberta Health Services and receives referrals from health care providers, community agencies and caregivers
- Following our screening process, eligible clients will be entered into the introductory **ARBI 101 Program**

Clients will participate in a variety of exercises with our therapists to determine which program and/or service will **best support their goals**

OUR PROGRAMS & SERVICES

- Approach to therapy is based on neuroplasticity— the brain's ability to adapt and rewire new pathways after an injury
- Therapists provide personalized treatment programs based on the individual's objectives and goals
- Rehabilitation volunteers assist therapists in delivering client-centered programs at ARBI, in the community & virtually
- Psychosocial programming for clients and caregivers
- ***On-Site Program, Outreach Program, Community Integration Program & Caregiver Support***



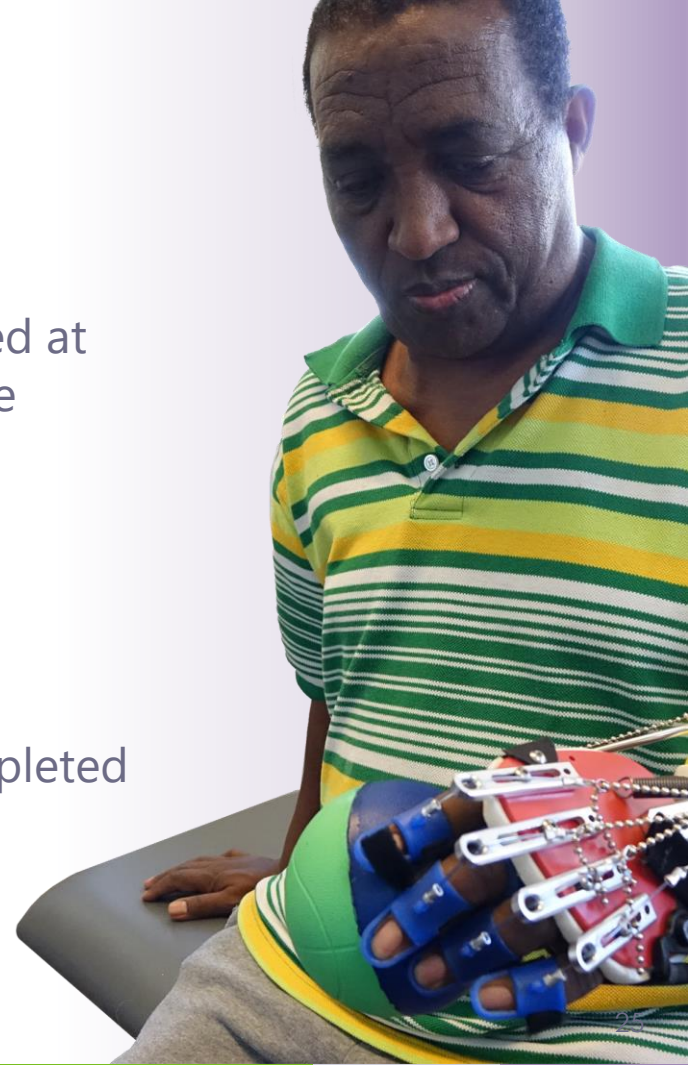
ON-SITE PROGRAM



- Intensive neuro-rehabilitation offering one-to-one assessment, goal identification, and multidisciplinary treatment for clients
- Depending on the severity of the injury, goals may vary from improving the ability to swallow or speak, to long-term goals of returning to work or moving back home with loved ones
- Individual and group activities include elements of traditional therapy (*occupational therapy, physiotherapy, speech-language pathology*), new methods for managing daily tasks, and social and emotional support

OUTREACH PROGRAM

- One-to-one assessment and treatment aimed at clients needing help from only one discipline
- Areas of support include:
 - Occupational Therapy
 - Physiotherapy
 - Speech-Language Pathology
- Clients include those who have already completed the On-Site Program, or clients new to ARBI
- Fee-for-service program determined by the therapist in conjunction with the client



COMMUNITY INTEGRATION PROGRAM (CIP)

- Life skills training and meaningful recreational opportunities for clients in group and one-to-one settings
- Virtual and face-to-face sessions take place in our facility or out in the community
- Interactive groups appeal to a wide range of clients with diverse interests
 - Community Kitchen
 - Art Classes
 - Woodshop
 - Exercise Group
 - Music Group
 - Golfing
 - Gardening



CAREGIVER SUPPORT



**BRAIN INJURY IMPACTS MORE
THAN THE SURVIVOR—IT IMPACTS
THE ENTIRE FAMILY**

- Neuropsychology Support

- ARBI's neuropsychologist works with clients, families, and staff to address the cognitive, social, emotional and behavioural consequences of brain injury or stroke
- Recommendations can be provided to help them successfully reintegrate into the community

- Social Worker

- ARBI's social worker provides ongoing support and is involved with our clients and their caregivers from the intake process through to their discharge
 - Provides supportive counseling to clients and caregivers
 - Connects clients and caregivers to resources in the community
 - Collaborates on client treatment plans, discharge planning, and general well-being

EVERYONE DESERVES TO HAVE HOPE FOR THE FUTURE

- With tailored and timely rehabilitation, significant improvements in recovery can occur for many years following a brain injury
- ARBI helps individuals achieve their dreams of re-engaging in the community and living a fulfilling life
- Blending science and compassion to create hope for our clients has allowed them to:
 - Regain lost abilities
 - Increase their independence
 - Reconnect with their communities
 - Improve their mental health and well-being
- Together, we help families rebuild their lives after brain injury

LONG-HAUL TRUCK DRIVER

- Sustained a severe traumatic brain injury (TBI) in a vehicle collision at age 36 (950,000 miles of safe driving prior to accident)
- No rehabilitation in hospital (not a candidate), laid there for 6 months
- Severe cognitive impairments, aphasia, tilt wheelchair, feeding tube
- Living in long-term care, has support from family and strong religious faith
- **Personal Goals:** communicate, sit-up, some self-care
- **Since Joining ARBI:** he speaks single phrases “is good” / “is no good”; could not express himself verbally before
 - Family has noted significant gains in head and hand movements and improved communication

VP OPERATIONS, OIL & GAS

- Collapsed unconscious while out in the community, suffered a stroke
- Unable to speak for the most part
- Can read single words and uses an iPad to support communication
- Will attempt to write what he cannot say
- Living at home with family
- **Personal Goals:** improve speech, hoping to learn adapted kayaking
- **Since Joining ARBI:** Goes swimming at Vecova, takes short hikes, and walks 30 mins a day on the treadmill

MAKING LIFE BETTER



Patrick

ARBI GRADUATE

ARBI has been my saving grace, it has given me back the light at the end of the tunnel, and I now have hope once again. The love and support from ARBI is like no other.



Judith

ARBI GRADUATE

I can now stand with a walker; walk short distances and I'm even learning to do stairs. I'm using this newfound confidence I've gained through ARBI and their wonderful staff, to kick start my days!



Dixie (Derek)

WIFE OF ARBI CLIENT

The talented staff and volunteers provide the very best therapy with compassion, kindness, understanding and expertise. Derek was so lost inside himself but shortly after beginning his therapy at ARBI he gained self-confidence and pride.



Colin

ARBI VOLUNTEER

In my future career as a physician, I will work with many individuals with brain injuries. I am relieved to know that after they leave the hospital, they can do their rehabilitation in the caring and capable hands of the staff and volunteers at ARBI.





HOW CAN YOU HELP **MAKE LIFE BETTER?**



Advocate

Follow us on social media & help promote brain injury awareness in our communities...

 [ARBllyc](#)  [arbi_yc](#)  [arbi_yc](#)



Donate

Help brain injury & stroke survivors relearn valuable life skills, recreate their independence & reconnect with their communities



Volunteer

Join us as a rehabilitation, administrative or event volunteer & give back to the community

INTERESTED IN A LUNCH & LEARN SESSION AT
YOUR COMPANY OR A TOUR OF OUR FACILITY?

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ANY QUESTIONS?