

# MINING IS ESSENTIAL

Mining is the backbone of the Ontario economy and keeps our society functioning with everyday essentials. The materials and products we deliver help us stay healthy, meet our basic life needs, remain safe and connected, and sustain northern economies.

Mining helps us build a better world.

THIS

IS

MINING



## MINING HELPS US STAY HEALTHY



A variety of **METALS** are used to make lithium-ion rechargeable batteries that power portable ventilators.



**GOLD** is a critical component in diagnostic COVID-19 test kits.

**GOLD** nanoparticles are also used in drug therapies that treat malaria, HIV, arthritis and cancerous tumours.



**NICKEL** is used in a wide variety of medical instruments and devices where the highest standards of hygiene and sterility are essential.



**SILVER** is used in hospital fabrics and devices, leveraging its antimicrobial properties to reduce bacterial contamination and prevent cross-infection.



**COPPER** is antimicrobial. Hospitals integrate it into physical settings –bed rails, door handles, IV poles and other exposed surfaces – to help reduce the risk of infection.



**RARE EARTH ELEMENTS** are used in X-ray and MRI scanning machines. They are also components of a special glass used in personal protection eyewear and visors.



**PLATINUM GROUP METALS** have high biological compatibility and are used to make key components for essential medical devices, like implantable defibrillators and pacemakers.



**SALT** is critical to maintain our supply of intravenous saline drips.



## MINING HELPS US MEET OUR BASIC LIFE NEEDS



**IRON, ZINC AND PHOSPHATE** are crucial to the healthy crops we eat and help prevent nutritional deficiencies and diseases.



**COPPER** is an essential trace mineral vital to human health, with its antimicrobial, antioxidant, anti-carcinogenic and anti-inflammatory properties. It is also important to store and transport water.



**NICKEL** containing stainless steel plays a vital role in food safety at every link in the food chain.



**PLATINUM GROUP METALS** help desalinate water for us to drink.



**SILVER** is used to help purify water and control bacteria growth, often added to water purification systems in hospitals and community water systems.



A wide variety of **MINERALS AND METALS** are used to help build and maintain our homes, chosen for their durability, strength and resistance to weather.



## MINING HELPS US STAY SAFE AND CONNECTED



**COPPER** is found in hydro transformers and wiring, keeping the electricity on in our homes and workplaces.



**NICKEL** is found in our mobile phones and laptops, as well as in the rechargeable batteries we use for electronics, vehicles and emergency power.



**GOLD** is the world's most reliable and durable electrical conductor, essential for computer electronics and satellite communications.



**SILVER** is found in virtually every electronic device. If it has an on/off button, it's likely that silver is inside.



**RARE EARTH ELEMENTS** are crucial to many hi-tech products, including TVs and other visual displays that give off different colours.

#INTHISTOGETHER

#THISISMINING

