Our Medical Supply Chain Needs a Strong Domestic Mining Industry

**THE MEDICAL AND HEALTHCARE APPLICATIONS OF MINERALS**

Minerals and metals are essential to our modern medical world and are key to many of the medicinal innovations we see today, serving as the building blocks of the life-saving medical devices and medications that doctors and patients rely on every day. The antimicrobial and antiviral properties of minerals have never been more relevant or needed.

**COPPER**

Not only can it be found in MRI scanners, copper is also critical to inhibiting the spread of viruses and is therefore used across a variety of medical equipment and applications. When influenzas, bacteria like E. coli, superbugs like MRSA, or even coronaviruses land on copper, they begin to die within minutes and are undetectable within hours.

**SILVER**

Silver is an active ingredient in medical products as it prevents bacterial growth and accelerates the healing process. Because of this, silver is a present ingredient in a number of antibiotics. In fact, a small amount of silver makes E. coli bacteria significantly more sensitive to commonly prescribed antibiotics like penicillin.

**GOLD**

Gold is essential to sophisticated medical equipment, including life-supporting devices, pacemakers, heart stents, CAT Scan devices, and it is used in the treatment of heart disease.

**LITHIUM**

Lithium is widely utilized in pacemakers, defibrillator machines and other types of portable electronic equipment.

**TITANIUM**

Titanium, which is resistant to bacteria, is a critical component in surgical equipment.

**PLATINUM**

Platinum group metals help fight cancer as active ingredients in chemotherapy drugs and in implants for radiation therapy. And because of their resistance to corrosion, they are also often found in medical devices such as pacemakers, implantable defibrillators, catheters and stints.

**ZINC**

With their resistance to radiation, durability in harsh environments and malleable properties, zinc alloys are ideal for medical manufacturing applications. The metal’s practical usage in medical technology includes defibrillators, portable oxygen supplies and patient monitoring devices. Studies have shown that zinc supplements may also help reduce the duration of symptoms from the common cold.