



CMG is FDA registered to provide Medical grade PPE across North America. Our products are compliant with ASTM standards, which are the governing body for product safety.







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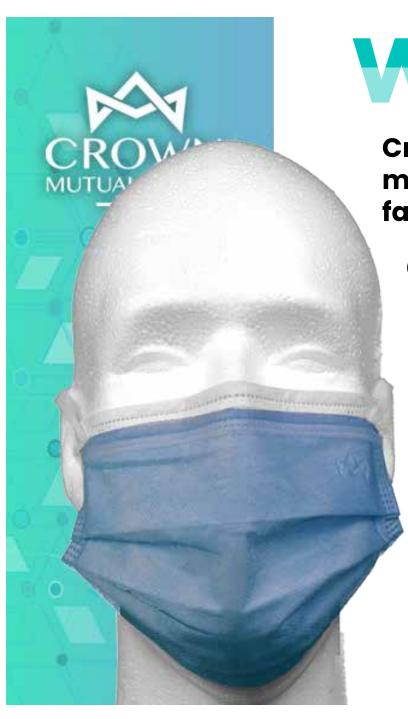
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WHAT WE ARE

Crown Mutual Medical Group Ltd is a Canadian owned manufacturer of medical grade devices and a multi-faceted service provider for the health and safety industry.

Our mandate:

- Enable a sustainable, globally competitive, PPE industry in North America
- Ensure pandemic-proof supply chain of quality medical device products
- Contribute to the economy; improving key economic goals: GDP, exports, skills & community development
- Facilitate industry collaboration; Support the sharing of technologies and resources
- Provide quality critical medical supplies to the vulnerable and underserved



Certified Mask Manufacture

Formed in 2020, Crown Mutual Group (CMG) is a North American based FDA and Health Canada registered manufacturer of medical grade ASTM surgical masks this includes:

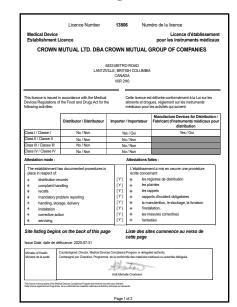
- ASTM Level 1
- ASTM Level 2
- ASTM Level 3
- Pediatric ASTM Level 3







FDA Registered





Pediatric Masks



Pediatric ASTM Level 3

- Size: 120mm 75mm
- BFE 95%+ \ PFE 98%+
- Fluid resistant
- Soft on the face
- Exceeds ASTM F2100 standards
- Easy breathability



- 1) Inner layer (non-woven); skin friendly, tasteless and non-irritating.
- 2) Middle layer (high grade melt-blown); absorption and filtration of virus droplets.
- 3) Outer layer (non-woven); fluid resistant.





Mask Manufacturing Equipment Supplier



CMG mask machines operate under very comprehensive Standard Operating Procedures to ensure quality and fluidity of the operations and fulfillment.

Output per hour / machine	6,000
Output / day (15 hours – 2 FT shifts)	90,000
Output per month / machine	2,700,000
Deficiencies (3%) – maintenance, QA	81,000
Net output/machine	2,619,000



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Chart 1.2 - CMG HIGH SPEED ELASTIC EARLOOP MASK MACHINE OUTPUT PER MACHINE

Output per hour / machine	12,000	
Output / day (15 hours – 2 FT shifts)	180,000	
Output per month / machine	3,600,000	
Deficiencies (2%) - maintenance, QA	72,000	
Net output/machine	3,528,000	





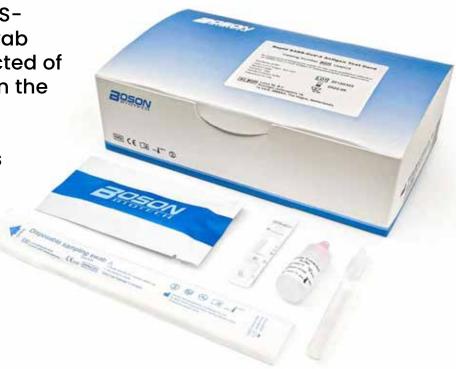
Rapid Test Kits For COVID 19



Testingforcovid.ca is a sub-brand CMG created, which is dedicated to sourcing reliable and compliant Rapid Antigen test kits for the Canadian population.

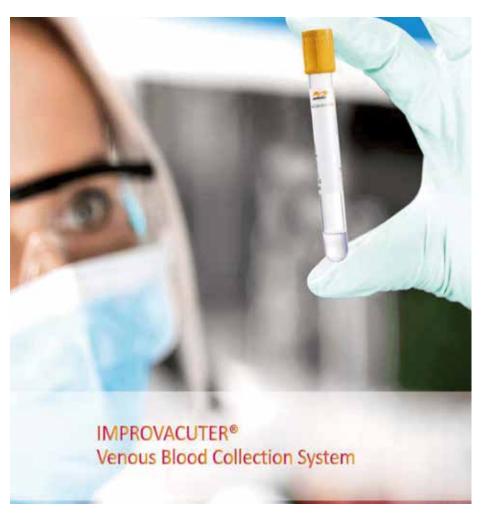
Rapid SARS-CoV-2 Antigen Test Card is a lateral flow immunoassay intended for the qualitative detection of nucleocapsid protein from SARS-CoV-2 in nasal swab or nasopharyngeal swab specimens from individuals who are suspected of COVID-19 by their healthcare provider within the first 7 days of symptom onset.

- 20 Rapid SARS-CoV-2 Antigen Test Cards
- 2 Sample Buffer
- 20 Sterilized nasopharyngeal swabs
- 20 Extraction tubes
- 1 Instruction for use
- 1 Tube rack (for 6 tubes/rack)
- Instructions as per the manufacturer:
- Boson Rapid SARS-CoV-2 Antigen Test Instructional Card





Preanalytical Systems



CMG offer a line of blood collection systems, liquid transport tubes, urine collection and microbiology transport swabs.

There has been an increaing customer preference for saftey-engineered product solutions and improved clinical performance.



Blood Collection Systems

Gel & Clot Activator Tubes

IMPROVACUTER • Gel & Clot Activator Tubes offer serum for determinations in chemistry and serology. The gel is very stable in physical and chemical features. After centrifugation, the gel can effectively separate the serum from blood cells, preventing substance exchange between blood cells and serum. So, serum could be aspirated directly from the collection tube, no need to transfer to another container. "FDA 51 O(k) cleared I# k093910

Clot Activator Tubes

IMPROVACUTER • Clot Activator Tubes offer premium serum for determinations in chemistry and serology. Clot Activator and silicone are coated interior to accelerate clotting process.

EDTA Tubes

IMPROVACUTER • EDTA Tubes offer whole blood specimen for whole blood haematology determinations. Generally, K2 or K3 Potassic Salt of EDTA is used as anticoagulant. The tube's inner wall is spray coated with additive. IMPROVACUTER • EDTA Tubes can be used in direct sampling analyzers without actually being opened. Blood smearing should be done within 2 hours after blood collection.

Citrate Tubes

IMPROVACUTER" Citrate Tubes(9NC 0.109M)/(9NC 0.129M) are generally used for coagulation studies. The tubes contain buffered sodium citrate solution as anticoagulant. Citrate concentration of either 0.109M (3.2 %) or 0.129M (3.8 %) is available. The mixing ratio is 1 part citrate to 9 parts blood.





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Heparin Tubes

IMPROVACUTER • Heparin Tubes offer plasma for plasma determinations in chemistry. Sodium or Lithium Heparin is used as anticoagulant. The tube's inner wall is spray coated with additive.

Gel & Heparin Tubes

IMPROVACUTER • Gel & Lithium Heparin Tubes offer plasma for plasma determinations in chemistry. The tubes contain Lithium Heparin as anticoagulant and barrier gel forms a barrier separating plasma from cells after centrifugation. Plasma may be aspirated directly from the collection tube, no need to transfer to another container.

Glucose Tubes

IMPROVACUTER • Glucose Tubes are used for glucose determination. The tubes contain Sodium Fluoride and EDTA as additive, providing better sample quality with results in less haemolysis and micro-clots.

No Additive Tubes

IMPROVACUTER • No Additive Tubes offer serum for determinations in chemistry, immunology and serology. The minimum recommended clotting time for serum tubes without Clot Activator is 90 minutes under room temperature.



ESRTubes

IMPROVACUTER • ESR Tubes are used for Westergren sedimentation rate determination. The tubes contain buffered sodium citrate solution as anticoagulant. Citrate concentration of either 0.109M(3.2 %) or 0.129M(3.8 %) is available. The mixing ratio is 1 part citrate to 4 parts blood.



Gel & EDTA.K2 Tubes

IMPROVACUTER • Gel & EDTA.K2 Tubes are used for viral load determination or preparation of undiluted plasma specimens for molecular diagnostic test methods or where undiluted plasma is required. Whole blood is collected and barrier gel forms a barrier separating plasma from cellular components of the blood after centrifugation.



ACD Tubes

IMPROVACUTER • ACD Tubes are suitable for HLA visualization, DNA Paternity testing. The tubes contain Sodium Citrate, Citric acid or glucose as additive, providing better sample quality with cell-stabilizing properties.

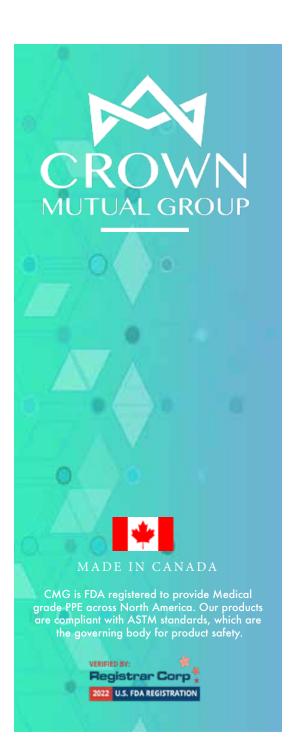


Multi-Sample Needles

IMPROVACUTER • Multi-Sample Needles have a tri-bevel design and are coated with silicone, a low friction lubricant, ensuring very gentle and smooth vein entry.







Multi-Sample Needles (Flashback)

IMPROVACUTER • Multi-Sample Needle (Flashback) provides greater convenience in use as its unique design allows instant blood flashback, giving a sign of venipuncture success. The Flashback needles ensure the full utilization of the closed system by providing a visual control for venipuncture.



Blood Collection Sets

IMPROVACUTER • Blood Collection Sets are used with evacuated venous blood collection tube together. The winged needles can help achieving patient comfort and healthcare workers' easy and flexible clinical operation. *FDA 510(k) cleared I# K153388



IMPROSAFE® Multi-Sample Needles

IMPROSAFE • Multi-Sample Needle is a safety-engineered designed needle, used for multiple sample collection. It is available with pre-attached holder which is ready to use, no assembly required after taking it out of the package. *FDA 510(k) cleared I# KI 5338.8



IMPROSAFE® Blood Collection Sets

IMPROSAFE • Blood Collection Set is simple and easy to use. It is a safety-engineered design protecting healthcare workers from needle stick injury. It is also available with pre-attached holder which is ready to use, no assembly required after taking it out of the package. *FDA 510(k) cleared I# K153388 *FDA 510(k) cleared I • KI 53388









IMPROSAFE • Blood Collection Set (w/Pre-Attached Holder) is simple and easy to use. Pre-attached holders prevents risk of accidental needlestick injuries and eliminate steps in preparation process before venipuncture.

*FDA 51 O(k) cleared I • KI 53388



Holders

IMPROVACUTER • Holder is compatible with all IMPROVACUTER • & ImproGene"" tubes, IMPROVACUTER • & IMPROSAFE • Blood Collection Needles. It provides safety and easy use for healthcare workers.



Luer Adapters

IMPROVACUTER • Luer Adapter is a sterile and disposable adapter that allow you to attach to a variety of devices (e.g. hypodermic needles, infusion lines, catheters) for use with the IMPROVACUTER 111 blood collection tubes.



Tourniquets

IMPROVACUTER" Tourniquet is used for fastening the vein in blood collection or blood transfusion, as well as venipuncture for othermedical purposed. It is safe and easy to use.





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Disposable Tourniquets

IMPROVACUTER • Disposable Tourniquet uses its unique design to provide safe, convenient, efficient, and latex-free blood collection experience.



Sharps Containers

IMPROVE • Sharps Containers have special Dual-lock System, with the temporary closure to seal the container for a while, and permanent closure to seal the container completely. It gives you great flexibility in disposable sharps treatment.



M SERIES

U SERIES





Capillary Blood Collection Tubes

M11 Type

Capillary Blood Collection Tube W/O capillary tube, safety cap



M2Type

Capillary Blood Collection Tube WI or W/O capillary, rubber closure



M3Type

Capillary Blood Collection Tube WI capillary, valve cap





IMPROMINI® Plus

13mm X 75mm Capillary Blood Collection Tube, Safety cap for laboratory automation process.

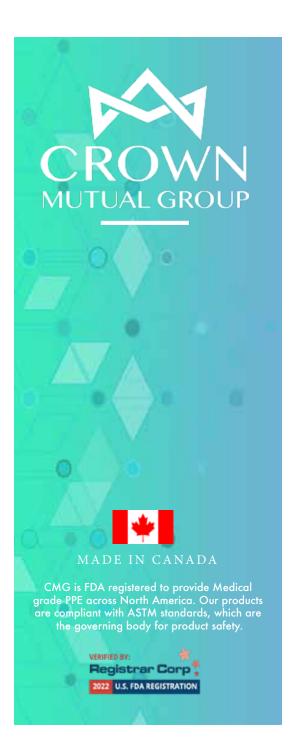
- *Bullet-design inner tube for better mixing
- *Leak-proof & pieceable stopper
- *Twist-design cap for closed & safer transportation



Cell Free DNA Tube

ImproGene"" Cell Free DNA Tubes are evacuated blood collection tube with a formal-dehyde-free preservative stabilizing nucleated blood cells. The unique stabilization prevents the release of genomic DNA (gDNA) and minimizes hemolysis, allowing isolation of high-quality ceH-free DNA (d DNA). The tubes also have been demonstrated to minimize the degradation of circulating tumor cells (CTCs).





Urine Collection System

Urinalysis Tubes

IMPROVACUTER • Urinalysis Tubes are used for urinary sediment and component analysis. The conical bottom is suitable for routine urine tests and microscopic sediment analysis. The preservative tube contain Sodium Propionate, Chlorhexidine and Ethyl p-hydraxybenzoate as additive, providing better sample preservation.



Urine Culture Tubes

IMPROVACUTER • Urine Culture Tubes are used for urine culture test. The microbiology preservative containing Sodium Formate, Boric, Acid Sodium Borate, effectively maintains bacterial viability up to 48 hours at room temperature to help reduce contamination rate.



Urine Collection Container

IMPROVACUTER • Urine Collection Container provides a safer and easier alternative for specimen transfer. By using this closed system, pouring off, leakage and wet areas are avoided, which positively impacts the work environment and conditions.





Liquid Transport System

IMPROVIRAL™ Viral Preservative Medium (VPM)

IMPROVIRAL TMViral Preservative Medium is an amino acids and antibiotics based universal transport medium for viruses and other pathogens.

COMPONENT

Amino acids, vitamins, inorganic salts, buffer solution, multiple antibiotics

STORAGE

2-25°C 12 months. It is recommended to store at 2-8°C for best product performance.

IMPROVIRAL™ NAT Medium (NAT)

IMPROVIRAL™ NAT Medium is a versatile molecular medium specially designed to stabilize and preserve microbial and human nucleic acids (RNNDNA) for prolonged time periods.

COMPONENT

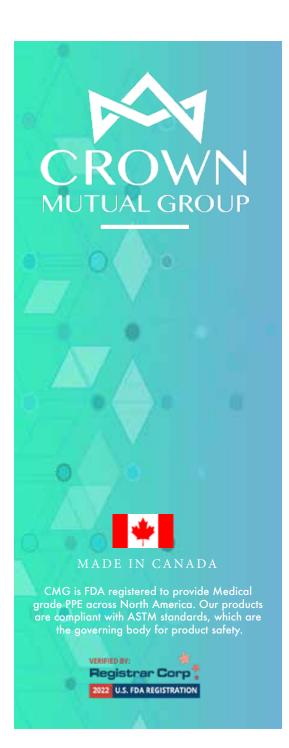
Guanidine salts and nucleic acid protectants

STORAGE

2-25°C 15 months







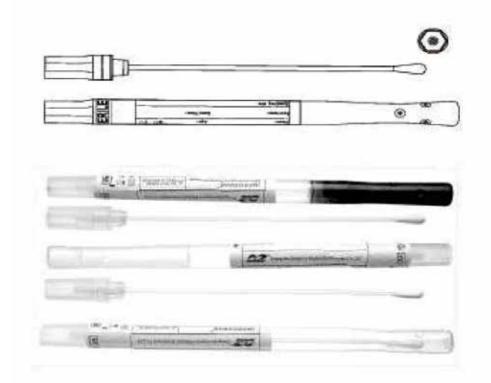
Microbiology Transport System

IMPROSWAB® Microbiological Transport Swab

(Compatible for use with VPM/NAD)
Guanidine salts and nucleic acid protectants

STORAGE

2-25°C 15 months





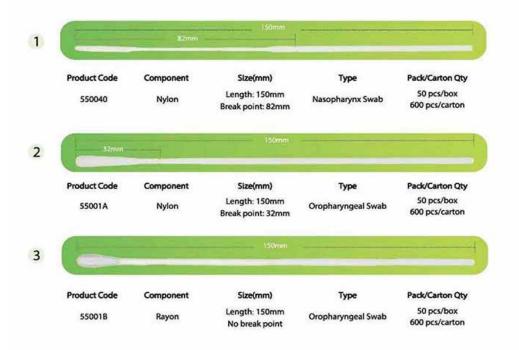


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Microbiological Transport Swabs

IMPROSWAB • Microbiological Transport Swab is a special device for collection, transportation and preservation of microbiological specimen, providing an optimal and professional solution for those specimen treatments. It can effectively protect the microbial character, the physiological activity and otherwise staff's work and keeps them from biological pollution. 2-25 °C 15 months





ADE IN CANADA

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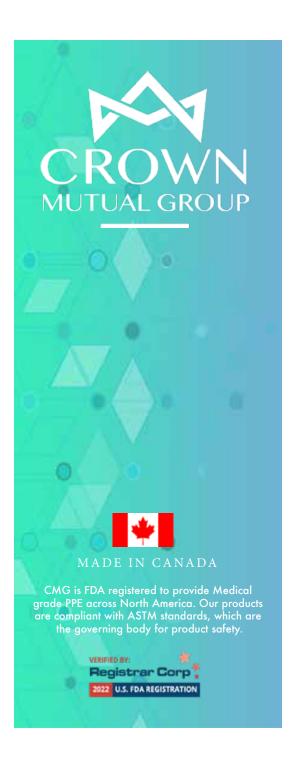
PPE Manufacturing Facility











WHAT WE DO

We are multiple Canadian industries with strengths in production, technology, infrastructure, certification and compliance.

OUR CORE SERVICES



Financing and Leasing

We have funded hundreds of clients who needed a lease, an affordable line of credit or accessible capital to advance their thriving business.



Compliance and Quality Assurance

We work directly with the Canadian Standards Association (CSA), to ensure all of our equipment and products meet the highest standard of



Supply Chain and Manufacturing

We are an importer of PPE manufacturing equipment. We also import and manufacture face masks and face shields for medical and



Testing & Certification

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MADE IN CANADA

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WHO WE ARE



ALEX LIU

Co-Founder Alex Liu owns and operates a successful construction company in the lower mainland called Case Construction. He is a Beijing-born businessman with a background in electrical engineering. Alex's connections with China run deep, and he has resources that reach into manufacturing.



RAY SERION

Co-Founder Ray Serion is instrumental in pulling together a group of colleagues that could collectively support a new business model of servicing PPE companies; thus, Crown Mutual Group of companies was born. Ray's background as a compliance officer has been critical to the companies success.



DAN SONG

Dan Song is a CPA, he merged his existing PPE brand with CMG and added to the scope and reach of the company goals for success.



SEAN MCKAY

Sean McKay is a digital marketing and creative director. He would be responsible for building the brand, and helping to position the company as an authority in the market.





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WHAT WE'VE DONE

We made some time for a show of goodwill, and we connected with the Vancouver Autism Network with a donation of masks. It was a tremendous feeling of gratitude to be able to give back in even the slightest way.









Over half-a-million masks are en route to Saint Vincent and the Grenadines, after a nearby volcano forced the evacuation of over 20,000 residents.



Crown Mutual Group graciously donated 15,000 surgical face masks to the very noble institution, Our Daily Bread.





Clients and Alliances















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Our Location



CMG is headquartered at 1100-1200 West 73 Avenue, Vancouver, British Columbia, and the manufacturing facility is 563 Ebury Place, Delta, BC.



Our manufacturing facilities are built under GMP standards with ISO 7 standard clean rooms that has a combined production output of over 45 million masks each month.





Our Contact

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