



*Performance Solutions
Designed to Deliver*
IV Catheter Patency 24/7!
--Nexus Medical Since 2001

Hello, my name is Cary Dikeman and I am the co-founder, Chairman and President of Nexus Medical.

We are happy that you are visiting our Website and reading about *Blood Reflux* and how our Nexus TKO® Technology has been proven to provide an enormous impact on;

- Patient Care
- Nursing efficiency
- Reduction in overall medical supply costs and pharmaceutical cost

The most important essential element of the Nexus TKO® is the true clinical value this technology will provide your patients and their families.

From the very beginning the Nexus Medical Engineering Team was guided by a single vision and mission which was.....

“I.V. Catheter Patency 24/7!™”

Let me tell you the story about how Nexus Medical started!

Our journey began in October of 2000 when the Company was awarded a Federal Grant from the US Army Medical Material Command to solve the problem of *Blood Reflux* into I.V. Catheters of the “Fighting Soldier” on the battlefield.

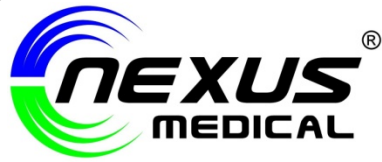
Nexus Medical first began studying the root causes of unintentional *Blood Reflux* with the Clinical Team from Wilford Hall Medical Center in San Antonio, Texas. These Clinicians were on the front lines of Operation Desert Storm and witnessed firsthand the effects of unintentional *Blood Reflux*.

From our very first work with the US Army and US Air Force, we discovered the unmet needs and dissatisfaction which existed with their current I.V. system. From the information we gathered from Wilford Hall Medical Center we quickly learned this was not only a problem with the Fighting Soldier on the Battlefield but every I.V. patient at Wilford Hall Medical Center.

Nexus Medical’s Engineering Team began work in our testing laboratory to simulate what we learned from the Clinical Team at Wilford Hall. Root cause analysis and human factors engineering principles were used to categorize the various ways in which blood can reflux into I.V. Catheters. The Nexus Engineering Team quickly learned *Blood Reflux* could be broken into two clearly distinct and definable root cause categories.

- Mechanical or externally induced *Blood Reflux*
- Physiological or internally induced *Blood Reflux*





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One of the very first root cause discoveries we found in our testing laboratory involved mechanically induced *Blood Reflux* by a simple, ordinary flushing syringe. Through simulated use testing, the Nexus Engineers discovered a fully depressed flushing syringe would create *Blood Reflux* into any peripheral or central I.V. Catheter. Nexus determined this was a major cause of *Blood Reflux* and very detrimental to nursing efficiency and overall patient care. We found it interesting the flushing syringe procedure was designed to fully flush blood and medications from the catheter, however when the nurse would compress the syringe plunger tip, a significant amount of blood would reflux into the I.V. Catheter.

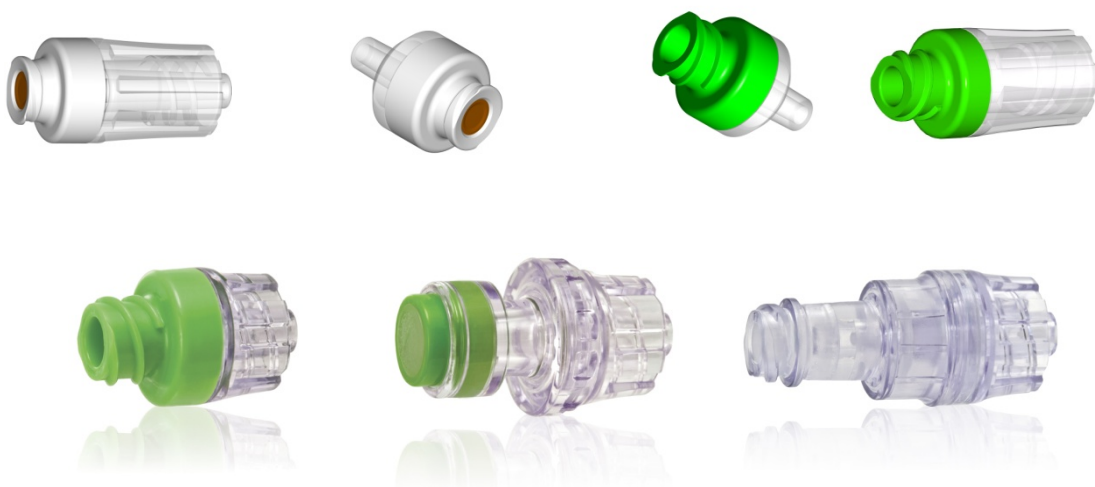
Nexus Medical shared this discovery with Roxanne Perucca, MS, CRNI who was the I.V. Team Leader at University of Kansas Medical Center. Roxanne Perucca, MS, CRNI and Lynn Hadaway Med, RN, BC, CRNI of Lynn Hadaway Associates later presented these finding at the INS meeting in 2005 in Fort Lauderdale. Nexus Medical also shared this discovery with the leading prefilled flushing syringe manufactures Covidien, Excelsior Medical and Medefil.

The Nexus TKO® Anti-Reflux valve is engineered to stop all known causes of unintentional *Blood Reflux* using a single clear silicone dome shaped valve technology called TKO (To Keep Open).

From our beginning in 2000; Nexus Medical's design criteria has been based upon two important clinical imperatives;

- "Crystal Clear" fluid pathway for easy assessment by the nurse
- "Straight and Non-Tortuous Fluid Pathway" to deliver "A Productive Flush®"

These two important design imperative are found in all Nexus technology which includes our first generation luer activated TKO-1, and our NIS-2, TKO-3, TKO-4, TKO-4S , TKO-5 and TKO-6.





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Nexus Medical is the only company which offers three unique Nexus TKO® Anti-Reflux technologies.

- The Nexus TKO®-6 is a luer activated, crystal clear, non-torturous fluid path technology which offers complete "Bi-Directional Flow Control 24/7™". This technology offers all users a tremendous clinical and economic value over standard non bi-directional flow control devices. If you are currently using a non bi-directional flow control device such as the CLAVE®, Microclave®, Smartsite®, MaxPlus®, Clearlink® or InVision®, the Nexus TKO®-6 will provide "Blood Reflux Protection 24/7™" and has been proven to promote our mission of "IV Catheter Patency 24/7™".



- The Nexus TKO®-5 is a true split septum system which offers plastic blunt cannula access. The TKO-5 is designed with crystal clear, non-tortuous fluid path technology which provides completed "Bi-Directional Flow Control 24/7™". This technology offers all users a tremendous clinical and economic value over standard non bi-directional flow control devices. If you are currently using a non- bi-directional flow control device such as the Interlink®, Safeline® or Lifeshield®, the Nexus TKO®-5 will provide "Blood Reflux Protection 24/7™" which extends our mission of "IV Catheter Patency 24/7™".

- The Nexus TKO®-4S which is a female luer device can be added to any needle-free technology where "Blood Reflux Protection 24/7™" is desired but due to contractual issues your hospital is not in a position to switch to either the TKO-5 or TKO-6.



If you should have any questions or you are interested in talking with one of our experienced representative do not hesitate to call or email Nexus Medical.

Thank you again for visiting our website!

Cary Dikeman

