

Biological Monitoring in Detergent Manufacturing using Skin Testing

Donald Bruce Kirchner, MD, MPH
The Procter & Gamble Company
Cincinnati, Ohio, USA

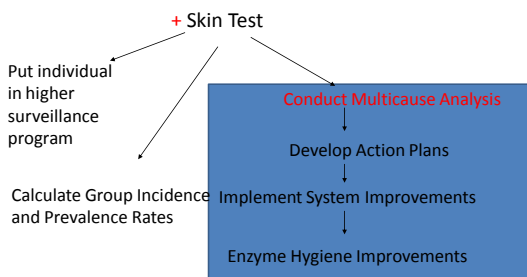




Advantages of Prick Test

- Less invasive than serology
- Immediate results
- Inexpensive compared to serological test

Positive Skin Test Results



Antigen Procurement

- Enzyme supplier
 - Ask for “purified material for skin testing”
 - Insure antigen is same as production enzyme
 - Laboratory determination of protein concentration
 - Test concentration should be between 50 micrograms/ml and 100 micrograms/ ml
 - Irradiation
- *User reconstitutes with saline and glycerine mixture*

Antigen Procurement

- Coming Soon to American Cleaning Institute Members- Commercially available protease and amylase