

Laundering and Pesticide Labeling

Carol Black, Washington State University

2018 The Pesticide Stewardship Alliance Conference



Garments and Laundering



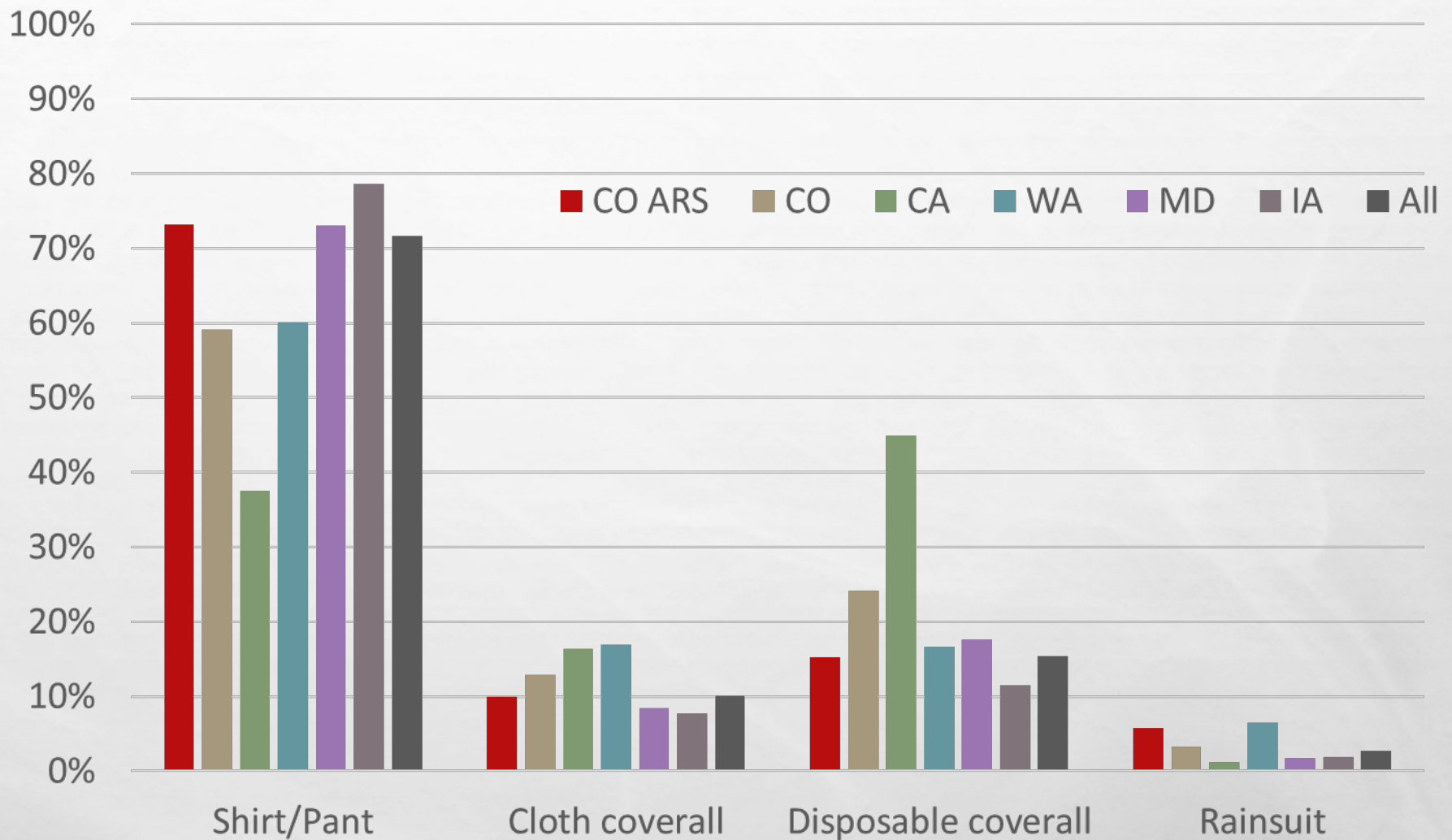
2018 TPSA Annual Conference



Do you apply pesticides?		
No	311	12.3%
Yes	2223	87.7%

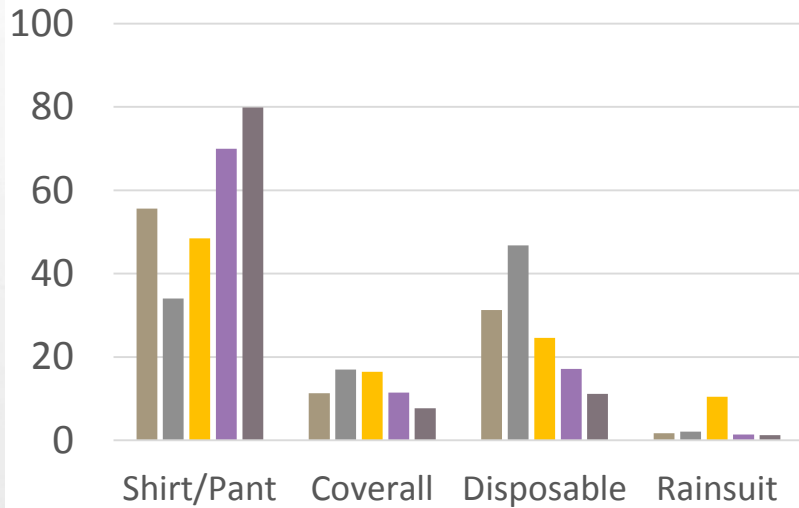
Type of Applicator		
Certified Applicator*	2118	95.1%
Trained Pesticide Handler	71	3.2%
Other	37	1.7%

Represented Sector		
Agriculture	1387	62.0%
Landscape maintenance	450	20.1%
Right-of-Way	165	7.4%
Residential/Industrial	181	8.1%
Other	55	2.5%

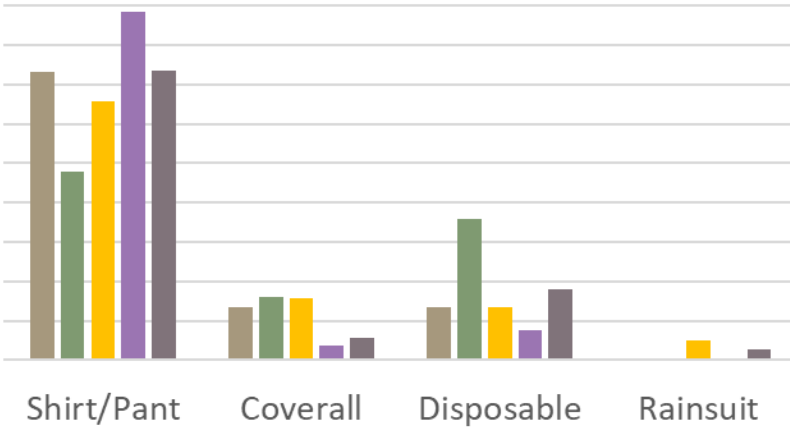


What do you commonly wear?

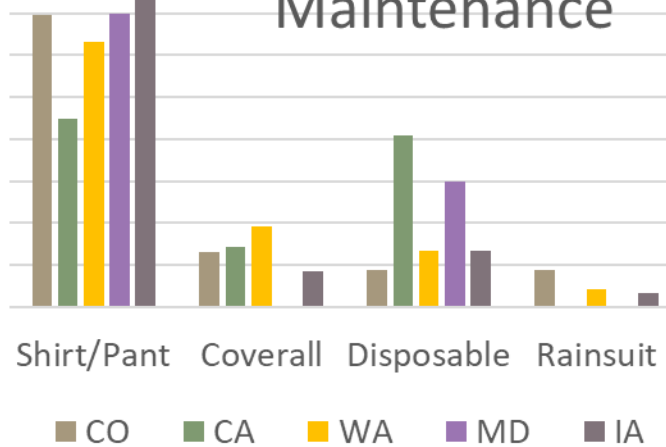
Agriculture



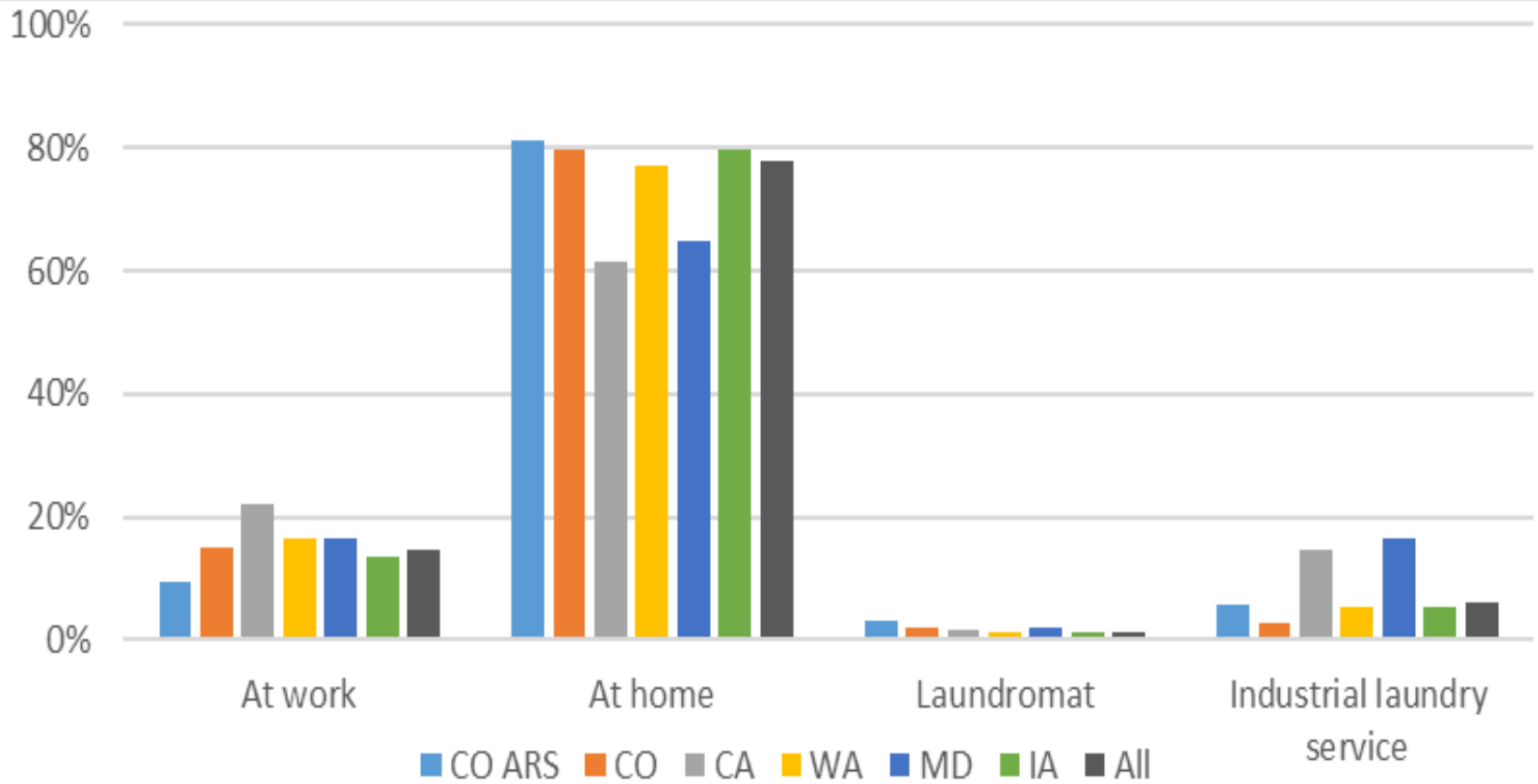
Right of Way



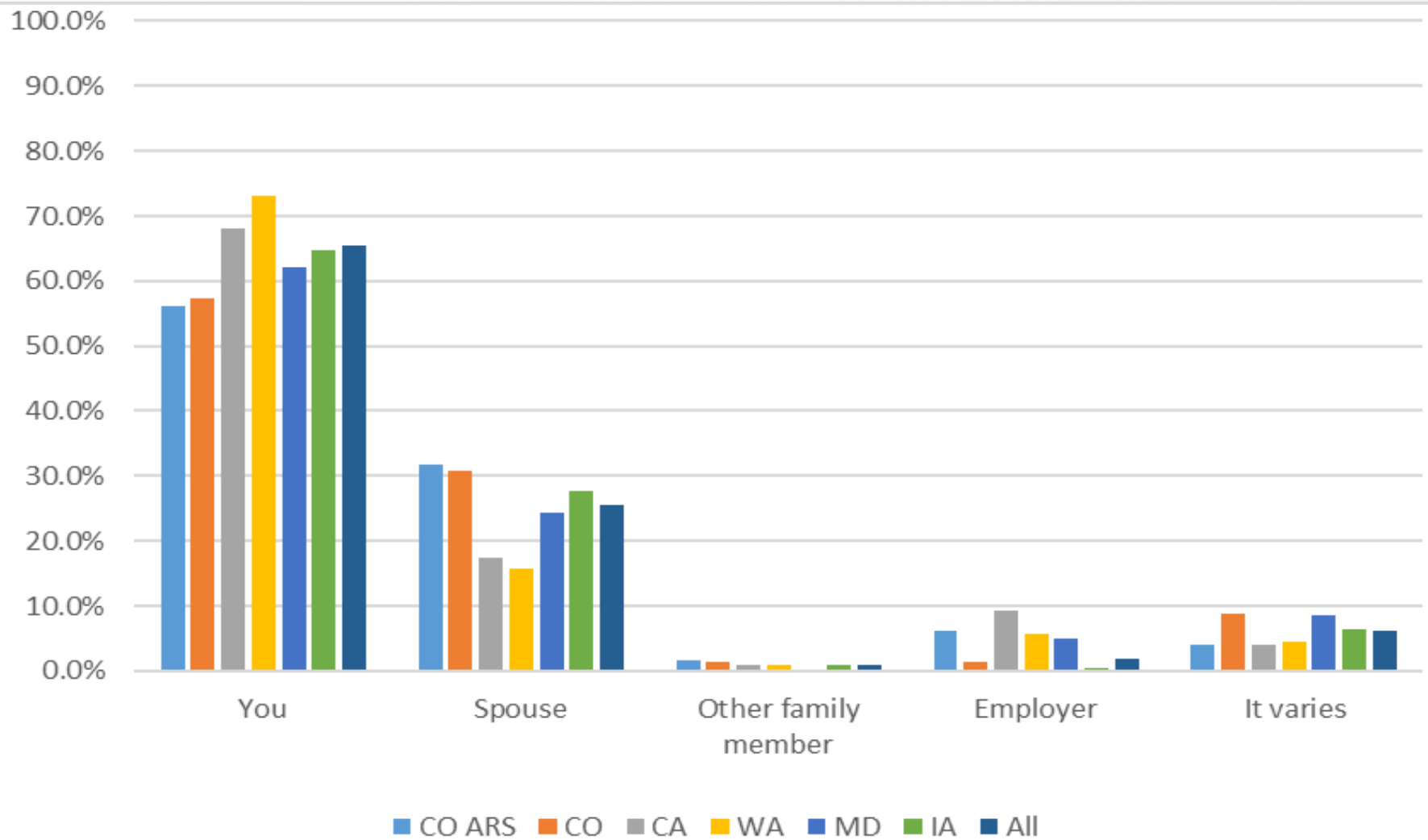
Landscape Maintenance



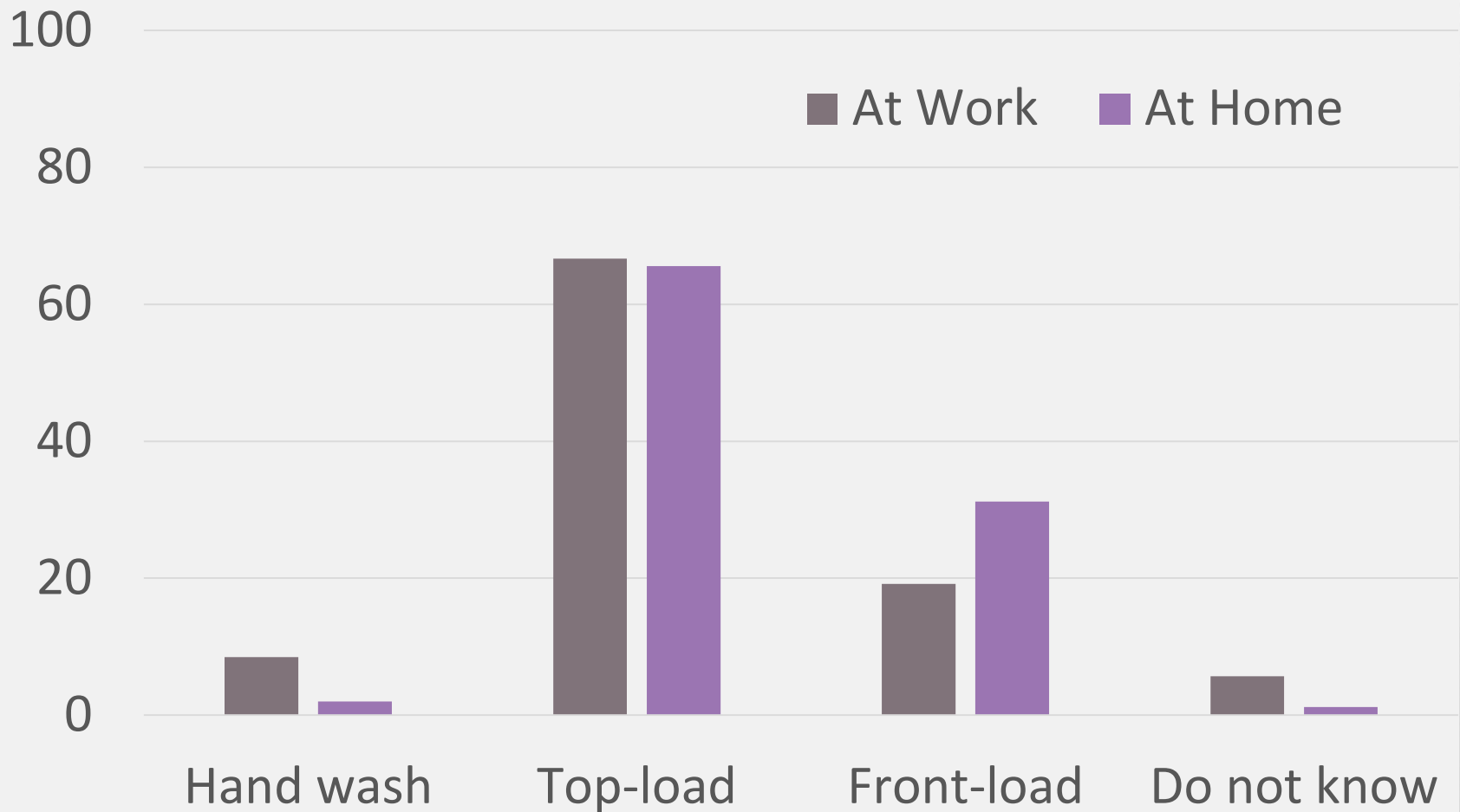
Commonly worn



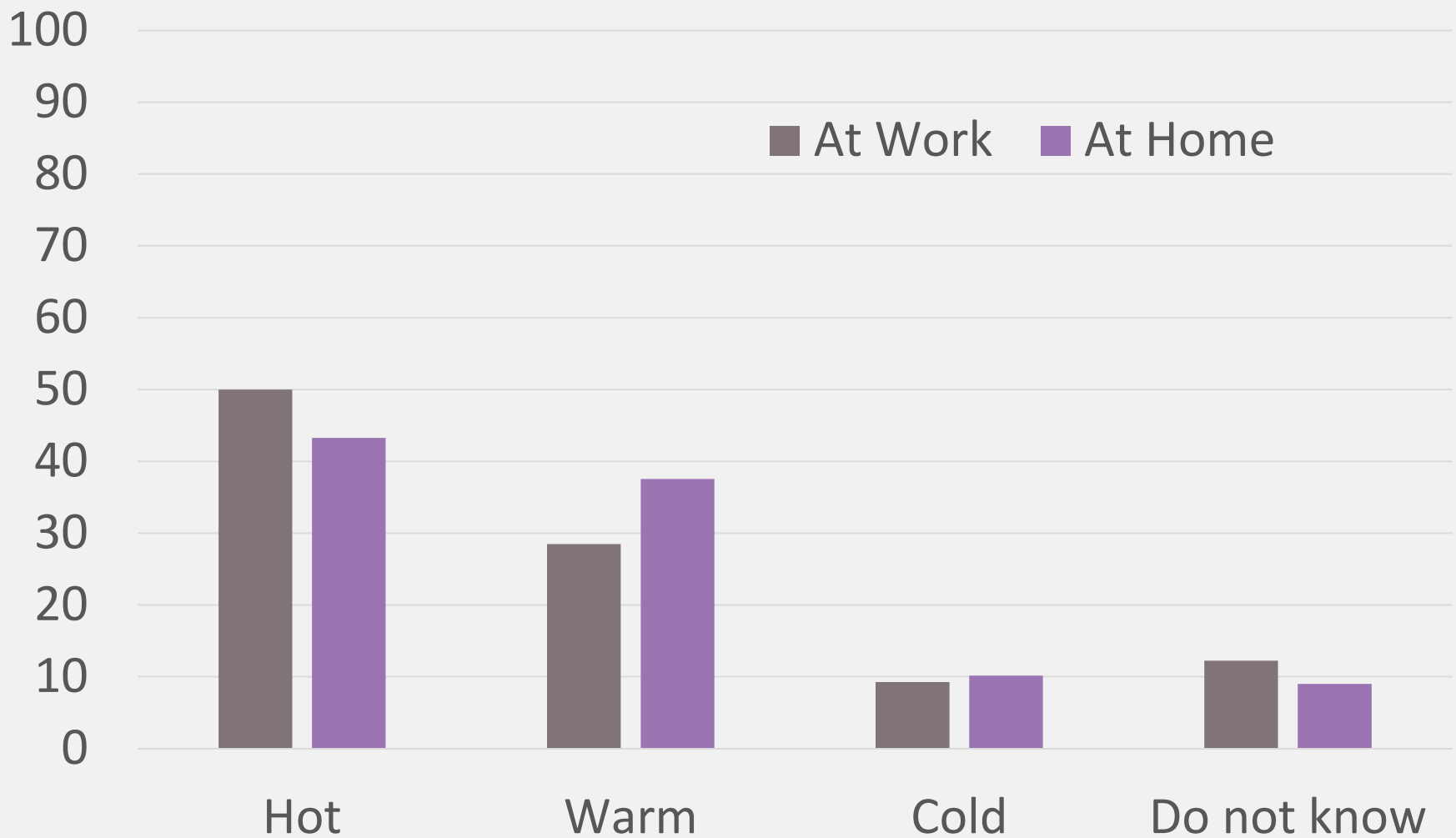
Where are they commonly washed?



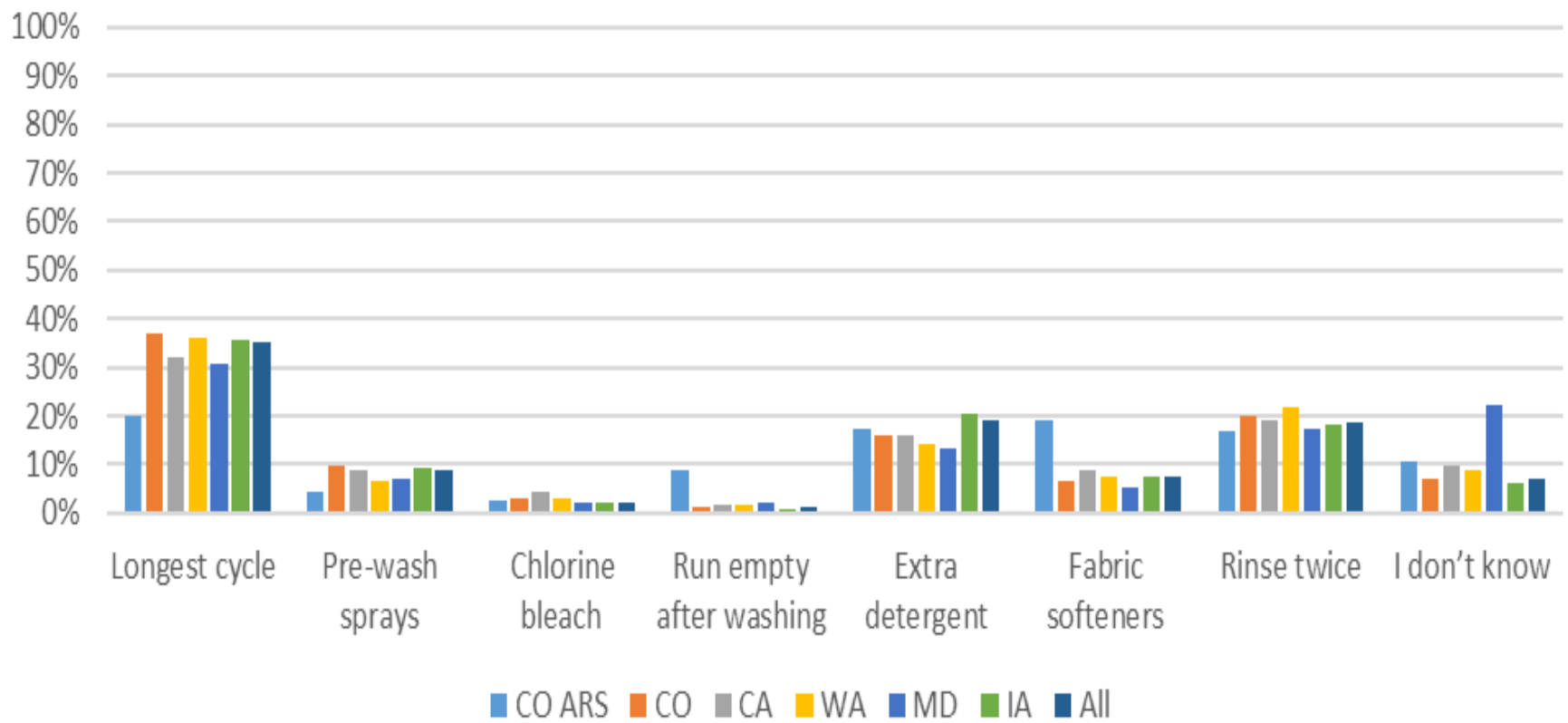
Who most often does the washing?



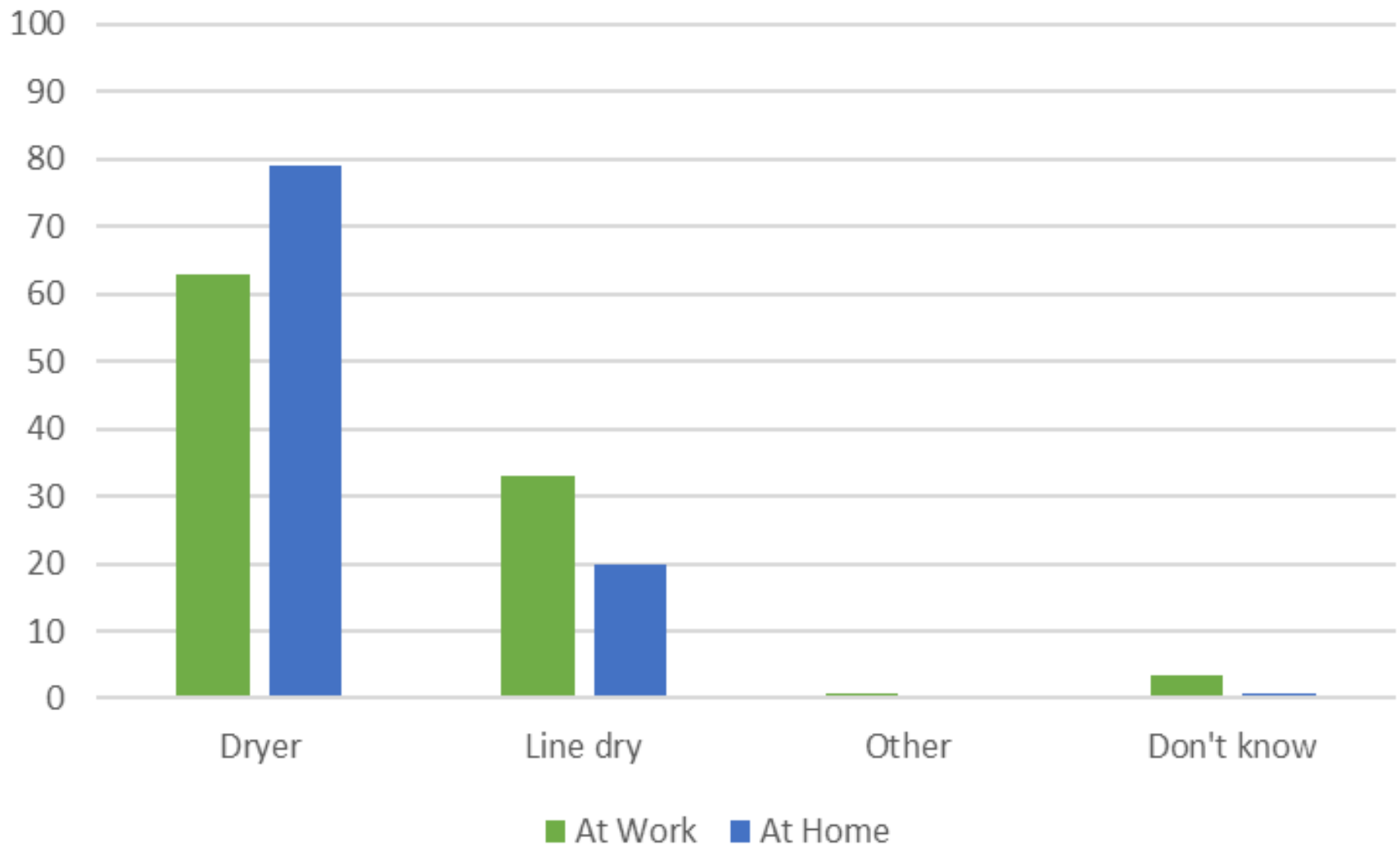
What type of washing machine?



What temperature of water?



What other attributes?



What are garments dried?

Brainstorming improvements for PPE label statements

Again, seeking your input and
a continued TPSA dialog

- Some materials that are chemical resistant to this product are made of **barrier laminate, nitrile rubber, neoprene rubber or viton**. If you want more options, follow the instructions for **Category E** on an EPA chemical resistant chart.
- **Mixer, loaders applicators, flaggers, and other handlers** must wear long-sleeved **shirt** and long **pants**, shoes plus socks, and chemical resistant **gloves**

AgriSOLUTIONS™

Dormant Oil 435

**An Emulsifiable Concentrate Useful For The Control Of Certain Insect Pests And
As An Additive To Certain Fungicidal Sprays**

ACTIVE INGREDIENT	
Mineral Oil*.....	98.8%
OTHER INGREDIENTS.....	1.2%
TOTAL	100.0%

Contains petroleum distillate
*Unsulfonated Residue 92% Min.

KEEP OUT OF REACH OF CHILDREN

CAUTION

PPE Table Proposed by UIPP for FRANCE

Source: Presentation by J. Durand-Réville

OCTOBER 2017

**PPE REQUIREMENTS ON PESTICIDE
PRODUCT LABELS**

Julien Durand-Réville
Health Manager
UIPP (French plant protection industry union)

PROTÉGER LES PLANTES C'EST PROTÉGER L'AVENIR | DES PRODUITS UTILES - DES ENTREPRISES RESPONSABLES

PROTECTION DE L'UTILISATEUR PENDANT LES PHASES DE :

Caractéristiques des EPI

GANTS EN NITRILE
réutilisables (certifiés EN 374-3)
ou à usage unique (certifiés EN 374-2)



EPI VESTIMENTAIRE
65 % polyester / 35 % coton
≥ 230 g/m² + traitement déperlant



EPI PARTIEL
blouse ou tablier à manches longues
catégorie III type PB3 certifié EN 14605+A1



COMBINAISON DE PROTECTION CHIMIQUE
catégorie III type 3 ou 4
certifiée EN 14605+A1:2009



LUNETTES ou ÉCRAN FACIAL
certifiés EN 166:2002 (CE, sigle 3)



PROTECTION RESPIRATOIRE
demi-masque ou masque (EN 140:1998) équipé d'un
filtre P3 (EN 143:2006) ou A2P3 (EN 14387:2008)



MÉLANGE/ CHARGEMENT

Réutilisables

EPI
vestimentaire
ET
EPI partiel

OU

Type 3 ou 4



APPLICATION AVEC :

**PULVÉRISATEUR PORTÉ OU TRÂINÉ
À RAMPE, PNEUMATIQUE OU ATOMISEUR ;
PULVÉRISATION VERS LE BAS**
TRACTEUR
AVEC CABINE

TRACTEUR
SANS CABINE

**PULVÉRISATEUR PORTÉ OU TRÂINÉ
À RAMPE, PNEUMATIQUE OU ATOMISEUR ;
PULVÉRISATION VERS LE HAUT**
TRACTEUR
AVEC CABINE

TRACTEUR
SANS CABINE

NETTOYAGE

Réutilisables

EPI
vestimentaire
ET
EPI partiel

OU

Type 3 ou 4



À usage unique

À usage unique



Type 4

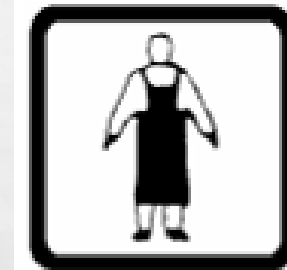
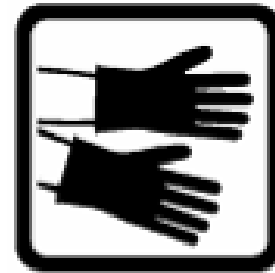
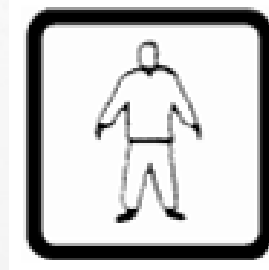


PPE name and pictogram

Same color for the same body part

Each column for each task and/or spraying types

Pictograms

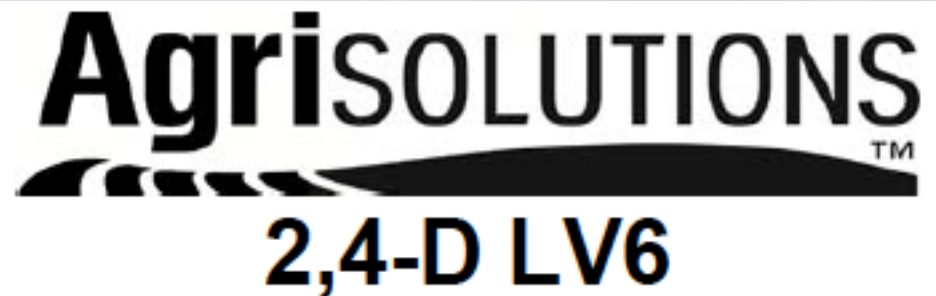


	Gloves	Footwear	Apron	Coveralls	Respirator	Protective Eyewear
						
Mixing/ Loading						
Enclosed Cab						
Knapsack Sprayers						
Overhead Spraying						
All Other Applications						



Some materials that are resistant to this product are **neoprene, nitrile rubber, barrier laminate, or viton**. If you want more options, follow instructions for **Category E** on an EPA chemical resistant category selection chart.

All mixers, loaders, applicators and other handlers must wear:

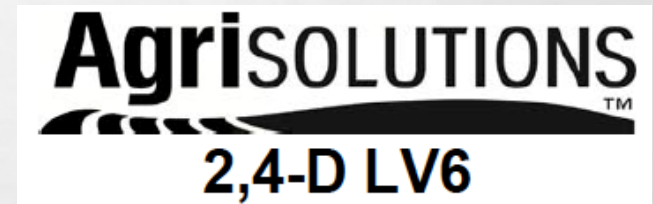
- Long-sleeved **shirt** and long **pants**; Shoes plus socks
- Chemical resistant **gloves** when **applying with any hand-held equipment or nozzle, mixing or loading, cleaning, . . .**
- Chemical resistant **apron** when **mixing or loading, cleaning,**



AgrisOLUTIONSTM
2,4-D LV6

	Gloves	Apron
		
Mixing/ Loading	R	✓
Apply with Hand-held Equipment	D	

Gloves – stipulate
**Disposal or
Reusable**



- Long-sleeved **shirt** and long **pants**; Shoes plus socks
- Chemical resistant **gloves** when **applying with any hand-held equipment or nozzle, mixing or loading, cleaning, . . .**
- Chemical resistant **apron** when **mixing or loading, cleaning, . . .**

	Gloves
	
Mixing, Loading	R
Apply, Flaggers, Others	D

Gloves – stipulate Disposal or Reusable

AgriSOLUTIONS™

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An Emulsifiable Concentrate Useful For The Control Of Certain Insect Pests And
As An Additive To Certain Fungicidal Sprays







ACTIVE INGREDIENT	
Mineral Oil*	98.8%
OTHER INGREDIENTS	1.2%
TOTAL	100.0%

*Contains petroleum distillate
*Unsulfonated Residue 92% Min.

KEEP OUT OF REACH OF CHILDREN

CAUTION

Mixer, loaders applicators, flaggers, and other handlers must wear long-sleeved **shirt** and long **pants**, shoes plus socks, and chemical resistant **gloves**

	Gloves	Footwear	Apron	Coveralls	Respirator	Headwear
						
Mixing/ Loading	R	✓	✓	✓	✓	
Overhead Spraying	R	✓		✓	✓	✓
All Other Applications	D	✓		✓	✓	

Coveralls over **short-sleeved shirt** and **short pants**

Chemical resistant **gloves** - **Category G**, Chemical-resistant **apron to mix/load**,

Chemical-resistant **footwear**

Chemical-resistant **headgear for overhead exposures**

NIOSH approved **respirator**

Nufarm
Chlorpyrifos SPC 2
Insecticide

For control of listed pests on golf course turf and ornamental plants around industrial sites and road medians, fire and treatment on nursery stock, and as a nonstructural acid treatment.

Nufarm Chlorpyrifos SPC 2 insecticide contains chlorpyrifos, the active ingredient used in Duramix.

ACTIVE INGREDIENT:
Chlorpyrifos (O,O-diethyl O-(2,5,6-trichloro-2-pyridinyl) phosphorothioate) 24.00%

OTHER INGREDIENTS: 75.94%

TOTAL: 100.00%

Contains 2 percent of Nonyl-16-polyglycol. Contains petroleum distillates.

KEEP OUT OF REACH OF CHILDREN
WARNING / AVISO
It is toxic to children in play. Swallow or splash into eye will irritate a child or child. If you feel unwell after the use, see a doctor to report it to you in detail. See back for complete information (SDS) 101-01
Nufarm, Toronto, Ontario

For Chemical Spill Leak, Fire or Exposure, Call CHEMTREC 800, 424-9300 For Medical Emergencies Only, Call (877) 325-1942

What do you think of this general idea for PPE and Labels?

- A. A great improvement
- B. A possible improvement
- C. Not really necessary
- D. Do not like it

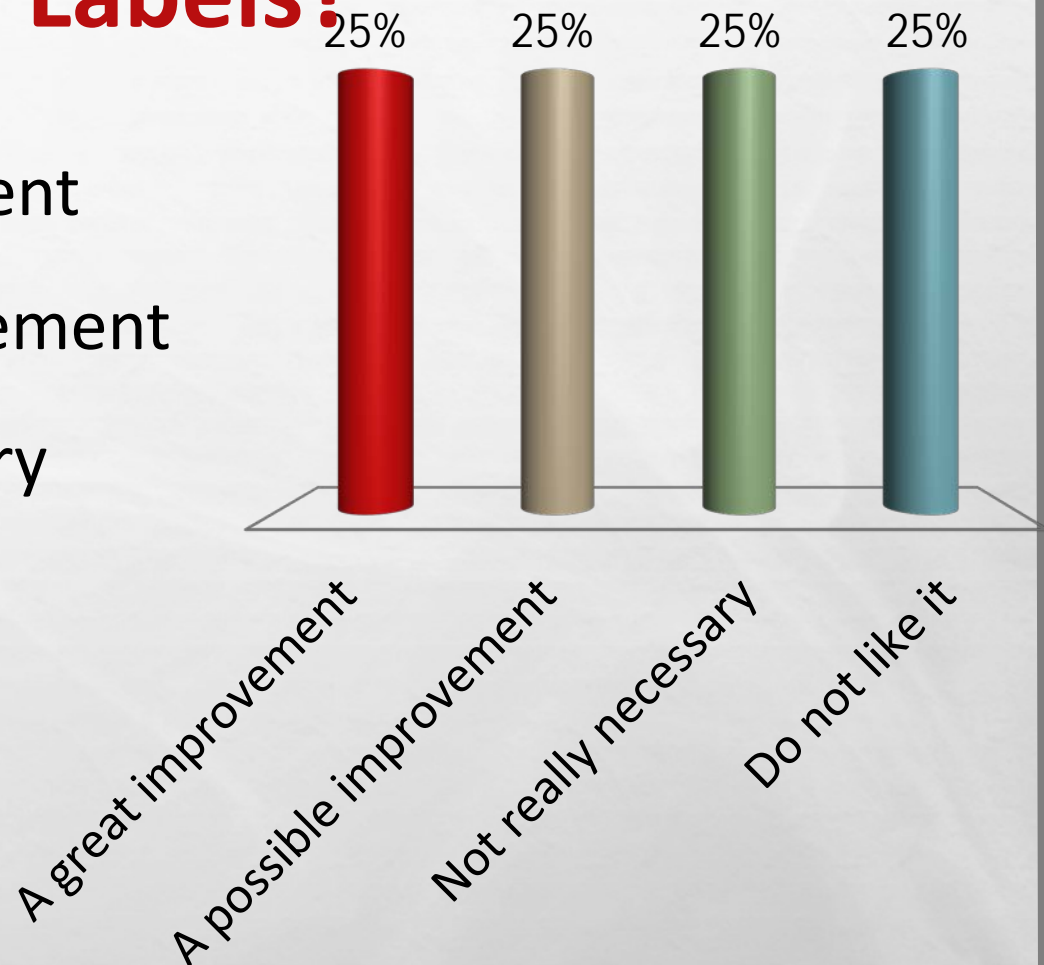


Table Format for PPE

- Define in box or text anything special
 - Short sleeved shirt, short pant under coveralls
- Allow for disposable gloves
- Specify by use-task



Iguacu Falls, Brazil

Thank You for Your Time