

# What Steps Do Consumers Need To Take To Ensure Safety of Medication?

**Source Supported By:** 



### **Brought To You By:**

Assistant Professor Dr Bontha Venkata Subrahmanya Lokesh, Phd
Assistant Professor Dr Dharmendra Kumar, Phd
Faculty of Pharmaceutical Sciences
UCSI University

### Introduction

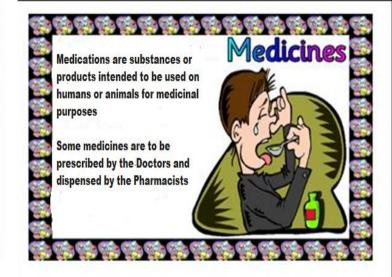
- Drug product safety is an important pharmacopoeia criteria and regulatory requirement to be released into the market.
- The National Pharmaceutical Regulatory Authority (NPRA), Pharmaceutical Services Division defined pharmaceutical testing for registration, licensing and monitoring of drug products for its safety and efficacy<sup>1</sup>.
- Drug products must be identified in good condition as registered and not as degraded, expired or fake.
- Degraded, expired or fake drug products can cause adverse reactions and are considered unsafe to use.



### Introduction







Legal medications in Malaysia have to undergo stringent registration and screening process to ensure its safety.
Nevertheless, inappropriate use of medications can be hazardous to the health.
Always follow health care professionals' instructions or ask your pharmacists for any questions.







# How to identify whether your drug is a registered product?

- Consumers must ensure that drug products are registered with the Drug Control Authority(DCA).
- DCA is the executive body established under the Control of Drugs and Cosmetics Regulations 1984 and is an integral part of NPRA.
- Products registered with the DCA have two main features, the registration number and the genuine hologram meditag.
- The registration number starts with 'MAL', followed by eight numbers, and ending with the letter T,A,X or N<sup>2</sup>.



#### **PRODUCT CODES**

**Product Codes** 

A: Scheduled Poisons

X: Non-scheduled Poisons (OTC products)

T: Traditional Medicines

K/KE: Cosmetics

C: Contract Manufactured

**E**: Export Only

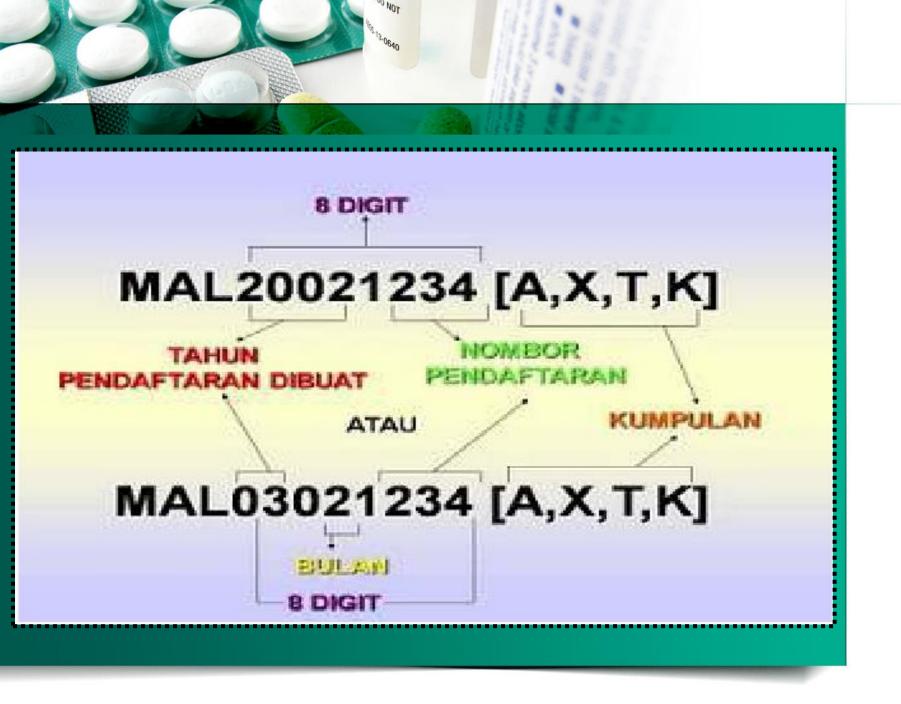
R: Repacked

5: Second source

#### CONTOH NOMBOR PENDAFTARAN:

### MAL20021234 (A, X, T, K)

- A Ubat mengandungi Racun terkawal (cth: Antibiotik)
- W Ubat TIDAK mengandungi Racun Terkawal (cth: vitamin)
- T Ubat tradisional (cth: jamu)
- K Kosmetik atau dinotifikasikan ethnya: NOT12345678K



### How to identify FAKE drug products?

- Visual inspection of the packaging of the drug product
- Imitation of appearance of drug products (e.g. tablets, capsules)
- Unexpected side effects (due to incorrect substances, improper dosage and hazardous substances, etc.)
- Fake registration number and Fake hologram sticker or No registration number and No hologram sticker.



## Hologram Meditag or Medication Hologram

Introduced in 2005









## Hologram Meditag or Medication Hologram

Introduced in 2005







Which one is counterfeit ???





Genuine PRISTIN™ Meditag holograms that start without any "A" in front



# How to Recognise degraded drug products?

- Degradation products are unwanted chemicals that can develop during:
  - Manufacturing process
  - Transportation,
  - Improper storage of drug products
- It can be recognised through physiochemicals and other laboratory examinations of drug products

### How to identify expired drug products?

- Expired drug products can be less effective or risky due to a change in chemical composition or a decrease in strength.
- Certain expired medications are at risk of bacterial growth.
- Visual examination of drug products indicates spoiled medicine change in terms of physical appearance.
- Once the expiration date has passed, there is no guarantee that the medicine will be safe and effective.
- If your medicine has expired, do not use it.

# Physical appearance and color coating of drugs products

- Mostly, drugs are white crystalline powders or whiteyellowish crystalline powders<sup>3</sup>.
- The colour of drug products (tablets or granules in capsules) is masked with coating materials with natural food colours for the following TWO reasons:
- To be attractive and palatable to mask its bitter taste.
- To mask or protect from bad effects of drug product in certain areas of the stomach.



## HOW DO YOU STORE YOUR MEDICATIONS

Consumers have to ensure the storage conditions as per label specified on the packaging of drug product and appropriately store above specified upon regular use.



### Temperature

> 3 types of storage temperatures

1.room temperature

2.cold temperature

3. Freeze storage

#### 1.Room temperature:

➤ Upto 30/25° c

2.Cold temperature/Refrigerator storage:

> Upto 2-8° c

#### 3. Freeze storage:

> Storage between -20 to -10° c

### **CONCLUSION**

Consumers can detect and report the unregistered, degraded, fake or expired drug products to NPRA Malaysia.

is needed to
create an
educated public
while using drug
products in terms
of identifying
quality drug
products

In view of this, it is important to emphasise the role of consumers to accomplish the long-term safety of drug products

## Consumers complaints can be sent to NPRA



- 1. <a href="https://www.npra.gov.my/index.php/en/consumers.html">https://www.npra.gov.my/index.php/en/consumers.html</a>
- 2. https://www.pharmacy.gov.my/v2/en/faq/how-identify-registered-drugs-or-pharmaceutical-products.html
  (Pharmaceutical Services Division, Ministry of Health, Malaysia)



## 3. UNITED STATES PHARMACOPOEIA- NF (2017) (GENERAL CHAPTER)

Reference





